भारतीय अभियांत्रिकी विज्ञान एवं
प्रौद्योगिकी संस्थान, शिवपुर

INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR

वार्षिक प्रतिवेदन
Annual Report
2023-24

वार्षिक प्रतिवेदन

Annual Report

2023-24

Indian Institute of Engineering Science and Technology, Shibpur

भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिवपुर

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From the Desk of the Chairperson

Merging its rich heritage with cutting-edge technology, our lush green campus, nestled between the River Ganga and the Jagadish Chandra Botanical Garden, is transitioning from its storied past as a leader in engineering education to reclaiming its place among the nation's top institutions.

The Institute has been making significant strides in various areas. Faculty members are publishing research in prestigious international journals and securing substantial funding for R&D and consultancy projects. Numerous academic events are being organized across departments, promoting the exchange of knowledge and technological advancements. Our students consistently excel and receive accolades on both national and international stages, with many opting for further education at esteemed global institutions.

The Institute supports its students with excellent placement opportunities, reinforced by internships and extensive industry engagement programs. Through MoUs and collaborations with international organizations like DAAD, we are enhancing research opportunities and internships. We are also committed to adopting Clean and Green Campus principles and achieving a zero-waste status.

The funding from the Ministry has been allocated for the construction of new facilities, including laboratories, classrooms, seminar halls, and a boys' hostel. Renovation projects are improving existing residential buildings, hostels, and the Institute Guest House. Alumni contributions have increased scholarships and financial support for deserving students. The recent recruitment of new faculty members has revitalized the Institute, fostering positive developments.

With a clear ambition to gain international recognition, IIEST Shibpur is dedicated to advancing its academic excellence, research capabilities, and infrastructure to meet global standards. Best wishes to all stakeholders contributing to this journey of advancement and excellence.

Thank you.

Vande Mataram,

Smt. Tejaswini Ananth Kumar

Chairperson, BoG, IIEST Shibpur

From the Desk of the **Director**

The past year has been a remarkable one for the Institute, with stakeholders working diligently to maintain high standards in teaching, research, and administration. We successfully hosted cultural programs with strong student participation, including a grand celebration of the 75th Independence Day as part of "Azadi ka Amrit Mahotsav."

Our esteemed faculty members have consistently published research articles in high-impact journals and secured funding for numerous research projects from DST-GOI, DST-SERB, DST-WB, UGC-DAE-CSR, Ansys Software Private Limited, IIT-Bombay, and other organizations. Various departments have collectively organized a number of workshops, conferences, and seminars, contributing to the institute's overall research and development and outreach. It is also worth noting that many new faculty members have been inducted to the Institute in the recruitment drive last year, which will certainly improve the teacher-student ratio to a significant extent. This is apart from delivering the academic courses in a more effective manner as well as help to enhance R&D output through external funding.

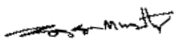
The placement and internship opportunities for our students have been promising. We have initiated several collaborative ventures, including signing MoUs with other universities to launch programs related to Intellectual Property Rights. Our students have made us proud with numerous national and global achievements, with many opting for higher studies at prestigious institutions.

On the infrastructural front, the Institute is on the cusp of making the ERP system functional for its stakeholders. We are working on a ministry-sanctioned ten-story hostel for boys. The Institute has also taken up the work of a massive facelift of the old buildings, hostels, and the Guest House with the help of CPWD. Major roads on campus have been reconstructed, and a perfect balance of greenery has been maintained.

Our alumni have always been a strong support system, contributing selflessly to the betterment of our students and the institute. The alumni association, GAABESU, has announced "Need-based" and "Merit-based" scholarships for IIEST students. Efforts to establish an international standard badminton court is underway.

I extend my sincere appreciation to the Annual Report Preparation Committee for their dedication in compiling the 2023-24 report. Together, Team IIEST Shibpur is working to enhance the Institute's national and global visibility through student's success and state-of-the-art academic and research endeavours by its committed faculty, officers, technical and ministerial staff.

Jai Hind!



V.M.S.R. Murthy
Director, IIEST, Shibpur

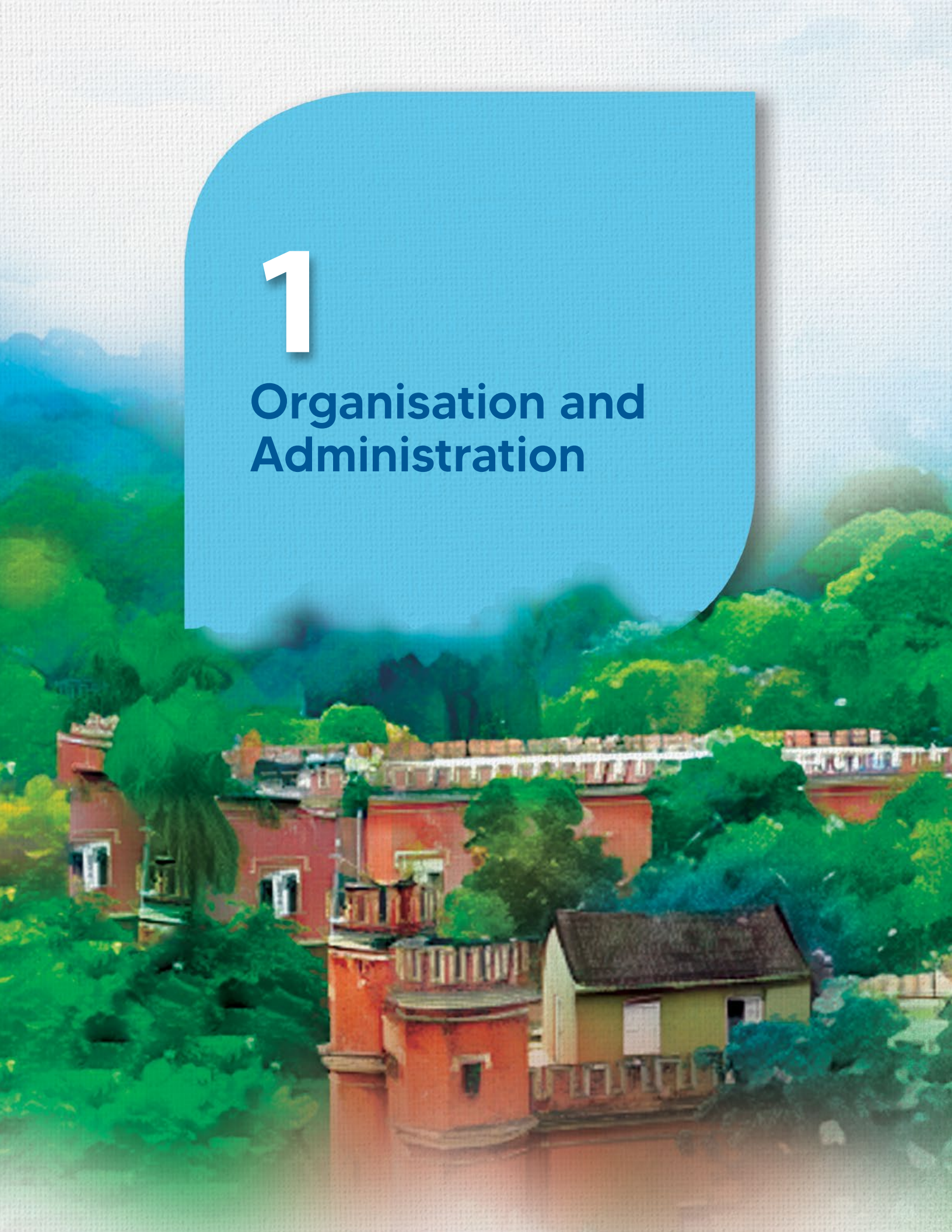
PATTON
PATTON

Vision

The Vision of Indian Institute of Engineering Science and Technology (IIEST), Shibpur is to become one of the best Institutes in the world in providing the state-of-the art multi-disciplinary research ambience that will usher innovative world-class technologies developed towards realizing the goal of Developed India, and thereby establish a unique identity for the institute amongst national and international academic and research organizations through knowledge creation, acquisition and dissemination for the benefit of society and humanity.

Mission

- To generate high quality human and knowledge resources in our core areas of competence and emerging areas to make valuable contribution in technology for social and economic development of the nation.
- To make focused efforts towards identification, monitoring and control of objective attributes of quality for continuous enhancement of academic processes, infrastructure and ambience.
- To efficaciously enhance and expand, even beyond national boundaries, its contribution to the betterment of technical education and offer international programmes of teaching, consultancy and research.



1 Organisation and Administration

Organisation and Administration

Established as the Calcutta Civil Engineering College in November 1856, this pioneering Institute, after several changes in its name at three different addresses, was lastly converted to an Indian Institute of Engineering Science and Technology by an amendment of the NITSER (National Institutes of Technology, Science Education and Research) Act 2007. Today, the Institute is an Institute of National Importance and its organizational and governing structure are on the lines of National Institutes of Technology (NITs).

The Institute has four authorities, namely:

Board of Governors	Authorities under the NITSER Act 2007
Senate	
Finance Committee	Authorities under the IIEST Statutes 2017
Building and Works Committee	

The NITSER Council co-ordinates the activities of the Institute and other Institutes governed under the same Act.

The Governing Structure of the Institute is as below:

- The President of India is the Visitor of IIEST, Shibpur. As provided in the NITSER Act, 2007, the Visitor appoints the Chairperson and the Director of the Institute
- The Council of NITSER is the apex decision making body. The Council is headed by the Hon'ble Union Minister of Human Resource Development and it comprises the Chairpersons and the Directors of the NITs, the IISERs and the IISET Shibpur, beside other members including three Members of Parliament.
- The Board of Governors is responsible for the general superintendence, direction and control of the affairs of the Institute.
- The Senate of the Institute has the control and general regulation, and is responsible for the maintenance of standards of instruction, education and examination in the Institute. The Senate is empowered to frame and revise curricula and syllabi for the course of studies for various departments and to promote research in academic development activities.
- The Finance Committee is empowered to examine and scrutinise the annual budget of the Institute and make recommendations on any financial proposal to the Board.
- The Building and Works Committee undertakes construction of all major works after obtaining necessary administrative approval and expenditure sanction from the Board; it also enjoys the power to give the necessary administrative approval and expenditure sanction for minor works and to undertake the same.

  During the year under review the Institute authorities-initiated actions towards framing of a large number of rules, regulations, ordinance, etc.

1.1 Board of Governors

The Board of Governors of the Institute is constituted as per provisions of Section 11 of the NITSER Act, 2007. During 2023-2024, the composition of the Board was as below.

Dr. Vasudev K. Aatre
Distinguished Scientist & Former Secretary,
Department of Defense Research & Development and
Scientific Advisor to Raksha Mantri
Chairperson
E-mail: vasudev.k.aatre@gmail.com
up to 24.08.2023

Smt. Tejaswini Ananth Kumar
Chairman and Co-Founder
Adamya Chetana Foundation, Bengaluru
Chairperson
from 25.08.2023

Prof. Parthasarathi Chakrabarti
Director, IIEST, Shibpur
Howrah – 711 103.
Ex-Officio Member
Ph: 033-26682674
Fax: 033-26687575
E-mail: director@iiests.ac.in

Additional Secretary (TE)
Ministry of Education,
Govt. of India
Shastri Bhawan, New Delhi – 110 001
or his/her nominee
Ex-Officio Member
Ph: 011-23381097
Fax: 011-23386903
E-mail: ashe-moe@gov.in

Joint Secretary & Financial Advisor
to the Govt. of India,
Ministry of Education, Shastri
Bhawan, New Delhi-110 001 or his/
her nominee
Ex-Officio Member
E-mail: jsfa-moe@gov.in
Ph: 011-23382696

Director, IISc, Bangalore
Sir C.V. Raman Avenue,
Bangalore – 560 012.
Ex-Officio Member
Ph: 080-23600690 / 22932222
Secy. to Director: 080-22932954
Fax: 080-23600936,
E-mail: director@iisc.ac.in

Secretary, Higher Education Department,
Govt. of West Bengal
Bikash Bhavan, Salt Lake
Kolkata- 700 091.
Ex-Officio Member
E-mail: highereducationwb@
gmail.com
Ph: 033-23211280

Members under clause e & f
under Section 11A of NITSER
Act 2007
vacant since 08.02.2022

Prof. Prasid Syam
Professor, Dept. of Electrical
Engineering, IIEST, Shibpur (Senate
nominated)
Member
E-mail: ps@ee.iiests.ac.in
up to 15.07.2023

Prof. Sudip Kumar Roy
Professor, Dept. of Civil Engineering
IIEST, Shibpur (Senate nominated)
Member
Email: sudip@civil.iiests.ac.in
from 20.11.2023

Prof. Amit Roy Chowdhury
Professor, Dept. of Aerospace
Engineering & Applied
Mechanics, IIEST, Shibpur
(Senate nominated)
Member
E-mail: amit@aero.iiests.ac.in

Dr. Devasis Datta
Registrar (Acting),
IIEST, Shibpur
Secretary to BoG
up to 31.07.2023

Dr. H.P. Sharma
Registrar (Acting),
IIEST, Shibpur
Secretary to BoG
from 01.08.2023
Ph: 033-26681503 (O)
Fax: 033-26682916
E-mail: regis@iiests.ac.in

1.2 The Senate

It is constituted under Section 14 of the National Institute of Technology ACT, 2007 (29 of 2007), the National Institutes of Technology (Amendment) ACT, 2012 (No. 28 of 2012), and the National Institutes of Technology, Science Education and Research (Amendment) ACT, 2014 (no. 9 of 2014). The Senate of the Institute is its principal academic authority. All permanent professors of the Institute are the members of Senate.

1.3 Finance Committee

Dr. Vasudev K. Aatre
Distinguished Scientist & Former Secretary,
Department of Defense Research & Development and
Scientific Advisor to Raksha Mantri
Chairperson
E-mail: vasudev.k.aatre@gmail.com
up to 24.08.2023

Smt. Tejaswini Ananth Kumar
Chairman and Co-Founder
Adamya Chetana Foundation, Bengaluru
Chairperson
from 25.08.2023

Prof. Parthasarathi Chakrabarti
Director, IIEST, Shibpur
Howrah – 711 103.
Ex-Officio Member
Ph: 033-26682674
Fax: 033-26687575
E-mail: director@iiests.ac.in

Joint Secretary & Financial Advisor to the Govt. of India,
Ministry of Education, Shastri Bhawan, New Delhi-110 001 or his/her nominee
Ex-Officio Member
E-mail: jsfa-moe@gov.in
Ph: 011-23382696

Joint Secretary (TE)
Ministry of Education, Govt. of India or his/her nominee
Ex-Officio Member

Dr. Devasis Datta
Registrar (Acting),
IIEST, Shibpur
Ex-Officio Member Secretary
up to 31.07.2023

Dr. H.P. Sharma
Registrar (Acting),
IIEST, Shibpur
Ex-Officio Member Secretary
from 01.08.2023
Ph: 033-26681503 (O)
Fax: 033-26682916
E-mail: regis@iiests.ac.in

Prof. Amit Roy Chowdhury
Professor, Dept. of Aerospace Engineering & Applied Mechanics, IIEST, Shibpur (Senate/BOG nominated)
Member
Member up to 14.07.2023
E-mail: amit@aero.iiests.ac.in
Member nomination from BoG
Pending since 15.07.2023

Member nomination from BoG
Pending

From time to time, the Chairperson, in consultation with the Director, invites an expert as a special invitee. All financial proposals are placed before the Finance Committee before placing it to the Board for consideration and approval.

1.4 Important Functionaries

Chairman, Council of NITSER

Shri Dharmendra Pradhan

Union Minister of Education, Government of India

Chairman, Board of Governors

Dr. Vasudev K. Aatre up to 24.08.2023;

Smt. Tejaswini Ananth Kumar from 25.08.2023

Director

Prof. Parthasarathi Chakrabarti

Deans	
Academic Affairs	Prof. Sudip Kr Roy up to 31.07.2023
	Prof. Ambarish Ghosh from 01.08.2023
Faculty Welfare	Prof. Binay Krishna Ghorai
Research & Consultancy	Prof. Hafizur Rahaman
Planning & Development	Prof. Subhasis Bhaumik
Student Welfare	Prof. Sudipta Mukhopadhyay
International Relations & Alumni Affairs	Prof. Debasis Datta
Associate Deans	
Academic Affairs	Dr. Asok Adak
Faculty Welfare	Dr. Chinmay Bhattacharya
Research & Consultancy	Dr. Papu Biswas
Student Welfare	Dr. Nityananda Nandi
International Relations & Alumni Affairs	Dr. Soumen Mitra up to 31.07.2023
	Dr. Indrajit Banerjee from 01.08.2023
Registrar	
Dr. Devasis Datta (Acting) up to 31.07.2023	
Dr. H.P. Sharma (Acting) from 01.08.2023	

1.5 Administration

Director
Prof. Parthasarathi Chakrabarti
Ph: 033-26682674
Fax: 033-26687575
E-mail: director@iiests.ac

Registrar
Dr. Devasis Datta (Acting)
up to 31.07.2023
Dr. H.P. Sharma (Acting)
from 01.08.2023
Ph: 033-26681503
E-mail: regis@iiests.ac.in

Joint Librarian
Dr. Hari Prasad Sharma
Ph: 033-26684561 (284)
E-mail: sharma_hp@hotmail.com

Deputy Registrar (Store & Purchase)
vacant

Deputy Registrar (Admin)
Dr. Devasis Datta
Ph: 033-26684561
E-mail: d3dr.iiests@gmail.com
up to 31.07.2023
vacant since 01.08.2023

Assistant Librarian (Selection Grade)
Mr. Shushil Kumar Barman
Ph:033-26684561 (291)
E-mail: sushilbarman@gmail.com

Joint Registrar (Finance)
Mr. Alok Kumar Maity
Ph: 033-26684561 (216)
E-mail: dr.finance@iiests.ac.in

Joint Registrar (Academic)
Dr. Nirmalya K Bhattacharya
Ph: 033-26688081
M: 9831212905/9830844455
E-mail: jr.ac@iiests.ac.in

Assistant Librarian
Mr. Abani Oraon
Ph: 033-26684561 (725)
E-mail: abani@library.iiests.ac.in

Assistant Registrar
Mr. Alok Kr. Mitra
Ph: 033-26684561 (276)
E-mail: ar.akm@iiests.ac.in

Assistant Registrar & Internal Auditor
Mr. Shib Sankar Basak
Ph: 033-26684561 (378)
M: 9434144611
E-mail: arssb@iiests.ac.in

Assistant Registrar
Dr. Bivore Das
Ph: 033-26684561 (643)
E-mail: arbd@iiests.ac.in

Assistant Registrar
Mr. Dipankar Chakraborty
Ph: 033-26684561 (640)
E-mail: dcosd@yahoo.co.in

Chief Warden
Prof. Sudipta Mukhopadhyay
Professor, Dept. of Mining Engineering
E-mail: sudiptam@mining.iiests.ac.in

Medical Officer
Dr. Rubi Golder
Ph: 033-26684561 (332)
E-mail: rubigolder@gmail.com

Central Public Information Officer
Dr. Hari Prasad Sharma
Ph: 033-26684561 (284)
E-mail: sharma_hp @hotmail.com

Superintending Engineer (Actg.)
Dr. Tapash Kumar Roy
Ph: 033-26684561 (345)
E-mail: uengineer@iiests.ac.in

Workshop Superintendent
Dr. Dibyendu Chatterjee
E-mail: dibeyendu_660 @rediffmail. com

Physical Instructor
Mr. Sandip Chatterjee
E-mail: c.sandip2010@gmail.com

Physical Instructor
Dr. Zia-Ul-Alam
E-mail: alamzia2002 @yahoo.com

Chief Vigilance Officer
Prof. Abdur Rouf
Professor, Dept. of Electrical Engineering
E-mail: arouf@ee.iiests.ac.in

1.6 Head of the Departments

Departments	Name of Head	Tenure from	Tenure up to
Aerospace Engineering and Applied Mechanics	Prof. Sujay Kr. Mukherjea Dr. Nityananda Nandi	01.04.2022 01.08.2023	31.07.2023 31.07.2025
Architecture and Planning	Prof. Subrata Kumar Paul Dr. Soumen Mitra	10.07.2020 10.07.2023	09.07.2023 09.07.2025
Chemistry	Dr. Jhuma Ganguly Dr. Chinmoy Bhattacharyya	18.12.2021 18.12.2023	17.12.2023 17.12.2025
Civil	Prof. Ambarish Ghosh Prof. Chaitali Ray	10.07.2020 10.07.2023	09.07.2023 09.07.2025
Computer Science and Technology	Prof. Asit Kumar Das Dr. Apurba Sarkar	31.05.2021 01.06.2023	30.05.2023 30.05.2025
Earth Science	Dr. Ananya Mukhopadhyay	03.05.2021	02.05.2024 (extended)
Electrical Engineering	Prof. Konika Das Bhattacharya Prof. Anindita Sengupta	01.06.2021 06.06.2023	31.05.2023 05.06.2025
Electronics and Telecommunication Engineering	Prof. Susanta Kumar Parui Dr. Tamaghna Acharya	15.11.2021 15.11.2023	14.11.2023 14.11.2025
Humanities and Social Sciences	Mr. Rupen Basu Mallick Dr. Mallika Ghosh Sarbadhikary	17.09.2020 22.09.2023	21.09.2023 21.09.2025
Human Resource Management	Prof. Manas Kumar Sanyal	23.08.2004	Until further order
Information Technology	Dr. Sukanta Das Dr. Prasun Ghosal	10.07.2020 11.07.2022	09.07.2022 10.07.2024
Mathematics	Prof. Pritha Das	06.07.2021	05.07.2024 (extended)
Mechanical Engineering	Dr. Sudip Ghosh Prof. Subhas Chandra Mondal	16.06.2021 02.01.2024	01.01.2024 01.01.2026
Metallurgy and Materials Engineering	Dr. Debdulal Das	08.06.2021	07.06.2024 (extended)
Mining Engineering	Prof. Netai Chandra Dey	18.11.2021	17.11.2024 (extended)
Physics	Dr. Syed Minhaz Hossain	21.06.2021	20.06.2024 (extended)

1.7 Heads of Schools and Centres

Schools

Schools	Name of Head	Tenure from	Tenure up to
Advanced Materials, Green Energy and Sensor Systems	Prof. Santi Prasad Maity Prof. Monojit Mitra Prof. Arindam Biswas	24.03.2023 25.09.2023 30.11.2023	23.09.2023 29.11.2023 29.05.2024
Community Science and Technology	Prof. Ajit Kumar Mahapatra Prof. Susanta Chakraborty Prof. Ajit Kumar Mahapatra	12.01.2023 17.07.2023 17.01.2024	11.06.2023 16.01.2024 16.07.2024
Disaster Mitigation Engineering	Prof. Souvanic Roy Head, Civil Engineering	10.01.2022 17.01.2022	09.07.2022 until further order
Ecology, Infrastructure and Human Settlement Management	Head, Civil Engineering	17.01.2022	until further order
Management Sciences	Prof. Dipali Banerjee Prof. Anirban Gupta Prof. Prabir Kr. Paul	14.10.2022 18.04.2023 25.10.2023	13.04.2023 17.10.2023 24.04.2024
Mechatronics and Robotics	Prof. Monojit Mitra Prof. Santi Prasad Maity Prof. Konica Das (Bhattacharya)	24.03.2023 25.09.2023 26.03.2024	23.09.2023 24.03.2024 25.09.2024
Purabi Das School of Information Technology	Prof. Monojit Mitra Head, Computer Science and Technology	10.01.2022 20.04.2023	19.04.2022 until further order
VLSI Technology	Prof. Bhabani Prasad Mukhopadhyay Prof. Asit Kr. Das Prof. Mousumi Basu	09.11.2022 07.06.2023 05.01.2024	08.05.2023 06.12.2023 04.07.2024

Centres

Centres	Name of Head	Tenure from	Tenure up to
Healthcare Science and Technology	Prof. Susanta Chakraborty Prof. Ajit Kumar Mahapatra Prof. Sudip Kr. Chattopadhyay	12.01.2023 14.07.2023 17.01.2024	11.07.2023 13.01.2024 16.07.2024
Water and Environmental Research	Head, Civil Engineering	until further order	

1.8 Warden of Hostels

Chief Warden:

Prof. Sudipta Mukhopadhyay (Email Id: chiefwarden@officer.iiests.ac.in)

Name	Email Id	Hostel
Dr. Pritam Saha	pritam@civil.iiests.ac.in	A.C. Roy Hall (Hostel-7)
Dr. Ujjal Bhattacharjee	ujjalb.chem@faculty.iiests.ac.in	A.K. Seal Hall (Hostel-10)
Dr. Santanu Maity	smaity@cegess.iiests.ac.in	B. Sen Hall (H-9)
Prof. Santanu Kumar Karmakar	skk.besus@gmail.com	D. Banerjea Hall (H-8)
Dr. Ashis Kumar Bera	ashis@civil.iiests.ac.in	Hostel-11
Shri Alok Kumar Mitra	akmitra7077@yahoo.co.in	Hostel-14
Prof. Sudipta Mukhopadhyay	sudiptam@mining.iiests.ac.in	Hostel-15, H15 Extension
Prof. Subhas Chandra Mondal	scmondall@gmail.com	Hostel-16, H16 Extension
Dr. Ayan Banerjee	ayanb12@gmail.com	Hostel-PG (H-13)
Dr. Dipankana Bhattacherjee	dipankana@civil.iiests.ac.in	Lt. Williams
Dr. Sujata Biswas	sujata@civil.iiests.ac.in	Lt. Williams
Dr. Nityananda Nandi	nityananda@aero.iiests.ac.in	MacDonald Hall
Prof. Chaitali Ray	chaitali@civil.iiests.ac.in	Pandya Hall
Dr. Chanchal Majumdar	chanchal@civil.iiests.ac.in	Richardson Hall
Dr. Sukumar Kundu	erskundu@gmail.com	Sen Hall
Dr. Tapash Kumar Roy	tapash@civil.iiests.ac.in	Sengupta Hall
Dr. Dipsikha Kalita	dipsikha@socsat.iiests.ac.in	Sister Nivedita
Dr. Bhaskar De	bde.arch@faculty.iiests.ac.in	Wolfenden Hall
Dr. Shashwati Banerjee	guest1.soms@faculty.iiests.ac.in	Lt. Williams Hall Extension

2

Human Resources

Human Resources

As is true with the other CFTIs, sanctioned posts for both teaching and non-teaching cadre are dependent on approved student intake of the Institute. Except in the case of employees paid from contingencies, the members of staff of the Institute which are classified as under:

Academic Staff:

Director, Deputy Director, Professor, Associate Professor, Assistant Professor, Professor of Training and Placement, and such other academic posts as may be decided by the Board from time to time.

Technical Staff:

System Manager, Workshop Superintendent, Librarian, Scientific Officers, Research Engineers, Deputy Librarian, Assistant Workshop Superintendent, System Analyst, Programmer, Foreman, Technician, Instructor, Laboratory Assistant, Mechanic, Overseer, Technical Assistant, Draftsman, and such other technical posts as may be decided by the Board from time to time.

Administrative and Others Staff:

Registrar, Jt. Registrar, Deputy Registrar and Assistant Registrar, Accounts Officer, Audit Officer, Estate Officer, Executive Engineer, Assistant Engineer, Junior Engineer, Medical Officer, Medical Assistant, Horticultural Assistant or Officer, Office Superintendent, Security Officer, Stores Officer, Store Keeper, Office Assistants, Data Entry Operators and such other Administrative and other staff as may be decided by the Board from time to time.

The Conversion of this institute from a State University to a CFTI was realized through the enactment of the NITSER (Amendment) Act 2014.

The pay scale enjoyed by the employees is at par with that in other CFTIs and, as provided in the IIEST Statutes, the employees of the Institute are entitled to allowances as admissible to the Central Government Employees. The employees of the Institute are governed by the Central Civil Services (Conduct) Rules, 1964.

The Institute is yet to frame the code of conduct for employees and as such, the Institute follows the Central Civil Services (Classification, Control and Appeal) Rules, 1965, as per provisions laid down in Section 25 of the IIEST Statutes. The leave for all the employees of the Institute is governed by the Central Civil Services (Leave) Rules 1972.

As per MoE Guidelines, the ratio of academic and non-academic staff members at the Institute should be around 1:1.1.

2.1 Academic Staff

The academic staff scenario in 2023-24 is shown in Table 2.1 and Table 2.2. Details of Academic staff members in various Academic Departments, Schools and Centre are furnished below:

Table 2.1: Regular Faculty Members of Individual Departments

Department of Aerospace Engineering and Applied Mechanics (AE&AM)

Sl. No.	Name	Designation	Highest Degree
1	Subhasis Bhaumik	Professor (HAG)	PhD
2	Amit Roy Chowdhury	Professor (HAG)	PhD
3	Salil Haldar	Professor	PhD
4	Koustuv Debnath	Professor	PhD
5	Santanu Majumder	Professor	PhD
6	Rana Roy	Professor	PhD
7	Basudeb Bhattacharyya	Associate Professor	PhD
8	Nityananda Nandi	Associate Professor	PhD
9	Prithwish Kumar Das	Associate Professor	PhD
10	Mihir Chandra Manna	Associate Professor	PhD
11	Niloy Khutia	Associate Professor	PhD
12	Pabitra Halder	Associate Professor	PhD
13	Debashis Pal	Assistant Professor Grade I	PhD
14	Pratim Kumar	Assistant Professor Grade I	PhD
15	Prince Raj Lawrence Raj	Assistant Professor Grade I	PhD
16	Krishnendu Bhowmik	Assistant Professor Grade II	PhD
17	Joydeep Bhowmik	Assistant Professor Grade II	PhD
18	Indrajit Mukherjee	Assistant Professor Grade II	PhD
19	Ajmira Nageswar Rao	Assistant Professor Grade II	PhD
20	Subhabrata Koley	Assistant Professor Grade II	PhD

Department of Architecture and Planning

Sl. No.	Name	Designation	Highest Degree
1	Souvanic Roy	Professor	PhD
2	Arup Sarkar	Professor	PhD
3	Keya Mitra	Professor	PhD
4	Partha Sarathi Mukhopadhyay	Professor	PhD
5	Amitava Roy	Associate Professor	PhD (D. Engg)
6	Subrata Kumar Paul	Associate Professor	PhD
7	Soumen Mitra	Associate Professor	PhD
8	Sutapa Das	Associate Professor	PhD
9	Bhaskar De	Assistant Professor Grade II	PhD
10	Tuhin Subhra Maparu	Assistant Professor Grade II	PhD

Department of Chemistry

Sl. No.	Name	Designation	Highest Degree
1	Shyamal Kumar Chattopadhyay	Professor (HAG)	PhD
2	Prasanta Kumar Nandi	Professor (HAG)	PhD
3	Binaykrishna Ghorai	Professor (HAG)	PhD
4	Ajit Kumar Mahapatra	Professor (HAG)	PhD
5	Sudip Kumar Chattopadhyay	Professor (HAG)	PhD
6	Chinmoy Bhattacharya	Associate Professor	PhD
7	Jhuma Ganguly	Associate Professor	PhD
8	Papu Biswas	Associate Professor	PhD
9	Nanda Dulal Paul	Associate Professor	PhD
10	Ujjal Bhattacharjee	Assistant Professor Grade I	PhD
11	Laksmikanta Adak	Assistant Professor Grade I	PhD

Department of Civil Engineering (CE)

Sl. No.	Name	Designation	Highest Degree
1	Sudip Kumar Roy	Professor (HAG)	PhD
2	Subrata Chakraborty	Professor (HAG)	PhD
3	Anirban Gupta	Professor (HAG)	PhD
4	Ambarish Ghosh	Professor (HAG)	PhD
5	Chaitali Ray	Professor (HAG)	PhD
6	Aparna (Dey) Ghosh	Professor	PhD
7	Debabrata Mazumder	Professor	PhD
8	Arun Kumar Chakraborty	Associate Professor	MTRP
9	Ashis Kumar Bera	Associate Professor	PhD
10	Sujata Biswas	Associate Professor	PhD
11	Soumya Bhattacharjya	Associate Professor	PhD
12	Tapash Kumar Roy	Associate Professor	PhD
13	Asok Adak	Associate Professor	PhD
14	Chanchal Majumder	Associate Professor	PhD
15	Sujit Kumar Dalui	Associate Professor	PhD
16	Pritam Saha	Associate Professor	PhD
17	Ujjwal Saha	Assistant Professor Grade I	PhD
18	Sandip Chakraborty	Assistant Professor Grade I	PhD
19	Sneha Murmu	Assistant Professor Grade II	PhD
20	Debojyoti Pandit	Assistant Professor Grade I	PhD
21	Dipankana Bhattacherjee	Assistant Professor Grade I	PhD
22	Anuj Kishor Budhkar	Assistant Professor Grade I	PhD
23	Saptarshi Kundu	Assistant Professor Grade II	PhD
24	Deep Roy	Assistant Professor Grade II	PhD
25	Dipaloke Majumder	Assistant Professor Grade II	PhD

Department of Computer Science and Technology (CST)

Sl. No.	Name	Designation	Highest Degree
1	Jaya Sil	Professor (HAG)	PhD
2	Sipra Das (Bit)	Professor (HAG)	PhD
3	Biplab Kr Sikdar	Professor (HAG)	PhD
4	Sulata Mitra	Professor	PhD
5	Sekhar Mandal	Professor	PhD
6	Asit Kumar Das	Professor	PhD
7	Manas Hira	Associate Professor	MTech
8	Abhik Mukherjee	Associate Professor	PhD
9	Apurba Sarkar	Associate Professor	PhD
10	Surajeet Ghosh	Associate Professor	PhD
11	Samit Biswas	Assistant Professor Grade I	PhD
12	Nirnay Ghosh	Assistant Professor Grade II	PhD
13	Tamal Pal	Assistant Professor Grade II	PhD
14	Malay Kule	Assistant Professor Grade II	PhD
15	Ashish Kumar Layek	Assistant Professor Grade II	ME

Department of Earth Sciences (ES)

Sl. No.	Name	Designation	Highest Degree
1	Bhabani Prasad Mukhopadhyay	Professor	PhD
2	Ananya Mukhopadhyay	Associate Professor	PhD
3	Atin Kumar Mitra	Assistant Professor Grade I	PhD
4	Moumita Talukdar	Assistant Professor Grade I	PhD

Department of Electrical Engineering (EE)

Sl. No.	Name	Designation	Highest Degree
1	Chandan Kumar Chanda	Professor (HAG)	PhD
2	Ashoke Sutradhar	Professor	PhD
3	Prasid Syam	Professor	PhD
4	Abdur Rouf	Professor	MTech
5	Mainak Sengupta	Professor	PhD
6	Debabrata Roy	Professor	PhD
7	Aparajita Sengupta	Professor	PhD
8	Konika Das (Bhattacharya)	Professor	PhD
9	Anindita Sengupta	Professor	PhD
10	Debjani Ganguly	Associate Professor	ME
11	Amal Barman	Associate Professor	PhD
12	Amalendu Bikash Choudhury	Associate Professor	PhD
13	Kaushik Mukherjee	Associate Professor	PhD
14	Abhinandan De	Associate Professor	PhD
15	Paramita Chattopadhyay	Associate Professor	PhD

Sl. No.	Name	Designation	Highest Degree
16	Atanu Banerjee	Associate Professor	PhD
17	Sukanya Parui	Assistant Professor Grade I	PhD
18	Suvarun Dalapati	Assistant Professor Grade I	PhD
19	Bhaskaran Barman	Assistant Professor Grade II	ME
20	Anirudh Nath	Assistant Professor Grade II	PhD
21	Syed Abdullah Qasim	Assistant Professor Grade II	PhD
22	Mousumi Mukherjee	Assistant Professor Grade II	PhD
23	Roshni Maiti	Assistant Professor Grade II	PhD
24	Reetam Mondal	Assistant Professor Grade II	PhD

Department of Electronics and Telecommunication Engineering (ETCE)

Sl. No.	Name	Designation	Highest Degree
1	Santanu Das	Professor (HAG)	PhD
2	Susanta Kumar Parui	Professor	PhD
3	Ayan Banerjee	Associate Professor	PhD
4	Chirasree Roy Chaudhuri	Associate Professor	PhD
5	Tamaghna Acharya	Associate Professor	PhD
6	Partha Bhattacharyya	Associate Professor	PhD
7	Debasis Mitra	Associate Professor	PhD
8	Ankita Pramanik	Associate Professor	PhD
9	Rik Chattpadhyay	Assistant Professor Grade I	PhD
10	Subiman Chatterjee	Assistant Professor Grade II	PhD
11	Ananda Sankar Chakraborty	Assistant Professor Grade II	PhD
12	Niladri Das	Assistant Professor Grade II	PhD

Department of Human Resource Management (HRM)

Sl. No.	Name	Designation	Highest Degree
1	Manas Kumar Sanyal	Professor	PhD

Department of Humanities and Social Sciences (HSS)

Sl. No.	Name	Designation	Highest Degree
1	Rupen Basu Mallik	Associate Professor	M.Com, ICWA
2	Mallika Ghosh Sarbadhikary	Associate Professor	PhD
3	Subhasis Bandyopadhyay	Associate Professor	MA
4	Averi Mukhopadhyay	Assistant Professor Grade I	PhD
5	Madhumita Roy	Assistant Professor Grade I	PhD
6	Vineet Srivastava	Assistant Professor Grade II	PhD

Department of Information Technology (IT)

Sl. No.	Name	Designation	Highest Degree
1	Hafizur Rahaman	Professor (HAG)	PhD
2	Santi Prasad Maity	Professor (HAG)	PhD
3	Arindam Biswas	Professor	PhD
4	Sukanta Das	Associate Professor	PhD
5	Tuhina Samanta	Associate Professor	PhD
6	Prasun Ghosal	Associate Professor	PhD
7	Indrajit Banerjee	Associate Professor	PhD
8	Surajit Kumar Roy	Associate Professor	PhD
9	Chandan Giri	Associate Professor	PhD
10	Ruchira Naskar	Associate Professor	PhD
11	Shyamalendu Kandar	Assistant Professor Grade I	PhD
12	Binanda Sengupta	Assistant Professor Grade II	PhD

Department of Mathematics

Sl. No.	Name	Designation	Highest Degree
1	Binayak Samadder Choudhury	Professor (HAG)	PhD
2	Guruprasad Samanta	Professor (HAG)	PhD
3	Tapan Kumar Kar	Professor (HAG)	PhD
4	Murari Mitra	Professor	PhD
5	Sanat Kumar Majumder	Professor	PhD
6	Asoke Kumar Dhar	Professor	PhD
7	Parbati Saha	Professor	PhD
8	Pritha Das	Professor	PhD
9	Santanu Saha Ray	Professor	PhD
10	Shariful Alam	Associate Professor	PhD
11	Ujjal Debnath	Associate Professor	PhD
12	Smita Pal (Sarkar)	Associate Professor	PhD
13	Sarita Ojha	Assistant Professor Grade II	PhD
14	Nirupam Ghosh	Assistant Professor Grade II	PhD

Department of Mechanical Engineering (ME)

Sl. No.	Name	Designation	Highest Degree
1	Sujoy Kumar Saha	Professor (HAG)	PhD
2	Santanu Kumar Karmakar	Professor	PhD
3	Debasis Datta	Professor	PhD
4	Bijan Kumar Mandal	Professor	PhD
5	Shyamal Chatterjee	Professor	PhD
6	Partha Pratim Dey	Professor	PhD
7	Subhas Chandra Mondal	Professor	PhD
8	Sudip Ghosh	Associate Professor	PhD

Sl. No.	Name	Designation	Highest Degree
9	Aritra Ganguly	Associate Professor	PhD
10	Ashim Guha	Assistant Professor Grade I	PhD
11	Bidyut Pal	Assistant Professor Grade I	PhD
12	Uttam Rana	Assistant Professor Grade I	PhD
13	Santanu Das	Assistant Professor Grade II	PhD
14	Debasish Das	Assistant Professor Grade II	PhD
15	Kaustav Pradhan	Assistant Professor Grade II	PhD
16	Snehasish Bhattacharjee	Assistant Professor Grade II	PhD
17	Rajib Chakraborty	Assistant Professor Grade II	PhD
18	Apurba Das	Assistant Professor Grade II	PhD
19	Mukesh Kumar	Assistant Professor Grade II	PhD

Department of Metallurgy and Materials Engineering (MME)

Sl. No.	Name	Designation	Highest Degree
1	Amitava Basu Mallick	Professor (HAG)	PhD
2	Partha Pratim Chattopadhyay	Professor	PhD
3	Swarup Kr Ghosh	Professor	PhD
4	Manojit Ghosh	Professor	PhD
5	Debdulal Das	Professor	PhD
6	Sumit Ghosh	Associate Professor	MMetE
7	Kaushik Das	Associate Professor	PhD
8	Sukumar Kundu	Associate Professor	PhD
9	Snehanshu Pal	Associate Professor	PhD
10	Suman Guha	Assistant Professor Grade I	PhD
11	Gautam Anand	Assistant Professor Grade II	PhD
12	Tapendu Mandal	Assistant Professor Grade II	PhD
13	Avishek Kumar	Assistant Professor Grade II	PhD

Department of Mining Engineering (MIN)

Sl. No.	Name	Designation	Highest Degree
1	Prabir Kumar Paul	Professor (HAG)	PhD
2	Netai Chandra Dey	Professor (HAG)	PhD
3	Pratik Dutta	Professor	PhD
4	Sudipta Mukhopadhyay	Professor	PhD
5	Gopal Chandra Roy	Assistant Professor Grade I	PhD
6	Md. Mirajul Islam	Assistant Professor Grade I	PhD

Department of Physics

Sl. No.	Name	Designation	Highest Degree
1	Mousumi Basu	Professor	PhD
2	Sampad Mukherjee	Associate Professor	PhD
3	Samar Jana	Associate Professor	PhD
4	Amit Kundu	Associate Professor	PhD
5	Krishnendu Mukherjee	Associate Professor	PhD
6	Syed Minhaz Hossain	Associate Professor	PhD
7	Dwipesh Majumder	Associate Professor	PhD
8	Abhijit Bisoi	Assistant Professor Grade I	PhD
9	Mojammel Haque Mondal	Assistant Professor Grade I	PhD
10	Debasis Ray	Assistant Professor Grade II	PhD
11	Sourav Pramanik	Assistant Professor Grade II	PhD

Centre for Healthcare Science and Technology (CHST)

Sl. No.	Name	Designation	Highest Degree
1	Ananya Barui	Assistant Professor Grade I	PhD
2	Amlan Roychowdhury	Assistant Professor Grade II	PhD

School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)

Sl. No.	Name	Designation	Highest Degree
1	Nillohit Mukherjee	Assistant Professor Grade II	PhD
2	Santanu Maity	Assistant Professor Grade I	PhD

School of Community Science and Technology (SOCSAT)

Sl. No.	Name	Designation	Highest Degree
1	Jayati Bhowal	Assistant Professor Grade I	PhD
2	Shantonu Roy	Assistant Professor Grade II	PhD
3	Dipsikha Kalita	Assistant Professor Grade II	PhD

School of Mechatronics and Robotics (SMR)

Sl. No.	Name	Designation	Highest Degree
1	Tanmay Pal	Assistant Professor Grade II	PhD
2	Anirban Nag	Assistant Professor Grade II	PhD

School of VLSI Technology

Sl. No.	Name	Designation	Highest Degree
1	Tamal Ghosh	Assistant Professor Grade II	PhD

Table 2.2: Non-Regular Faculty Members

Contractual Faculty

Sl. No.	Name	Dept./School/Centre
1	Chitrangada Das Mukhopadhyay	Centre for Healthcare Science and Technology
2	Sumita Mukhopadhyay	School of Advanced Materials, Green Energy and Sensor Systems
3	Sudip Ghosh	VLSI Technology

INSPIRE Faculty

Sl. No.	Name	Dept./School/Centre
1	Subhabrata Koley	Aerospace Engineering and Applied Mechanics
2	Pratik Kumar Das	Earth Sciences
3	Shreedevi Moharana	Mining Engineering

UGC-FRP Faculty

Sl. No.	Name	Dept./School/Centre
1	Mrinal K. Bera	Chemistry
2	Manish Pal Chowdhury	Physics
3	Abhijit Majumdar	Physics

Visiting Faculty

Sl. No.	Name	Dept./School/Centre
1	Subhasis Chaudhuri	Electrical Engineering
2	Abhijit Chakrabarti	Electrical Engineering
3	Subir Kumar Sarkar	Electronics and Telecommunication Engineering
4	Kajal Mukhopadhyay	Human Resource Management
5	Prasun Kumar Chatterjee	Human Resource Management
6	Ashis Bhattacherjee	Mining Engineering
7	Kabir Dasgupta	Mining Engineering
8	Subir Kumar Sinha	School of Management Sciences

Temporary Faculty

Sl. No.	Name	Dept./School/Centre
1	Nilavarasan T	Aerospace Engineering and Applied Mechanics
2	Sunil Manohar Maharana	
3	Rajesh Kumar Yadav	
4	Mouli Majumdar	Architecture and Planning
5	Krishanu Santra	
6	Suchismita Nayak	
7	Varsha Vinod	
8	Syed Meheboob Elahi	Chemistry

Sl. No.	Name	Dept./School/Centre
9	Sangita Deb Barman	Civil Engineering
10	Saptarshi Kundu	
11	Swarup Kumar Barman	
12	Deep Roy	
13	Swaraj Chowdhury	
14	Akshay Pratap Singh	
15	Subhra Paul	
16	Mrinal Kanti Layek	Earth Science
17	Vikas Kumar Das	
18	Rajkumar Ghosh	
19	Reetam Mondal	Electrical Engineering
20	Mithu Sarkar	
21	Debdeep Saha	
22	Syed Abdullah Qasim	
23	Sumit Kumar Pandey	
24	Pritam Paral	
25	Dipankar Saha	Electronics and Telecommunication Engineering
26	Madhupriya Samanta	
27	Sourav Kundu	
28	Subhabrata Roy	
29	Shashwati Banerjee	Humanities and Social Sciences
30	Koninika Mukherjee	
31	Soumen Samanta	Mathematics
32	Akashdip Karmakar	
33	Snehasish Bhattacharjee	Mechanical Engineering
34	Subhadip Pradhan	
35	Pradip Mondal	
36	Mukesh Kumar	
37	Vinod Kumar Singh	
38	Tamonash Jana	
39	Santanu Sardar	
40	Avishek Kumar	Metallurgy & Materials Engineering
41	Debasish Chatterjee	
42	Aditi Sarkar	Mining Engineering
43	Shreedevi Moharana	
44	Poulami Ghosh	Physics
45	Sangeeta Das	
46	Subhadip Chakraborty	Centre for Healthcare Science and Technology
47	Joynarayan Mukherjee	School of Advanced Materials, Green Energy and Sensor Systems
48	Dipsikha Kalita	School of Community Science & Technology
49	Anup Gorai	School of Mechatronics & Robotics

Sl. No.	Name	Dept./School/Centre
50	Partha Sarathi Chowdhury	School of Management Sciences
51	Poulomi Mukherjee Mondal	
52	Rana Basu	
53	Shanujas V	
54	Satarupa Roychowdhury	
55	Mandira Dey	

Superannuated Faculty

Sl. No.	Name	Date of Superannuation
1	Somnath Pal	30.06.2023
2	Sujay Kumar Mukherjea	31.07.2023
3	Sugato Pal	31.08.2023
4	Dipali Banerjee	30.11.2023
5	Monojit Mitra	31.12.2023
6	Susanta Chakraborty	31.12.2023
7	Indranath Sinha	31.01.2024

2.2 Non-Academic Officers and Staff Members

Officers Cadre

Sl. No.	Name	Department	Designation
1	Alok Kumar Maity	Office of the Finance	Joint Registrar
2	Nirmalya Kumar Bhattacharyya	Jt. Registrar (Academic)	Joint Registrar
3	Hari Prasad Sharma	Library	Joint Librarian
4	Alok Kumar Mitra	Office of the Registrar	Assistant Registrar
5	Bivore Das	Office of the Registrar	Assistant Registrar
6	Dipankar Chakrabarty	Office of the Finance	Assistant Registrar
7	Shib Sankar Basak	Office of the Registrar	Assistant Registrar
8	Sushil Kumar Barman	Library	Assistant Librarian (SG)
9	Abani Oraon	Library	Assistant Librarian

Administration: Higher Grade

Sl. No.	Name	Department	Designation
1	Haran Chandra Sadhukhan	Office of the Dean (FW)	Private Secretary
2	Mamit Mitra	Office of the Finance	Private Secretary
3	Chinmoy Sana	Office of the Dean (SW)	Private Secretary
4	Mintu Charan Khan	Mechanical Engineering	Private Secretary
5	Tarun Paul	Electronics & Tele-communication Engineering	Private Secretary
6	Malay Garai	Human Resource Management	Private Secretary
7	Tamal Kumar Das	Office of the Finance	Superintendent SG-I

Sl. No.	Name	Department	Designation
8	Kashi Nath Singh	Office of the Registrar	Superintendent SG-II
9	Madan Mohan Bose	Office of the Registrar	Superintendent SG-II
10	Tarak Nath Das	Office of the Registrar	Superintendent SG-II
11	Partha Sarathi Maity	Office of the Registrar	Superintendent SG-II
12	Susmita Sarkar	Office of the Finance	Superintendent SG-II
13	Sunil Kumar Manna	Office of the Finance	Superintendent SG-II
14	Arup Kumar Patra	Office of the Finance	Superintendent SG-II
15	Nimain Charan Satapathy	Office of the Finance	Superintendent SG-II
16	Judhistir Mandal	Office of the Finance	Superintendent SG-II
17	Raja Banerjee	Office of the Dean (Academic and Examination)	Superintendent SG-II
18	Swati Kar (Deb)	Office of the Dean (Academic and Examination)	Superintendent SG-II
19	Mantu Goswami (Manna)	Office of the Dean (Academic and Examination)	Superintendent SG-II
20	Gautam Biswas	Office of the Dean (Academic and Examination)	Superintendent SG-II
21	Biplab Mukherjee	Electrical Engineering	Superintendent SG-II
22	Alok Roy	Workshop	Superintendent SG-II
23	Mahadev Biswas	Hostel Management Council	Superintendent SG-II

Administration: Lower Grade

Sl. No.	Name	Department	Designation
1	Anindya Mukhopadhyay	Office of the Registrar	Assistant (SG-I)
2	Partha Sarathi Nath	Office of the Registrar	Assistant (SG-I)
3	Ayandeb Datta	Office of the Registrar	Assistant (SG-I)
4	Subrata Baidya	Office of the Registrar	Assistant (SG-I)
5	Pijush Datta	Office of the Registrar	Assistant (SG-I)
6	Sourasis Mitra	Office of the Registrar	Assistant (SG-I)
7	Debasish Saha	Central Library	Assistant (SG-I)
8	Sujata Saren	Office of the Finance	Assistant (SG-I)
9	Sujan Sarkar	Office of the Dean (Academic and Examination)	Assistant (SG-I)
10	Suchita Khakha	Dean (Students' Welfare)	Assistant (SG-I)
11	Ram Sunder Yadav	Human Resource Management	Assistant (SG-I)
12	Asim Das Chakraborty	Physics	Assistant (SG-I)
13	Somnath Das	Office of the Finance	Assistant (SG-I)
14	Shyamal Kumar Manna	Hospital	Assistant (SG-I)
15	Baidyanath Mondal	Compound Section	Assistant (SG-I)
16	Arindam Banerjee	Office of the Registrar	Assistant (SG-II)
17	Uttam Chatterjee	Office of the Finance	Assistant (SG-II)
18	Arpita Das	Office of the Dean (Academic and Examination)	Assistant (SG-II)
19	Surajit Das	Office of the Registrar	Assistant (SG-II)
20	Chandrani Mukhopadhyay	Office of the Registrar	Assistant (SG-II)
21	Sarojit Das	Office of the Finance	Assistant (SG-II)
22	Abhijit Bhattacharyya	Office of the Finance	Assistant (SG-II)
23	Santanu Ganguli	Office of the Finance	Assistant (SG-II)
24	Tarun Kanti Mitra	Office of the Finance	Assistant (SG-II)

Technical: Higher Grade

Sl. No.	Name	Department	Designation
1	Ranjan Kumar Biswas	Civil Engineering	Technical Assistant SG-I
2	Sajal Kumar Chakraborty	Civil Engineering	Technical Assistant SG-I
3	Amrita Bandopadhyay (nee Khan)	Civil Engineering	Technical Assistant SG-I
4	Sarbani Barari	Office of the Registrar	Technical Assistant SG-I
5	Sutap Chakraborty	Office of the Finance	Technical Assistant SG-I
6	Debjit Bhowmik	Office of the Dean (Academic & Examination)	Technical Assistant SG-I
7	Amalendu Sahoo	Aerospace Engineering and Applied Mechanics	Technical Assistant SG-I
8	Sarbani Sarkar	Architecture and Planning	Technical Assistant SG-I
9	Anjana Sengupta	Architecture and Planning	Technical Assistant SG-I
10	Keyarani Mondal	Architecture and Planning	Technical Assistant SG-I
11	Sugata Munshi	Chemistry	Technical Assistant SG-I
12	Ramesh Halder	Chemistry	Technical Assistant SG-I
13	Amar Tarafder	Civil Engineering	Technical Assistant SG-I
14	Mohini Mohan Debsharma	Civil Engineering	Technical Assistant SG-I
15	Swaroop Shobhan Mukherjee	Civil Engineering	Technical Assistant SG-I
16	Sumitra Bagchi	Computer Science and Technology	Technical Assistant SG-I
17	Rumeli Bose	Computer Science and Technology	Technical Assistant SG-I
18	Sujata Misra	Computer Science and Technology	Technical Assistant SG-I
19	Rajib Bandopadhyay	Electrical Engineering	Technical Assistant SG-I
20	Pradip Kumar Das	Electrical Engineering	Technical Assistant SG-I
21	Amitava Pal	Electrical Engineering	Technical Assistant SG-I
22	Partha Sarathi Baruri	Electrical Engineering	Technical Assistant SG-I
23	Rajat Mukhopadhyay	Electronics and Tele-communication Engineering	Technical Assistant SG-I
24	Brindaban Patta	Electronics and Tele-communication Engineering	Technical Assistant SG-I
25	Pradip Mistry	Electronics and Tele-communication Engineering	Technical Assistant SG-I
26	Soma Naskar (Sardar)	Information Technology	Technical Assistant SG-I
27	Souvik Patra	Information Technology	Technical Assistant SG-I
28	Amiya Ratan Rout	Information Technology	Technical Assistant SG-I
29	Snehashis Saha	Information Technology	Technical Assistant SG-I
30	Subhajit Biswas	Information Technology	Technical Assistant SG-I
31	Asish Kumar Paul	Mechanical Engineering	Technical Assistant SG-I
32	Bijit Kumar Dey	Mechanical Engineering	Technical Assistant SG-I
33	Subhasish Pradhan	Mechanical Engineering	Technical Assistant SG-I
34	Nani Gopal Roy	Mechanical Engineering	Technical Assistant SG-I

Sl. No.	Name	Department	Designation
35	Kankar Mohan Das	Mechanical Engineering	Technical Assistant SG-I
36	Salil Kumar Dalui	Metallurgy and Materials Science and Engineering	Technical Assistant SG-I
37	Swapan Kumar Jana	Metallurgy and Materials Science and Engineering	Technical Assistant SG-I
38	Prasanta Gope	Mining Engineering	Technical Assistant SG-I
39	Amitava Chowdhury	Mining Engineering	Technical Assistant SG-I
40	Janardan Kar	Mining Engineering	Technical Assistant SG-I
41	Bibhas Chandra Mitra	Physics	Technical Assistant SG-I
42	Amal Kumar Mandal	Physics	Technical Assistant SG-I
43	Sintu Das	Physics	Technical Assistant SG-I
44	Susanta Dhara	Computer Centre	Technical Assistant SG-I
45	Biswajit Das	Computer Centre	Technical Assistant SG-I
46	Braja Gopal Koner	Institute Work Division	Technical Assistant SG-I
47	Soumen Gope	Network and IT Infrastructure	Technical Assistant SG-I
48	Sanjoy Naskar	Workshop	Technical Assistant SG-I
49	Hariprasad Saha	Workshop	Technical Assistant SG-I
50	Pradip Kumar Roy	Website Cell	Technical Assistant SG-I
51	Saumendu Atta	Central Library	Library and Information Assistant SG-I
52	Biswajit Samanta	Electronics and Tele-communication Engineering	Technical Assistant SG-II
53	Bishnu Pada Choudhury	Information Technology	Technical Assistant SG-II
54	Santosh Kumar Kayal	Workshop	Technical Assistant SG-II
55	Rabi Sankar Kandar	Hospital	Sr. Pharmacist
56	Moumita Sahoo (Porya)	Hospital	Sr. Pharmacist

Technical: Lower Grade

Sl. No.	Name	Department	Designation
1	Balaram Roy	Office of the Registrar	Technician SG - I
2	Jayanta Kundu	Aerospace Engg. & Applied Mechanics	Technician SG - I
3	Bablu Santra	Electrical Engineering	Technician SG - I
4	Dibyendu Paul	Electronics and Telecommunication Engg.	Technician SG - I
5	Pradip Kumar Dey	Mechanical Engineering	Technician SG - I
6	Saibal Ghosh	Mining Engineering	Technician SG - I
7	Sudipta Mandal	Hospital	Technician

Supporting Staff

Sl. No.	Name	Department	Designation
1	Subir Ghosh	Office of the Registrar	Office Attendant SG I
2	Dharmendra Das	Office of the Registrar	Office Attendant SG I
3	Sukumar Sarkar	Office of the Registrar	Office Attendant SG I
4	Siba Prasad Jana	Office of the Registrar	Office Attendant SG I
5	Amarendra Nath Polley	Office of the Registrar	Office Attendant SG I
6	Rabin Das	Office of the Registrar	Office Attendant SG I
7	Prasanta Mallick	Office of the Registrar	Office Attendant SG I
8	Susanta Pal	Office of the Registrar	Office Attendant SG I
9	Arabinda Samanta	Office of the Registrar	Office Attendant SG I
10	Susanta Bhattacharjee	Office of the Finance	Office Attendant SG I
11	Prosenjit Panja	Office of the Finance	Office Attendant SG I
12	Ashok Kumar Ghosh	Office of the Finance	Office Attendant SG I
13	Asit Baran Dey	Office of the Finance	Office Attendant SG I
14	Nemai Charan Bal	Dean, Faculty Welfare	Office Attendant SG I
15	Richar Francis Subba	Office of the Dean (Academic and Examination)	Office Attendant SG I
16	Buddhadev Samanta	Dean, Students' Welfare	Office Attendant SG I
17	Saleha Khatun	Aerospace Engineering and Applied Mechanics	Office Attendant SG I
18	Gopal Chandra Parua	Aerospace Engineering and Applied Mechanics	Office Attendant SG I
19	Ranu Dey	Architecture and Planning	Office Attendant SG I
20	Julfikar Ali Molla	Chemistry	Office Attendant SG I
21	Chanda Devi	Earth Science	Office Attendant SG I
22	Sanjay Ghosh	Electrical Engineering	Office Attendant SG I
23	Jahar Pal	Computer Science and Technology	Office Attendant SG I
24	Rama Roy	Computer Science and Technology	Office Attendant SG I
25	Deb Kumar Jana	Mathematics	Office Attendant SG I
26	Tarak Das	Mathematics	Office Attendant SG I
27	Dilip Kumar Das	Mechanical Engineering	Office Attendant SG I
28	Amiya Kumar Paul	Physics	Office Attendant SG I
29	Bibhuti Bhusan Dey	Central Library	Office Attendant SG I
30	Pradut Kumar Manna	Compound Section	Office Attendant SG I
31	Mahesh Das	Compound Section	Office Attendant SG I
32	Rambrij Prasad Harijan	Compound Section	Office Attendant SG I
33	Tapan Oraon	Compound Section	Office Attendant SG I
34	Ram Prosad Routh	Compound Section	Office Attendant SG I
35	Rajesh Routh	Compound Section	Office Attendant SG I
36	Debabrata Patra	Compound Section	Office Attendant SG I
37	Gita Hela	Compound Section	Office Attendant SG I
38	Ram Chandra Routh	Compound Section	Office Attendant SG I

Sl. No.	Name	Department	Designation
39	Rankanidhi Nayak	Compound Section	Office Attendant SG I
40	Gangadhar Nayak	Compound Section	Office Attendant SG I
41	Niranjan Nayak	Compound Section	Office Attendant SG I
42	Raj Kumar Dome	Compound Section	Office Attendant SG I
43	Arun Kumar Patra	Dept. of Students' Activity	Office Attendant SG I
44	Murali Mohan Mohanty	Dept. of Students' Activity	Office Attendant SG I
45	Kalyan Prasad Pathak	Dept. of Students' Activity	Office Attendant SG I
46	Nirmal Kumar Kar	Dept. of Students' Activity	Office Attendant SG I
47	Biswajit Kar	Dept. of Students' Activity	Office Attendant SG I
48	Sibu Das	Hospital	Office Attendant SG I
49	Mithilesh Kumar Roy	Hospital	Office Attendant SG I
50	Ashoke Halder	Hospital	Office Attendant SG I
51	Murari Mondal	Institute Work Division	Office Attendant SG I
52	Prabir Naskar	Workshop	Office Attendant SG I
53	Badal Seal	Workshop	Office Attendant SG I
54	Santanu Pramanick	Office of the Registrar	Office Attendant SG II
55	Subhas Sarkar	Office of the Registrar	Office Attendant SG II
56	Kakali Pakhira (Pan)	Office of the Registrar	Office Attendant SG II
57	Chaitali Bhattacharjee	Office of the Registrar	Office Attendant SG II
58	Chandan Karmakar	Office of the Registrar	Office Attendant SG II
59	Sushil Kumar Dey	Office of the Finance	Office Attendant SG II
60	Suresh Chandra Naik	Office of the Registrar	Office Attendant SG II
61	Biplab Kayal	Office of the Dean (Academic)	Office Attendant SG II
62	Dhiman Chandra Das	Office of the Dean (Academic)	Office Attendant SG II
63	Tarak Nath Jana	Office of the Dean (Academic)	Office Attendant SG II
64	Idrish Mallick	Office of the Dean, Faculty Welfare	Office Attendant SG II
65	Ruma Das Ghosh	Dean, Research and Consultancy	Office Attendant SG II
66	Dilip Kumar Bag	Dean, Students' Welfare	Office Attendant SG II
67	Rajkumar Dhali	Dean, Students' Welfare	Office Attendant SG II
68	Tinku Das	Office of the Dean, Students' Welfare	Office Attendant SG II
69	Pintu Das	Office of the Dean, Students' Welfare	Office Attendant SG II
70	Satya Narayan Karmakar	Civil Engineering	Office Attendant SG II
71	Bijan Sarkar	Computer Science & Technology	Office Attendant SG II
72	Uttam Pal	Electronics and Tele-communication Engineering	Office Attendant SG II
73	Ashura Begum	Humanities and Social Sciences	Office Attendant SG II
74	Sudarsan Mahato	Human Resource Management	Office Attendant SG II
75	Biswajit Sarkar	Mechanical Engineering	Office Attendant SG II
76	Tarak Nath Dey	Metallurgy and Materials Science and Engineering	Office Attendant SG II
77	Manoj Bhagat	Metallurgy and Materials Science and Engineering	Office Attendant SG II
78	Debashis Mondal	Metallurgy and Materials Science and Engineering	Office Attendant SG II

Sl. No.	Name	Department	Designation
79	Sanjoy Ghosh	Mining Engineering	Office Attendant SG II
80	Sanjay Singh	Centre for Healthcare Science and Technology	Office Attendant SG II
81	Kumaresh Dey	School of Mechatronics and Robotics	Office Attendant SG II
82	Menoka Turi	Compound Section	Office Attendant SG II
83	Sidheswar Roy	Compound Section	Office Attendant SG II
84	Harekrushna Dash	Compound Section	Office Attendant SG II
85	Sapani Nayek	Compound Section	Office Attendant SG II
86	Sudama Chaowdhury	Compound Section	Office Attendant SG II
87	Md. Riaz	Compound Section	Office Attendant SG II
88	Asik Mohammad	Compound Section	Office Attendant SG II
89	Bapi Majhi	Compound Section	Office Attendant SG II
90	Rabi Nayak	Compound Section	Office Attendant SG II
91	Nageswar Mahato	Compound Section	Office Attendant SG II
92	Jaydeb Barua	Compound Section	Office Attendant SG II
93	Laloo Hela	Compound Section	Office Attendant SG II
94	Bhola Prasad Harijan	Compound Section	Office Attendant SG II
95	Naresh Bhagat	Compound Section	Office Attendant SG II
96	Chandra Shekhar Malakar	Compound Section	Office Attendant SG II
97	Sadhu Thakur	Compound Section	Office Attendant SG II
98	Sanjay Bhagat	Compound Section	Office Attendant SG II
99	Pradip Das	Compound Section	Office Attendant SG II
100	Gouranga Chowdhury	Hostel Management Council	Office Attendant SG II
101	Dipendu Paul	Institute Work Division	Office Attendant SG II
102	Md. Shamim	Workshop	Office Attendant SG II
103	Biswanath Darjee	Workshop	Office Attendant SG II
104	Ajoy Kumar Das	Workshop	Office Attendant SG II
105	Purnendu Bera	Architecture and Planning	MTS Workshop Attendant II
106	Mrinmoy Kumar Jana	Office of the Director	Sr. Office Attendant
107	Narayan Chandra Dash	Office of the Registrar	Sr. Office Attendant
108	Subhadra Manna	Office of the Registrar	Sr. Office Attendant
109	Malati Dey	Office of the Registrar	Sr. Office Attendant
110	Mahua Sarkar	Office of the Finance	Sr. Office Attendant
111	Rakesh Kumar Nayak	Civil Engineering	Sr. Office Attendant
112	Sandip Pramanick	Electrical Engineering	Sr. Office Attendant
113	Krishna Chakraborty	Electronics and Tele-communication Engineering	Sr. Office Attendant
114	Avijit Nath	Mechanical Engineering	Sr. Office Attendant
115	Sekhar Rao	Compound Section	Sr. Office Attendant
116	Mina Routh	Compound Section	Sr. Office Attendant
117	Radhashyam Chatterjee	Dept. of Students' Activity	Sr. Office Attendant

Sl. No.	Name	Department	Designation
118	Ashok Kumar Roy	Dept. of Students' Activity	Sr. Office Attendant
119	Taraprasanna Ganguly	Dept. of Students' Activity	Sr. Office Attendant
120	Ranjan Kumar Pal	Dept. of Students' Activity	Sr. Office Attendant
121	Bikash Majhi	Dept. of Students' Activity	Sr. Office Attendant
122	Tarak Majhi	Dept. of Students' Activity	Sr. Office Attendant
123	Sanjib Das	Dept. of Students' Activity	Sr. Office Attendant
124	Rabin Jana	Dept. of Students' Activity	Sr. Office Attendant
125	Joydeb Dolai	Dept. of Students' Activity	Sr. Office Attendant
126	Tarun Chaandra Das	Dept. of Students' Activity	Sr. Office Attendant
127	Manas Kumar Saha	Dept. of Students' Activity	Sr. Office Attendant
128	Uttam Kumar Dolai	Dept. of Students' Activity	Sr. Office Attendant
129	Sankar Karmakar	Dept. of Students' Activity	Sr. Office Attendant
130	Milon Kumar Das	Institute Work Division	Sr. Office Attendant

Contractual Non-Academic Staff

Sl. No.	Name	Designation
1	Malay Kundu	Scientific Officer
2	Dibyendu Banerjee	Assistant Engineer (Civil)
3	Amal Das	Technical Assistant
4	Sourav Kundu	Technical Assistant
5	Sanchayita Dhara	Technical Assistant
6	Goutam Paul	Technical Assistant
7	Sandipan Patra	Technical Assistant
8	Ratna Ghosh	Technical Assistant
9	Suhrid Bakshi	Technical Assistant
10	Suvankar Bose	Technical Support Staff
11	Mouli Das	Technical Support Staff
12	Sudip Bhattacharjee	Laboratory Attendant
13	Kumar Nayak	Laboratory Attendant
14	Dipsikha Chandra (Pal)	Computer Assistant
15	Shiladitya Bhandary	Sr. Network Assistant
16	Monoj Das	Physical Trainer-Cum- Ground Maintenance Staff
17	Avijit Banerjee	Assistant (Maintenance of Information System)
18	Sambhu Meta	Document Preparation Assistant
19	Indrajit Ghosh	Information cum Data Entry Assistant
20	Goutam Bandyopadhyay	Accountant (Contractual)
21	Kanchan Kumar Maji	Accounts Assistant
22	Saikat Ganguli	Accounts Assistant
23	Asish Bag	Accounts Assistant
24	Mousumi Shaw (Das)	Library Assistant
25	Susanta Sarma	Office Assistant

Sl. No.	Name	Designation
26	Malay Kumar Dhir	Office Assistant
27	Arindam Bhattacharjee	Office Assistant
28	Sanjay Sarkar	Office Assistant
29	Goutam Sarkar	Office Assistant
30	Subhasree Majumder	Part time Office Assistant
31	Sanjay Dey	Project Office Staff (Group-C) Category
32	Bishwarup Bhattacherjee	Project Office Staff (Group-C) Category
33	Swapan Kumar Patra	Project Office Staff (Group-C) Category
34	Bimal Adhya	Project Office Staff (Group-C) Category
35	Sougata Das	Project Office Staff
36	Manoranjan Jana	Project Office Staff
37	Sukhen Adhikari	Project Office Staff
38	Sudipta Das	Junior Assistant
39	Rajat Mullick	Office Peon
40	Pranab Satpathi	Office Peon
41	Pradip Kumar Majumder	Office Peon
42	Sukanta Guha	Office Peon
43	Suman Sarkar	Group-D
44	Koushik Dey	Group-D
45	Dinabandhu Sadhukhan	Group-D
46	Rabindra Nath Das	Group-D
47	Aloke Mondal	Group-D
48	Manick Chandra Pal	Group-D
49	Uttam Kayal	Driver
50	Avijit Das	Driver

Superannuated Non-Academic Staff

Sl. No.	Name	Designation
1	Devasis Datta	31.07.2023
2	Bagala Prasad Patra	31.10.2023
3	Asoke Routh	31.10.2023
4	Usha Shankar Bhattacharya	30.11.2023
5	Milan Majumder	30.11.2023
6	Rita Ghosh	30.11.2023
7	Raktim Maity	31.01.2024
8	Rashbihari Chakrabarti	31.01.2024
9	Arati Majumdar	29.02.2024
10	Arun Kumar Ghosh	29.02.2024

GYM

3 Academic Programmes

Academic Programmes and Statistics of Examination

The Institute offers the following Undergraduate (UG), Postgraduate (PG) and Doctoral (PhD) programmes:

UG	PG	PhD
» Four-Year BTech Degree	» Two-Year MTech Degree	» Doctoral Programme
» Five-Year Dual Degree (BTech-MTech)	» Two-Year MPlan Degree	
» Five-Year BArch Degree	» Two-Year MSc	
	» Two-Year MBA	

3.1 Four-Year BTech Degree / Five-Year Dual Degree (BTech-MTech)

The Institute offers Four-year full-time programme leading to BTech Degree in the following disciplines:

- Aerospace Engineering
- Civil Engineering
- Computer Science and Technology
- Electrical Engineering
- Electronics and Telecommunication Engineering
- Information Technology
- Mechanical Engineering
- Metallurgy and Materials Engineering
- Mining Engineering

On the basis of performance of a student, options are offered to (i) Change discipline at the end of 2nd semester for BTech programme and (ii) Switch over to Dual Degree (BTech-MTech) programme at the end of 6th semester for completing MTech programme along with the BTech programme by studying for one more year.

3.2 Five-Year BArch Degree

The Institute offers **Five-year full-time** programme in Architecture leading to **BArch Degree**.

3.3 Two-Year MTech Degree

The Institute offers Two-year full-time programme leading to MTech Degree in the following disciplines:

MTech Programme in	Offered by
Applied Mechanics	Department of Aerospace Engineering and Applied Mechanics (AE&AM)
Civil Engineering	Department of Civil Engineering (CE)
Computer Science and Engineering	Department of Computer Science and Technology Department (CST)
Electrical Engineering	Department of Electrical Engineering (EE)
Electronics and Telecommunication Engineering	Department of Electronics and Telecommunication Engineering (ETCE)
Information Technology	Department of Information Technology (IT)
Mechanical Engineering	Department of Mechanical Engineering (ME)
Metallurgy & Materials Engineering	Department of Metallurgy and Materials Engineering (MME)
Geoinformatics	Department of Mining Engineering Department (MIN)
(i) Biomedical Engineering	Centre for Healthcare Science and Technology (CHST)
(ii) Safety & Occupational Health	
(i) Materials Science and Engineering	School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)
(ii) Renewable Energy Science and Technology	
Mechatronics	School of Mechatronics and Robotics (SMR)
VLSI Design	School of VLSI Technology (VLSI)

Details of specializations for the courses above are furnished in Table 3.1.

3.4 Two-Year MPlan Degree

The Institute offers **Two-year full-time** programme in the following discipline leading to **MPlan Degree**:

MTech Programme in	Offered by
Urban and Regional Planning	Department of Architecture and Planning

Table 3.1: Details of MTech / MPlan Programmes

Academic Sections	Specializations
Department of Aerospace Engineering and Applied Mechanics	Mechanics of Fluids Mechanics of Solids
Department of Architecture and Planning	Urban and Regional Planning
Department of Civil Engineering	Environmental Engineering Geotechnical Engineering Structural Engineering Transportation Engineering Water Resources Engineering
Department of Computer Science and Technology	Computer Science and Engineering
Department of Electrical Engineering	Control System and Instrumentation Power and Energy Systems Power Electronics, Machines and Drives
Department of Electronics and Telecommunication Engineering	Communication Engineering and Signal Processing Microelectronics and VLSI Design Microwave Communication
Department of Information Technology	Information Technology
Department of Mechanical Engineering	Machine Design Thermal Engineering Manufacturing Science
Department of Metallurgy and Materials Engineering	Materials Engineering Manufacturing Technology
Department of Mining Engineering	Geoinformatics Mining Engineering
Centre for Healthcare Science and Technology	Biomedical Engineering Safety and Occupational Health
School of Advanced Materials, Green Energy and Sensor Systems	Materials Science and Technology Renewable Energy Science and Technology
School of Mechatronics & Robotics	Mechatronics
School of VLSI Technology	VLSI Design

3.5 Two-Year MSc Degree

The Institute offers **Two-year full-time** programme leading to **MSc Degree** in the following disciplines:

MSc Programme in	Offered by
Chemistry	Department of Chemistry
Applied Geology	Department of Earth Science
Applied Mathematics	Department of Mathematics
Physics	Department of Physics
Food Processing & Nutrition Sciences	School of Community Science & Technology

3.6 Two-Year MBA

The Institute offers a **Two-year full-time** programme leading to **MBA Degree** by School of Management Sciences (SOMS).

3.7 PhD Programme

The Institute offers **full time Doctoral Programme** to obtain **PhD Degree** in

Architecture

Engineering

Science

Management

3.8 Student Strength

Category	UG				PG				PhD				Total
	Male		Female		Male		Female		Male		Female		
	NPH	PH	NPH	PH	NPH	PH	NPH	PH	NPH	PH	NPH	PH	
General	745	26	211	2	172	0	80	0	401	3	164	0	1804
SC	268	1	91	0	70	0	24	0	99	0	36	0	589
ST	139	0	49	0	11	0	2	0	1	0	0	0	202
OBC	647	9	163	2	90	0	49	0	96	0	20	0	1076
EWS	276	0	76	0	43	0	15	0	5	0	5	0	420
Total	**2075**	**36**	**590**	**4**	**386**	**0**	**170**	**0**	**602**	**3**	**225**	**0**	**4091**
Total Male / Female (course-wise)		**2111**		**594**		**386**		**170**		**605**		**225**	
Total (UG / PG / Ph.D.)				**2705**				**556**				**830**	

PhD Students	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Full Time Admitted	85	72	57	91	116
Degree Awarded	96	108	129	65	81

3.9 Statistics of Examination (Year 2023)

I. BArch, BTech under Dual Degree Programme

Course	Appeared	Passed	Pass Percentage
Bachelor of Architecture	20	20	100
Bachelor of Technology Under Five Year Dual Degree (BTech-MTech) Programme in Computer Science & Technology	1	1	100

II. BTech

Course	Appeared	Passed	Pass Percentage
Bachelor of Technology in Aerospace Engineering	39	38	97
Bachelor of Technology in Civil Engineering	106	105	99
Bachelor of Technology in Computer Science and Technology	95	95	100
Bachelor of Technology in Electrical Engineering	88	88	100
Bachelor of Technology in Electronics and Telecommunication Engineering	59	59	100
Bachelor of Technology in Information Technology	97	97	100
Bachelor of Technology in Mechanical Engineering	87	85	98
Bachelor of Technology in Metallurgy and Materials Engineering	33	32	97
Bachelor of Technology in Mining Engineering	37	37	100

III. Dual Degree (BTech)

Course	Appeared	Passed	Pass Percentage
Bachelor of Technology Under Five Year Dual Degree (BTech-MTech) Programme in Civil Engineering	2	2	100
Bachelor of Technology Under Five Year Dual Degree (BTech-MTech) Programme in Metallurgy & Materials Engineering	1	1	100

IV. Dual Degree (MTech)

Course	Appeared	Passed	Pass Percentage
Master of Technology Under Five Year Dual Degree (BTech-MTech) Programme in Civil Engineering	2	2	100
Master of Technology Under Five Year Dual Degree (BTech-MTech) Programme in Metallurgy & Materials Engineering	1	1	100

V. MTech / MPlan / MSc / MBA

Course	Appeared	Passed	Pass Percentage
Master of Technology in Applied Mechanics	14	13	93
Master of Technology in Civil Engineering	51	50	98
Master of Technology in Computer Science and Engineering	11	11	100
Master of Technology in Electrical Engineering	23	23	100
Master of Technology in Electronics and Telecommunication Engineering	14	14	100
Master of Technology in Information Technology	9	9	100
Master of Technology in Mechanical Engineering	19	18	95
Master of Technology in Metallurgy and Materials Engineering	5	5	100
Master of Technology in Geoinformatics	4	4	100
Master of Technology in Mining Engineering	4	3	75
Master of Technology in Biomedical Engineering	11	11	100
Master of Technology in Safety and Occupational Health	2	2	100
Master of Technology in Materials Science and Engineering	8	8	100

Course	Appeared	Passed	Pass Percentage
Master of Technology in Renewable Energy Science and Technology	10	10	100
Master of Technology in Mechatronics	10	10	100
Master of Technology in VLSI Design	16	16	100
Master of Planning	15	15	100
Master of Science in Chemistry	28	28	100
Master of Science in Applied Geology	32	32	100
Master of Science in Applied Mathematics	34	34	100
Master of Science in Physics	23	23	100
Master of Science in Food Processing & Nutrition Science	20	20	100
Master of Business Administration	7	7	100

3.10 Convocation

The Tenth Annual Convocation of the Institute was held on December 22, 2023. **Dr. Kota Harinarayana**, Former Chief Designer of India's 4th Generation Fighter, Light Combat Aircraft, Tejas Programme and Chairman, Board of Governors, IIT (BHU), Varanasi delivered the Convocation Address as the Chief Guest. In his address, he stressed the development of technologies that enable net zero emission goals to sustain the survival of life on this earth. **Smt. Tejaswini Ananth Kumar**, Chairperson, Board of Governors, IIEST, Shibpur, presided over the function. Her speech encouraged the IIEST fraternity for their commitment to innovation and sustainability in various areas, especially in alternative medicine and renewable energy. She emphasized environmental consciousness and responsible practices. **Prof. Parthasarathi Chakrabarti**, Director, IIEST, Shibpur delivered the Welcome Address. He outlined the achievements and activities of IIEST throughout the year. He wished the students to always nurture the spirit of innovation and keep alive their quest for higher knowledge.

The total number of Degree recipients in this Convocation was 1095. Degrees and prizes were awarded in this Convocation to a total of 657 Undergraduate students of 10 courses, 366 Postgraduate students from different courses, 03 Dual Degree students of two courses and 69 PhD Fellows who had completed their studies and passed the examinations during this period. Medals were awarded to 32 candidates who had secured the highest marks in different disciplines. THE PRESIDENT OF INDIA GOLD MEDAL was awarded to the student Nirabhro Makhal, Computer Science & Technology Department who secured 1st position among the undergraduates of all ten engineering disciplines taken together. GANESH CHANDRA MITRA MEMORIAL MEDAL was awarded to the student Deepshikha Saha, School of VLSI Technology who secured 1st position among the postgraduates of all the disciplines taken together. Some endowment medals were also awarded to the students who had stood first in their respective disciplines or had secured the highest marks in a particular subject.

4

Academic Units

Academic Units

Departments

4.1 Department of Aerospace Engineering and Applied Mechanics (AE&AM)

The Department of Applied Mechanics was established as a separate major engineering department in 1947 and subsequently, the Drawing Section was attached to it in the late fifties. With effect from 2008, the department has been renamed as the Department of Aerospace Engineering and Applied Mechanics. The prominent research areas of the department are Solid Mechanics, Fluid Mechanics and Hydraulics, Aerodynamics, Propulsion, Biomechanics, Robotics and Mechatronics, Structural Dynamics and Earthquake Engineering, Computational Fluid Dynamics, Soil-Structure Interaction, Composite Materials etc. Recent sponsors of research projects at the department include DST, AICTE, UGC, BARC, BRNS, MHRD, NAL, DRDO, Ministry of Earth Science, and CSIR. The research outcomes of the department are gauged by the significant number of publications made by faculty members in journals of repute.

Nozzle Performance Set-up, High Speed Aerodynamics Lab.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

» One-Day Workshop on Aeromodelling and Flight Training, February 2024

Invited Talk Organized

» Capt. MS Achal, First Officer in INDIGO delivered a talk on "Flight Training", February, 2024.

» Dr. Satadal Ghosh, Assistant Professor, Department of Aerospace Engineering, IIT Madras delivered a talk on "Guidance Laws for Application in Autonomous Vehicles", 19th May, 2023

Students' Achievement/Activities/ Higher Studies

» MTech in IITs/IISc: 3

» MBA in IIT/IIM: 1

» MS (Overseas): 4 (Imperial College, London -1, Cranfield University – 2, University of Florida, Gainesville – 1)

4.2 Department of Architecture and Planning

The Department of Architecture, Town and Regional Planning at the Indian Institute of Engineering Science and Technology, Shibpur has a long and rich history. Shortly after Independence, in 1949, two sister Departments were established at the erstwhile Bengal Engineering College, that is, the Department of Architecture headed by Mr G K Paknikar and the Department of Town and Regional Planning headed by Mr Abani Kumar De. The former offered the first 5-Year undergraduate degree in architecture of the country (Bachelor of Architecture-B Arch), the latter offered the first 2-Year postgraduate diploma in town and regional planning of the country (Diploma in Town and Regional Planning-DTRP).

Later, in October 1952, the two Departments merged to form the Department of Architecture, Town and Regional Planning headed by Mr Joseph Allen Stein, the renowned American architect, who has left his indelible mark in the post-independence architecture of India. The DTRP programme subsequently became a full-time course in Master of Town and Regional Planning (MTRP) from 1975.

In 2019, responding to the requirements of the present times, the postgraduate programme was upgraded as Master of Planning (specialization in Urban and Regional Planning). This was done to broaden the horizon of the Department in terms of academics, research and students' employment opportunities.

In its first ever participation as an independent entity in the National Institutional Ranking Framework (NIRF) for Architecture, approved by the Ministry of Human Resource Development, the Department obtained the sixth position in India rankings 2020, from amongst 66 participating institutions and departments of architecture.

Now, as an integral part of the IIEST, the department has expanded considerably with varied areas of research that include the following Architecture and Built Form, Computer Aided Architecture, Vernacular and Rural Architecture, Energy and Building, Urban Design, Architectural Conservation, Housing and Human Settlement Planning, Transportation Planning, Remote Sensing and Geographical Information System, Environmental Planning and Management, Rural Planning and Development, Regional Planning and Development, Earthquake resilient Buildings and Built form, Urban Planning/Town Planning, Infrastructure Planning, Urban administration, management and finance, Climate Change and Human Settlements. Presently the department has developed several state-of-the-art facilities for the benefit of the students, such as Material Museum for permanent display of samples of building materials, Computer Aided Architectural Design laboratory, Multimedia Simulation Laboratory and Remote Sensing and GIS laboratory.

Research Scholar Lab

GIS Lab

Climate Built Environment Lab

CAAD Lab

Workshop/Seminar/Conference/Symposium/Webinar Organized

» The department had conducted a Masonry workshop on Brickwork at the Construction yard of the Institute on 13.03.2024. First Year and Second Year students have had hands on experience of masonry in this One-day workshop.

Masonry Workshop

Invited Talk Organized

- The students had conducted unit level event under the banner of NASA – "NASA Day event" on 13th September 2023, and Dr. Biplab Kanti Sen Gupta, Professor from IIT-Kharagpur, was invited as the keynote speaker and the unit had arranged for an exhibition and various design and literary competitions.
- Mr. Rohit Priyadarshi Sanatani delivered an invited talk on "Glimpses of an Ongoing Journey" on 26th July 2023
- Mr. Anirban Adhya delivered an invited talk on "Memoirs of teaching and research experience in Architecture and Urban Design" on 18th October 2023

Students' Achievement/Activities/ Higher Studies

Academic Achievements

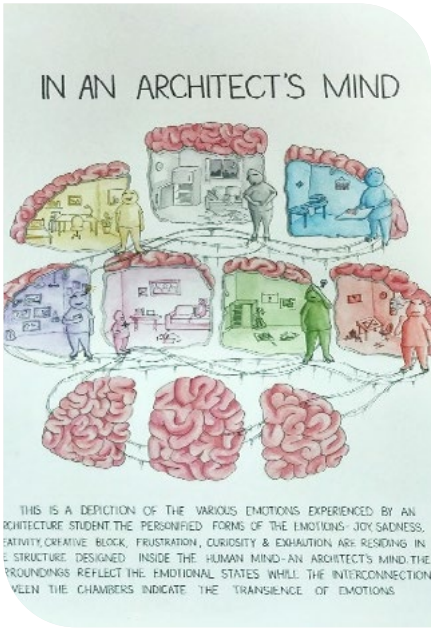
- Urjjasee Basak received 'Somenath Ghosh Memorial Award for All-Round Excellence 2024' awarded by alumni of B. E. College.
- Urbi Jana was awarded the best student award 2023 provided by the Indian Institute of Architects.
- Dayita Maity and Ujwal Sharma, present 3rd year students had been shortlisted in Writing Architecture Trophy 2023, conducted by NASA during April and May 2023.
- Ujwal Sharma, Soumaditto Das, Debasish Panja, Aindree Sen, Apurv Mirgule, Sunanda Roy won second prize in gate design competition in a Design Competition conducted by ABID Interiors Kolkata under Milan Mela Banner, April 2023.
- Dayita Maity, Siddharth Paul, Soumik Barua, Aratrika Das and Gaurav Dutta won second prize in installation design competition in a Design Competition conducted by ABID Interiors Kolkata under Milan Mela Banner, April 2023.
- Apurva Mirgule and Dayita Maity won an award in reel making competition in parametric architecture in a Design Competition conducted by ABID Interiors Kolkata under Milan Mela Banner, April 2023.
- Our students had won the Architectural Treasure Hunt, in the Nexus event, organised by Zone 4, NASA on 24th September 2023. The treasure hunt was conducted based on clues focussing on the heritage buildings in Kolkata. The winning team comprised of Arathrika Das, Oswin Joy, Debopriyo Dalal, Smriti Singh, Kazi Unmeelan Islam, Adarsh Dhanraj Panchbhai and Trishit Das)
- Awarded Special mention award in Floatila Competition, in the theme 'Vivelo', in in Zonal NASA convention, conducted in Gitam University, Vishakhapatnam, on 29th October 2023.

Students' Achievement

Students' Achievement

Participated

- Participation in ArchCult Microcosm competition conducted by NIT Trichy (2023) on 7th October 2023.
- Participated in (a) thread and pins competition and Sketching workshop (b) Mud and lime workshop (c) Sketching workshop, as part of Zonal NASA Convention 2023, conducted in Gitam University, Vishakhapatnam, from from 27th to 30th October 2023.



Students' Participation in Workshop

Curricular Activities and Achievements

Student	Title	Event	Organised by
Prateeksha Sinha	Wolfame-Gold (team)	Table Tennis	Wolfenden Hall, IIEST Shibpur
	Salient-Gold(singles)	Silver (mixed doubles), Table Tennis	IIEST Shibpur
	Interdept- Gold(team)	Table Tennis	IIEST Shibpur
	Shaurya 2023	Intercollege Table Tennis	IIT Kharagpur
	Table Tennis Girls Captain from Even & Odd sem. of Year 2022-23		IIEST Shibpur
Anirban Mazumdar	Captain- IIEST Shibpur Athletic Team		
	Member/Player- IIEST Shibpur Football Team		
	3rd Prize	Football, Shaurya 2023	IIT Kharagpur
Shruti Sharma	IIEST Shibpur Athletics Captain (Girls)		2022-23,23-24, IIEST Shibpur
	Participation	Shaurya 2023 Intercollege Basketball Match 2023	IIT Kharagpur
Ansuiya Thapa	Participation	Shaurya 2023 Intercollege Basketball Match 2023	IIT Kharagpur
Md Ajib Kp	Inter-batch winner	Football	IIEST Shibpur
	Inter department winner	Football	IIEST Shibpur
	third prize	Football, SHAURYA,	IIT Kharagpur
Apurv Mirgule	Inter-batch winner	Football	IIEST Shibpur
	Inter department winner	Football	IIEST Shibpur

- Participation in the inter-college sports festival "SPARDHA" organized by IIT BHU in October 2023
- Participation in the KASHIYATRA, a cultural fest organized by IIT BHU, in January and the classical team securing the third position.
- Participating in the AL CHERINGA, a Cultural fest organized by IIT Guwahati.
- Students participated in various events such as Dance performance, Cosplay etc in April 2023.
- Urjjasee Basak, final year student has participated in (a) Uday Shankar Dance Festival,2023 (b) International Odissi Dance Festival,2024 (c) Sanjog festival, (d) 4. ICCR festival 2023 and (e) Kolkata international dance festival, 2023.
- Trishit Das, received the best delegation award among all colleges, best verbal mention (within other 10 members) in GMUN, 2023.

Participating Students' Group Photo at IIT BHU

Student Performing Dance at IIT Guwahati

Higher Studies

- Deepabali Choudhury got admission for M.Arch in Urban Design in University College London, UK in 2023.
- Fida Hamid is pursuing Industrial Design Centre, M.Des in Animation Design at IIT Bombay in 2023.
- Rohit Priyadarshi Sanatani (B.Arch 2015) has been awarded Leventhal Center for Advanced Urbanism (LCAU) Fellowship 2023, which supports his research in Design Computation and Advanced Urbanism at the Massachusetts Institute of Technology (MIT).

Any others

- Department won 10th Rank among architectural degree awarding institutions of India in NIRF 2023 for Architecture awarded by Ministry of Higher Education, Govt. of India

4.3 Department of Chemistry

The over a century old department has a glorious past. The Department, besides engaging itself in undergraduate and postgraduate teaching has a heritage of conducting research in various fields. At present, the faculty members are involved in research in the frontier areas of Chemistry and Chemical Physics, which include Coordination & Bioinorganic Chemistry, Carbohydrate Chemistry, Electrochemistry & Corrosion Science, Fuel Cell Technology, Molecular Recognition &Supra-molecular Chemistry, Structural Chemistry, Catalysis, Synthetic Organic & Organometallic Chemistry, Thin Film Semiconductor, Solar Photo-voltaic & Photo-electrochemical Cells, Non-linear Optical Phenomena: Modelling& Computation, Non-equilibrium Statistical Mechanics, Relativistic & non-relativistic Electronic Structure Theory, and Fluorescence Spectroscopy and Imaging. The department is endowed with a number of research projects sponsored by various funding agencies. The department has also been selected for MHRD special grant and DST-FIST and UGC-SAP programs.

Fluorolog (Make: HORIBA), Steady State & Excited State Spectroscopic Studies

Workshop/Seminar/Conference/ Symposium/Webinar Organized

» A One-day program, "National Chemistry Day" to celebrate the 162nd Birth Anniversary of Acharya Sir Prafulla Chandra Ray on 2nd August, 2023.

Invited Talk Organized

» Prof. Bas de Bruin of the Van't Hoff Institute for Molecular Sciences (HIMS), Faculty of Science, University of Amsterdam (UvA), Amsterdam, Netherlands visited the Department, and delivered a lecture on the topic "Metalo-radical Approaches in Homogeneous Catalysis" on 10th January, 2024.

» Dr. Abhijit Patra, Associate Professor, Department of Chemistry, Indian Institute of Science Education and Research Bhopal (IISERB), Bhopal, delivered a talk on "Self-assembly of π-conjugated fluorescent molecular bio-probes and deciphering intracellular dynamics" on 10th July 2023.

» Dr. Kuppuswamy Arumugam, Associate Professor, Department of Chemistry, Wright State University, Dayton, OH, USA visited the Department on 10th January, 2024 and interacted with the students and faculty members.

4.4 Department of Civil Engineering (CE)

The Department of Civil Engineering was established in May 1856 and is as old as the Bengal Engineering College itself. The Department was founded as the Civil Engineering College, Calcutta, with the goal of providing civil engineering training to individuals in order to meet the needs of the Government of India's Public Works Department. Since then, it has worked to establish and sustain a proud national legacy of producing high-quality civil engineers for the country. Over time, the Civil Engineering College was elevated to the status of a full-fledged Government Engineering College with many specialties and renamed the Bengal Engineering College. Then it was elevated to Bengal Engineering and Science University in Shibpur.

The institute has now been turned as an Institute of National Importance and renamed IIEST, Shibpur. The Civil Engineering department currently offers facilities for research and development in the broad fields of Structural Engineering, Geotechnical Engineering, Environmental Engineering, Transportation Engineering and Water Resources Engineering. The Department has worked on a variety of funded initiatives in the categories mentioned above. It is a Quality Improved Programme Centre recognised by the Government of India, with a focus on topical research and development. The Department often conducts sponsored research funded by the AICTE, MOE, UGO, CSIR, DST, DRDO, BRO, CWC, WBDST and other agencies.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

» Prof. Debabrata Majumder and Prof. Chanchal Majumder organized the 1st International Conference on Sustainable Advanced Technologies for Environmental Management (SATEM-2023) on December 20-22, 2023.

» Prof. Aparna Dey Ghosh and Dr. Subhra Paul organized a lecture as part of a certificate course training program on "Steel Design, Fabrication and Erection." This program was jointly organized by IIEST Shibpur and INSDAG, for the period of March 1, 2024, to March 21, 2024, at the Civil Engineering Department, IIEST Shibpur.

» A Technical Training Programme on the construction and quality control aspects of road works was held for the Engineers-Officers of PWD, Government of West Bengal.

This program was divided into five phases, each of duration of five days, Dr. Sandip Chakraborty serving as the Course Coordinator.

- The 1st phase was conducted from June 5 to June 10, 2023.
- The 2nd phase was organized from August 17 to August 22, 2023.
- The 3rd phase took place from November 29 to December 4, 2023.
- The 4th phase was held from December 13 to December 18, 2023.
- The 5th and final phase occurred from January 17 to January 22, 2024.

» A series of Technical Training Programmes on Road Safety were conducted for the Engineers-Officers of PWD, West Bengal Government in 2024.

Photographs from SATEM-2023 on December 20-22, 2023

Technical Training Programme on the Construction and Quality Control Aspects of Road Works for the Engineers-Officers of PWD, Government of West Bengal.

Technical Training Programmes on Road Safety for the Engineers-Officers of PWD, West Bengal Government

Invited Talk Organized

- The 4th Pradip Kumar Ray Memorial Lecture was jointly organized with GAABESU on February 23, 2024. On this event Er. Amitabha Ghoshal presented a lecture on 'Engineers for Sustainability- Case studies on Bridges'.
- Dr. Deep Roy organized an invited talk on February 15, 2024, featuring Prof. Manu Santhanam and Dr. Tamali Bhowmik, Senior Scientific Officer, on behalf of the Centre of Excellence on Technologies for Low Carbon Lean Construction (TLC2), IIT Madras. The topic was "Technologies for Low-Carbon and Lean Construction," aimed at fostering collaborations with students and faculty at the Civil Engineering Department, IIEST Shibpur.

4th Pradip Kumar Ray Memorial Lecture Jointly Organized with GAABESU.

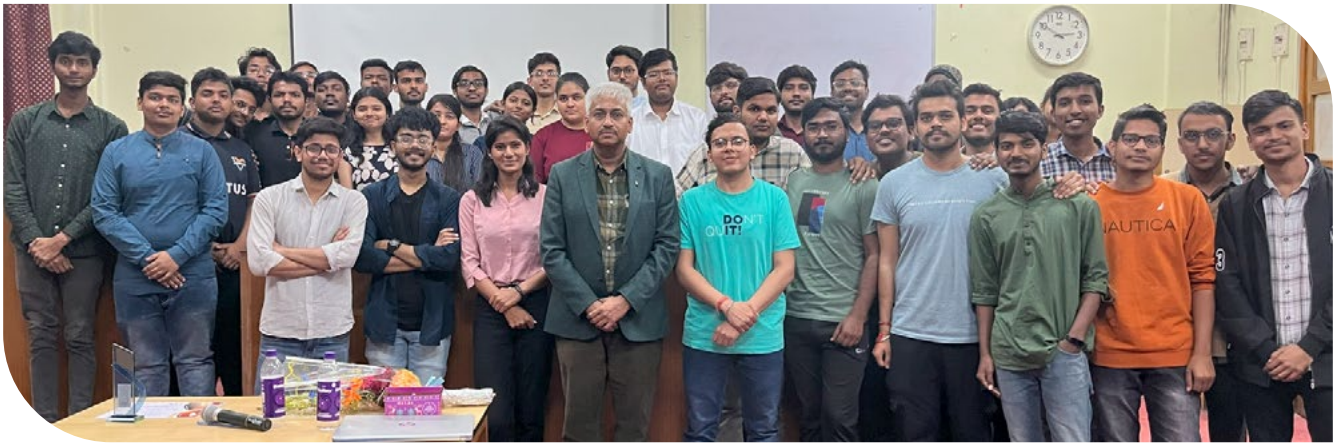
Students' Achievement/Activities/ Higher Studies

- Site visit of the 3rd-year Civil Engineering BTech students to Howrah Rail Museum on March 16, 2024.
- Site visit of the 2nd-year Civil Engineering BTech students to an under-construction 1000-seater capacity hostel.
- Best UG project 2023 award recipients during their convocation, with faculty members on December 22, 2023
- The Society of Civil Engineers (SOCCE) organized an event, namely 'Thinkout' in collaboration with the entrepreneurship cell – an event pitching entrepreneurship ideas on February 10, 2024.
- Mr. Siddharth Chatterjee, Batch 2024 earned the Erasmus Mundus Joint Masters in Flood Risk Management.
- Ms. Bhaswati Sen, Batch 2024 selected for Masters at Purdue University, USA.
- Dr. Saptarshi Sen, 2023 secured Postdoctoral fellowship at University College Dublin, Ireland.
- Dr. Atin Roy, Ph.D. in Structural Engineering, 2023 received Postdoctoral fellowship at James Watt School of Engineering, Glasgow University, UK.
- Ms. Tanmayee Nadimpalli, 2023 selected for Masters at Texas A&M University with a specialization in Transportation Engineering.

Site Visit of 3rd Year Students to Howrah Rail Museum on 16.03.2024

Site Visit of 2nd Year Students to Under Construction 1000-seater Capacity Hostel

Best UG Project 2023 Award Recipients with Civil Engineering Faculties



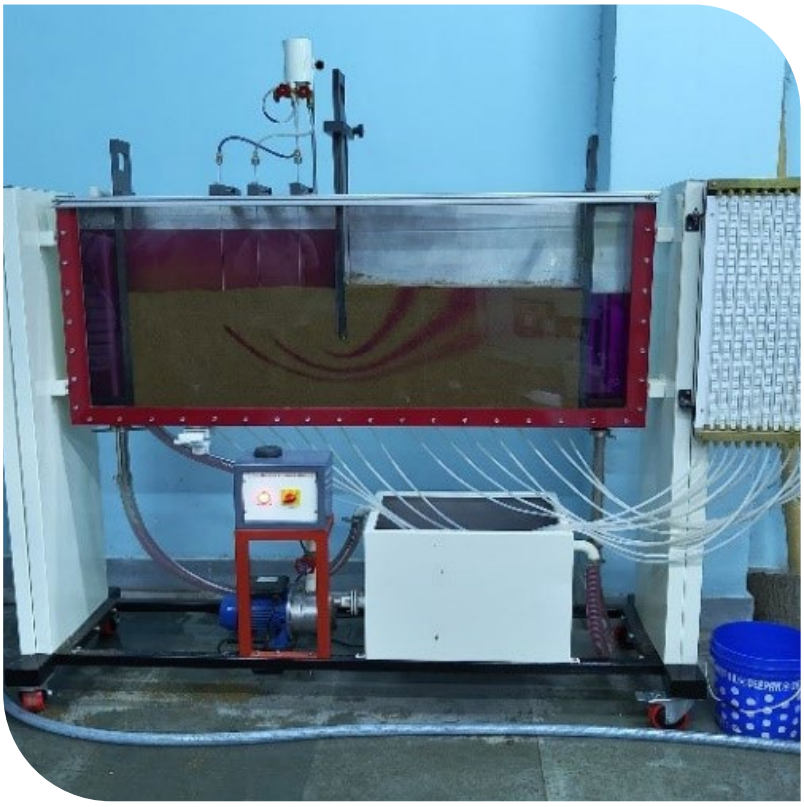
'Think-out' Event in Collaboration with the Entrepreneurship Cell
Organized by Society of Civil Engineers (SOCCE)

New Infrastructure Developed

- Dynamic Shear Rheometer is a cutting-edge instrument acquired by the Pavement Engineering Laboratory, Civil Engineering Department, IIEST on 2023. It is used to characterize the viscous and elastic behavior of asphalt binders at medium to high temperatures. Tests which can be performed by it includes Multiple Stress Creep Recovery Test, various Sweep Tests and many more.
- The Spider-80Xi is a compact, lightweight vibration test controller and dynamic signal analyzer acquired by Geotechnical Laboratory. It's designed for applications such as dynamic data acquisition, machine monitoring, and vibration test control. The Spider-80Xi has a 64-channel chassis that weighs less than 10.5 kg and can be used with a personal computer.
- The Water resource engineering group modernized the Water resource engineering laboratory by acquiring a set of new equipment, such as:
  - Ground Water Flow Model
  - Visualisation of Seepage Flow
  - Lysimeter
  - Double ring infiltrometer

Dynamic Shear Rheometer acquired by
Pavement Engineering Laboratory

Spider-80Xi for precise shock, vibration, acoustic, or general-purpose voltage data acquisition system



Various Equipment acquired by Water Resource Engineering Laboratory (Photographs are in sequence)

Various Equipment acquired by Water Resource Engineering Laboratory (Photographs are in sequence)

4.5 Department of Computer Science and Technology (CST)

The Department of Computer Science and Technology (CST) was established in 1982. Since its inception the department has played an important role in developing a vibrant and forward-looking academic environment. The department always maintains state-of-the-art infrastructure and facilities for advanced research and consultancy. It was accredited by the National Board of Accreditation (NBA) as 'A' grade and received ISO 9000 certification in 1999-2000. The department was also honoured as the DST-FIST sponsored department in 2004.

Some of the thrust areas identified by the department are Machine learning including Deep Neural Networks and Soft Computing techniques, Generative Adversarial Networks, Internet Of Things, Wireless Sensor Network, Mobile Computing, Cryptanalysis Techniques, Image, Text, Audio and Video Processing including Medical Image Analysis, Code Mixed Bilingual Language Processing, Low Resource Real Time Image Processing and Sequence Tagging, Managing Uncertainty in Primary Healthcare. Further, the department also conducts advanced research on Interconnection Network, Mixed Signal Design and Testing, Text Mining in Diverse Social Media Data Analysis, Theory and Applications of Cellular Automata in Diverse Fields, Synthesis and Testing of Reversible Circuit, Digital Micro Fluidic Bio Chip and Nano-Biochip, Pattern Recognition, and Bio Informatics.

Hardware Lab

Software Lab

Research Scholar's Lab.-2

Workshop/Seminar/Conference/ Symposium/Webinar Organized

» "Scopes in PhD in Abroad and Future Academic Planning", Sree Bhattacharya, PhD Scholar, Penn University and Samartha Khanna, PhD Scholar, Penn University), 28th March 2024.

Invited Talk Organized

» "Natural Language Processing and its applications in diverse domains", Dr. Saptarshi Ghosh, Associate Professor, Department of Computer Science and Engineering, Indian Institute of Technology Kharagpur, Kharagpur - 721302, West Bengal, India, Organized on 11th March 2024.

» "Machine Learning for Design Automation of Microfluidic Biochips: Current Status and Scope", Dr. Sudip Roy, JSPS Fellow (2021-2022), Associate Professor, Department of Computer Science and Engineering, Joint Faculty, Centre of Excellence in Disaster Mitigation and Management, Indian Institute of Technology (IIT) Roorkee, Roorkee - 247667, Uttarakhand, India, Organized on 11th January 2024.

» "Adventures in the field of Discrete Mathematics / Theoretical Computer Science", Dr. Somnath Kundu, Post-Doctoral Researcher, Department of Computer Science, Toronto Metropolitan University, Canada, Organized on 13th September 2023.

» "Mathematics and Data Science for Football", Dr. Somnath Kundu, Post-Doctoral Researcher, Department of Computer Science, Toronto Metropolitan University, Canada, Organized on 13th September 2023.

Students Activities

» Tech-Talks Organized by the students

- With Rajesh Penugonda (Media.Net 39LPA) (6th February 2024).
- With Divi Srivastava (Atlassian 82LPA) (7th February 2024).
- With Devanshu Chatterjee (Google 50LPA) (13th March 2024).

» Revelation: The Technical Fest of the Department

- Organized 10+ events including coding, CTF, ML related activities, etc.

Students Achievement

» One student achieved a rank of AIR 67 in Gate CSE.

» 20 students with 20+ LPA package and 6 students with >35 LPA package.

4.6 Department of Earth Sciences (ES)

The subject of geology was first introduced in the civil engineering curricula more than a century ago in the Department of Civil Engineering. Furthermore, Geology became an important section of the Department of Mining ever since its establishment in 1956. With introduction of master's programme in applied geology, the department bifurcated and the Department of Geology came into being in 2005. It was later named as the Department of Earth Sciences to host teaching and research in a wide spectrum of Earth Sciences. This diversification from classical Geology has helped students to undertake research programs in other interesting fields like Hydrogeology with an application of GIS and Remote Sensing, Geophysics and Tectonic Geomorphology.

Students of the present department are being trained by permanent and eminent visiting faculty members involved in frontier areas of research like Structural Geology, Igneous & Metamorphic Petrology, Sedimentology, Sequence Stratigraphy, Basin tectonics, Hydrogeology, Environmental Geology etc. The students are taught to apply their knowledge to cope up with the need of hydrogeological problems, natural hazard mitigation, petroleum or mineral exploration, and geoscience research at par with international standard. Students are also getting the facility of performing analogue experiments in Experimental Geology Laboratory which will help students to understand the dynamics of Earth and process-response systems. The curriculum has been revised to meet the requirements of various Industries and National competitive examinations. The knowledge is helping them to get jobs in Government organizations like SWID, Geological Survey of India, Oil sectors, Mining Industries, and Academic Departments. Training of application of geological knowledge, which is essential for mine planning, handling other problems of mining geology and engineering geology are also being imparted to them in this course.

Within a short span of time, the department has been able to accommodate several numbers of research scholars for the Ph.D. degree. At this stage, they are enrolled and working on research problems in Hydrogeology, GIS-Remote Sensing applications, Sedimentology and Structural geology with Mathematical modelling. For the purpose of study, fund has been sanctioned through projects, mentored by the faculty members from the Department of Science &Technology, Govt. of India, University Grants Commission, ONGC& WBPDCL. The Department aims to focus on future efforts to apply geoscientific research in multidisciplinary subjects.

Students Working in Lab.

Students' Achievement/Activities/ Higher Studies

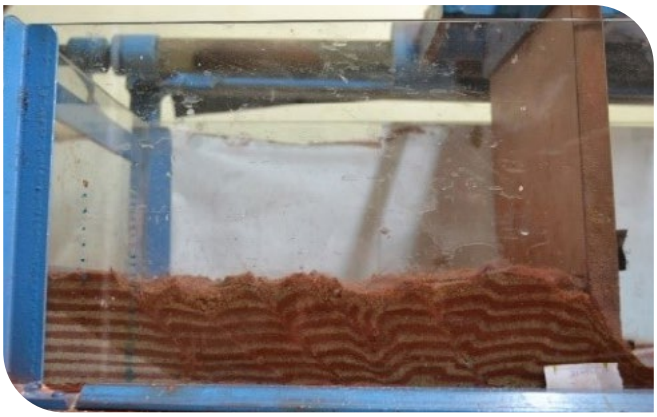
- Mr. Amit Bera completed PhD degree in March 2023, under the Supervision of Prof. Bhabani Prasad Mukhopadhyay and carrying out Post-Doctoral research in IIT, ISM Dhanbad.
- Ms. Swarnali Barua completed PhD degree in August, 2023, under the Supervision of Prof. Bhabani Prasad Mukhopadhyay and working as Assistant Professor, Department of Geology, Presidency University, Kolkata.
- Mr. Uddalak Biswas serves as the primary convenor of a session– "Fracture Roughness Analysis and Influence of Fault Structural Maturity on Earthquake Behavior I & II Oral & Poster." In Fall Meeting AGU 2023. San Francisco, Organized by American Geological Union, USA. 11th – 15th Dec, 2023.
- Mr. Uddalak Biswas was awarded an AGU Student Travel Grant of $1000 by the American Geophysical Union, USA. 2023.

New Infrastructure Developed

- Shear Apparatus in Structural Geology Laboratory: A shear apparatus for rock analogue modelling is a specialized device used to simulate and study the deformation and mechanical behaviour of rock-like materials under shear stress. This apparatus typically consists of a loading frame, shear box, and instrumentation for measuring stress, strain, and displacement. The shear box holds the rock analogue material, which is usually composed of materials like clay, sand, or synthetic compounds designed to mimic the properties of natural rocks. By applying controlled shear forces, researchers can observe how the material fractures, deforms, and flows, providing valuable insights into geological processes such as faulting, folding etc.

Shear Apparatus

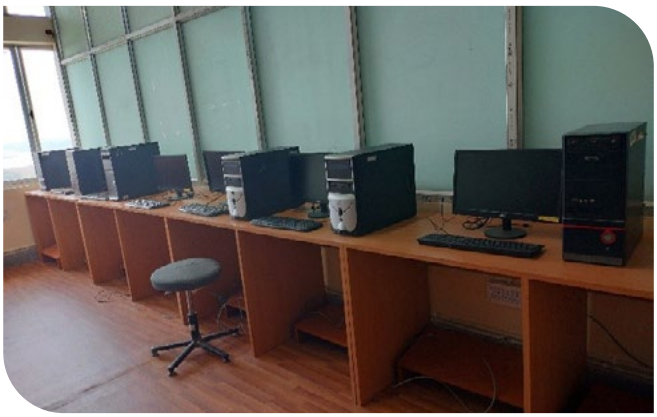
- Sand box apparatus in Structural Geology Laboratory: In this apparatus thrust, fault related experiments can be performed. Sand is used in this apparatus as rock analogue material as it is a Coulomb material fault, fracture and thrusts are well developed. This year a new sand box with digital programmable controller is installed.



Sand box Apparatus

- High pressure fluid injection apparatus: This machine is indigenously designed to perform experiments regarding injection of fluid in rock analogue material by high pressure.
- Computer laboratory developed

High Pressure Fluid Injection



Computer Lab.

4.7 Department of Electrical Engineering (EE)

A combined Electrical and Mechanical Engineering Department was established in the then Bengal Engineering College in the year 1902. Demerger of the departments took place in 1912 and the Department came into existence. The degree course in Electrical Engineering was introduced during the year 1935-36. First batch of students with M.E. Degree in Electrical Engineering came out in 1955. Since 1989 this department has been serving as one of the QIP Centres for Post Graduate Studies and Research in Electrical Engineering. Research specializations offered in the department include Control Systems and Instrumentation, Power Electronics, Machines and Drives, Power and Energy Systems. The faculty members are actively engaged in numerous collaborative and sponsored research projects. In the last few years, a number of research projects with a funding of around Rs.5 crores are under execution. There have been consistent efforts in the field of Magnetics for the last few years. The notable Research Projects from the Department of Electronics and IT, GoI going on during the 2020-21 are Wide- band Gap Based Semiconductor Device for High Current Industry Applications; MEMS for Electric Machines and Drives, Magnetic Core Power Inductors. Also, international Research Project Collaboration under the SPARC Scheme of MHRD is going on with, MIT USA in vibration monitoring systems for switched reluctance motor-based drives. Research work on high efficiency power electronic converter technology using next generation Si/SiC-based switching devices for high frequency operation under reduced losses, is under development with University of Hiroshima, Japan. Another new field in the Area of Magnetics has been funded by DST, GoI, past researches in the Areas of Magnetic Bearings have opened up another Area for Exploration of Knowledge, i.e. Applications of Magnetostriction in Energy Harvesting. The research project aims to investigate various behaviors of magnetostrictive energy harvester under mechanical stress or vibration. To add to the laurels of the Department, the intellectual assets created over the years have been patented, and have been granted this year. The granted patent numbers are 521555, 487726, 457824.

Electrical Machine Lab.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

- 3rd International Conference on Control, Instrumentation, Energy and Communication, 2024 jointly organised by Dept. of Applied Physics, University of Calcutta, India and IEEE Joint CSS-IMS Kolkata Chapter, India with Prof. Anindita Sengupta as General Co-Chair.
- Department of Electrical Engineering, IIEST, Shibpur with Prof. Anindita Sengupta as coordinator organised a one-day seminar on "Simulating Soft Landing in Real Time, A Hardware-n-Loop Approach " in collaboration with IEEE Joint CSS-IMS Kolkata chapter, on Tuesday, October 10, 2023, at 4:45 p.m. IST.
- Prof. Bhaskaran Barman organized a Seminar on "Emerging Trends on Power Electronics" by Mr. Satyabrata Das on 07/03/2024.

Students' Achievement/Activities/Higher Studies

» EE GATE Rankers.

» An Industrial visit was organised for their students in the Purulia pumped storage hydroelectric power plant under WBSEDCL from 01/03/2024 to 03/03/2024.

4.8 Department of Electronics and Telecommunication Engineering (ETCE)

Electron Devices Lab.

Computational Electromagnetics Lab.

The department of Electronics and Telecommunication Engineering started its journey in July, 1965 after its nucleation from the Department of Physics and Telecommunication in the erstwhile Bengal Engineering College Shibpur. The batch of Electronics and Telecommunication engineers graduated from this department in 1971. The Master's program was launched in 1972 and the first batch of post graduate passed out in 1974. Currently, PG programmes are offered in the specialization of Microelectronics and VLSI Design, RF & Photonics, and Communication Engineering and Signal Processing.

The department, besides engaging itself in undergraduate and postgraduate teaching has a heritage of conducting research in various fields like MEMS based Biosensors, Graphene and other two dimensional material based gas sensor devices, Microwave Devices, Electromagnetic Metamaterial, Microstrip Antennas, MIMO Radars for Collision Avoidance, VLSI Architecture Design for Real Time Signal and Image Processing Systems, Energy and Spectrally Efficient Wireless communication for Cellular IoT Applications, Artificial Intelligence in Medical Image Processing, Deployable Biosensors System for Pathogen

Detection, Photonic Topological Devices based on 2D Photonic Crystal.

Department laboratories are upgraded with several high-end equipment like RF Network Analyzer (100MHz-40 GHz), Vector Signal Generator (9kHz-3GHz), Automatic PCB Prototype Machine for designing microstrip circuit, Photodiode Characterization Unit (200-2000 nm with Czerny-Turner Configuration), EDFA Training System, Precise PCB fabrication unit, Laser Spectrum Analyzer, Positioner System for Antenna Measurements, BET Surface Area and Pore Size Analyzer, Dielectric Measurement Kit, Software Defined Radio and many more. Considerable effort has been put forward during the last couple of years towards setting up new laboratories for undergraduate and post graduate students like Microelectronics Lab, Digital Signal and Image Processing Lab, VLSI and CAD Lab, Microwave Research Lab and Anechoic Chamber, Wireless Communication Lab, Optoelectronics Lab.

The faculty members are actively engaged in their individual as well as numerous collaborative and sponsored research projects of UGC, CSIR, ISRO, DST, AICTE, DRDO, etc., worth a high value. In course of their research faculty members have published large volume of quality publications in different international and national journals and conferences. Faculty members have also earned lot prestigious awards and laurels through their research. A number of students got accepted in prestigious institutions of higher learning abroad (like Purdue, Georgia Tech etc) and India (like IISc, IIT B, IIT KGP etc). Department has produced large number of technologists, scientists and educationalists over more than fifty years who are bearing the flag of the department worldwide.

Invited Talk Organised

A list of the speakers who delivered lectures during AY 2023-24 :

Date	Speaker Designation and Affiliation	Title of the talk
11-01-2024	Dr. Srutarshi Banerjee Postdoctoral Researcher at The X-Ray Science Division, Argonne National Laboratory, IL, USA. Former Scientific Officer at BARC	Learning-based intelligent imaging and beyond.
18-01-2024	Prof. Ajoy Kumar Roy Awarded the Padma Shri by The President of India. Former Director of IIEST, Shibpur, and Former Vice Chancellor BESU, Shibpur	Electronics in the age of data science.
20-01-2024	Dr. Tapas Samanta Scientific Officer, Computer and Informatics Group, Variable Energy Cyclotron Centre (VECC)	Internship opportunities in VECC.
06-03-2024	Dr. Goutam Paul Associate Professor & Head Cryptology and Security Research Unit (CSRU) Indian Statistical Institute Kolkata, Alumnus of CST batch 2001	Chemical vs. natural happiness: an engineer's pursuit

Students' Achievement/Activities/Higher Studies

Event	Students Achievements
IMP-2023	Ms. Piyali Mukherjee awarded 1st prize in Innovation in Manufacturing Practices (IMP-2023) under the aegis of INAE-SERB conclave on "Atmanirbhar Technologies - Engineering Secured Future", organized by BIT Mesra, 26th June, 2023.
FOSET -2023	Ms. Piyali Mukherjee awarded best Model presentation in Model Competition for a Sustainable Society, organized by Forum of Scientists, Engineers & Technologists (FOSET) , India on "Graphene based FET for virus detection"

4.9 Department of Human Resource Management (HRM)

The erstwhile Department of Training and Placement, was renamed as Department of Human Resource Management with extension of activities beyond job placements and training. The department also offers PhD programmes in the areas of Entrepreneurship and IPR. The major current activities of the department encompass the following:

- Job Placements of students of the Institute through Campus and Off-campus selection processes.
- Summer Internship of the students of the Institute including Summer Internship Programme at foreign universities and Remote Internship Programme at reputed industries.
- Facilitating Internships of students of other Institutes under supervision of different faculty-members of IIESTS.
- Facilitating various Grooming up (Personality/Soft-Skill/ Performance Effectiveness) Programmes for the Students
- Organizing / facilitating various Industry Engagement events / activities on behalf of various major industries

Placement Talk in Progress in Gateway Hall

During 2023-24 selection processes, both for final recruitment and internship, have successfully been organized mostly on a physical /hybrid mode. Infrastructure facilities of the department have significantly been improved during the year to cope up with the increasing demands of the recruiters.

4.10 Department of Humanities and Social Sciences (HSS)

The establishment of the Department of Humanities in 1945 reflected a holistic and pragmatic approach to engineering education in the modern era. Renamed as the Department of Humanities and Social Sciences in 2004, the department has always emphasized the need for modernized syllabus in communication skills, knowledge of the society, and economy that are in tune with contemporary developments. Along with Core and Elective courses in Sociology, Management and Finance, the Humanities and Social Sciences department has been offering a core course on Professional Communication in English to the B.Tech. First semester students. Various other English elective courses on Indian Writing in English, Literature and Urban Experience, Popular Literature, Film Studies, Business Communication, Research and Technical Writing for Engineers are also offered both at the undergraduate and the postgraduate levels. It is also imperative that the students of IIEST, Shibpur should have adequate managerial skills to cope with the recent changes in the social and the economic environment of business. It is, therefore, the responsibility of the Humanities and Social Sciences department to fill the lacunae in the aforementioned areas and enable a less jarring transition of our graduates from students to responsible and mature citizens. Additionally, the HSS department also extends its teaching to the postgraduate courses in the MBA programme since 1999.The department, at present, offers Ph. D programs in English and Cultural Studies, and Management Studies. It also offers a compulsory course on Technical Writing to all the Ph.D. scholars of the institute. The department seeks to offer new courses on Basic & Development Economics, Data Analysis and Corporate Governance in the near future.

The HSS Department also runs an outreach programme named "ICCHE." Under the aegis of this programme, the students of IIESTS teach local slum and pavement dwelling children after class hours. They also organize hands-on training in computers and teach children a variety of life skills. ICCHE has also done commendable work during the Covid period in distributing provisions to the families in the neighbourhood. ICCHE not only benefits the above-mentioned children but also the participating students of IIESTS who get a grooming in having a sense of social responsibility and feeling of empathy towards the underprivileged and downtrodden section of the society. The programme is running under at present the guidance of CMA Rupen Basu Mallik, an Associate Professor of the Department.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

Five-Day International Workshop titled "Interdisciplinary Research in Humanities" was held from 5th to 9th February, 2024,

Invited Talk Organized

- Lecture on "The Spirit of Inquiry in the 20th Century" was held by Prof. Dhruv Raina (Professor of History of Science Education, Zakir Hussain Centre for Educational Studies, Jawaharlal Nehru University) on December 7, 2023.
- Lecture on 'The Defining Issue of Indian Political Economy Today in the Global South' was held by Prof. Amit Bhaduri (Former Professor, Pavia University, Italy & JNU, New Delhi) on 11th March 2024.

4.11 Department of Information Technology (IT)

The beginning of this century is marked as the start of the Information Age which has not only revolutionized Indian and global industrial markets but has also had an impact on the engineering education system. The erstwhile BESU, Shibpur responded timely by introducing a new specialized engineering degree course in Information Technology under the department of Information Technology in the year 2000. The course is unique with respect to the similar degree program offered by other Indian universities and is framed accordingly to educate graduate engineer to be an expert of microelectronics-based processing, computing and communication of data that global IT sector of coming days demands. The department has celebrated its first 10 years of existence with an impressive record of achievement. The strength of the department has been in its diverse areas of research in which it has excelled. Research focuses of the department are in the fields of Systems Architecture and Design, Theory and Applications of Cellular Automata, Digital Image Watermarking and Signal Processing, Digital Geometry and Image Analysis, Wireless and Mobile Communication, Sensor Network, FPGA based Embedded Systems.

4.12 Department of Mathematics

Computational Lab

The Department of Mathematics, established at the very inception of the institute, has consistently been one of the most active departments both in terms of delivery of course materials and research outputs. Besides instilling in the undergraduate engineering students of the institute the rudiments of pure and applied mathematics since its commencement in 1856, the department has also been offering the Masters of Science in Applied Mathematics degree since the year 2000. Correspondingly, the department now undertakes the teaching of a wide variety of mathematics courses including Analysis, Algebra, Differential Equation, Discrete Mathematics, Linear Programming, Operations Research, Mathematical Biology, Statistics, Numerical Analysis and Computational Techniques, to undergraduate and postgraduate students in various branches of Science, Engineering and Architecture. The department also has a rich history of conducting impactful research in several fields of Mathematics. Specifically, research work is undertaken throughout the areas of Functional Analysis, Topology, Complex Analysis, Nonlinear Dynamics and Chaos, Mathematical Biology, Elasticity, Fluid Mechanics, Relativity, Cosmology and Astrophysics, Quantum Information Theory, Mathematical and Statistical Theory of Life Testing and Reliability, Fuzzy Logic, Fuzzy Optimization, Operations Research and Management Systems.

Invited Talk Organized

- Prof. W. Sintunavarat, Department of Mathematics and Statistics, Thammasat University, Thailand, delivered a talk on the Topic: The Evolution and Elegance of Fixed-Point Theory from Historical Foundations to Future Research Challenge on 11.12.2023.
- Prof. Amartya Goswami, Department of Mathematics and Applied Mathematics, University of Johannesburg, South Africa, delivered a talk on the Topic: Interplay Between Algebraic Structures and Topological Spaces on 11.01.2024.
- Prof. Biswajit Sarkar, Industrial Engineering, Yonsei University, South Korea, delivered a talk on the topic: Applications of Supply Chain Management of Real Life Problems on 09.02.2024.

Students' Achievement/Activities/ Higher Studies

» The research scholar, Sayani Adak, of Dept. of Mathematics has acquired 1st position in the discipline of Mathematical Sciences, IT and its Applications and Statistics discipline, 6th regional science and technology congress, 2023-2024 (region 5) held on 3rd and 4th January, 2024 at the University of Kalyani, West Bengal.

4.13 Department of Mechanical Engineering (ME)

Though the department started its journey in 1921, the first degree level course in Mechanical Engineering started in 1930. Postgraduate courses in the department started in 1954. Over the years, through its high level of teaching and research, the department has earned a name and fame for itself, making significant contributions to this important field of engineering. The department offers 8-Semester Undergraduate (B. Tech.) and 4-Semester Postgraduate (M. Tech.) courses in Mechanical Engineering, with current annual intakes of 96 and 40, respectively. A 10-semester Dual Degree (B. Tech.-M. Tech.) Program is also in place. Currently, M. Tech. courses are available in four specializations, namely, Machine Design, Thermal Engineering, Manufacturing Science and Energy Science.

The department runs a full-time PhD program, where currently 38 research scholars are engaged, mostly with institute fellowship, in research in the frontier areas like vibration and control, composite materials, tribology, energy technology and renewable energy, non-traditional machining, biomechanics, advanced ceramics, advanced material, FGM, combustion science and technology, alternative fuels, CFD and numerical heat transfer. Many research projects are supported by funding agencies like DST, MHRD, BRNS etc.

The departmental faculty consists of erudite teachers who actively pursue original research work and publish the findings in the reputed international journals and also disseminate their experiences through invited talks in national and international conferences and seminars. Many faculty members work in close cooperation with researchers in other Indian as well international institutes and some are also associated with renowned professional societies like Society of Automotive Engineers (SAE), Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), Solar Energy Society of India (SESI), American Society of Mechanical Engineers (ASME, USA), Institution of Mechanical Engineers (IMechE, UK), The Institution of Engineering and Technology (IET, UK) etc.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

» Dept of Mechanical Engg. organized 1st International Conference on Mechanical Design and Manufacturing (ICMDM 2023), 27-28th April 2023. (Chairman: Prof. Sudip Ghosh, Joint co-ordinators: Prof. Bidyut Pal and Prof. Santanu Das.)

» Dept of Mechanical Engg. organized 2nd International Conference on Energy Resources and Technologies for Sustainable Development (ICERTSD 2023), 27-28th April 2023. (Chairman: Prof. Sudip Ghosh, Joint co-ordinators: Prof. Pradip Mondal and Prof. Mukesh Kumar)

» Dept of Mechanical Engg. organized International Workshop on "Zero Emission Vehicles (ZEVs)", 26th April 2023. (Organizing committee: Prof. Sudip Ghosh, Prof. Bidyut Pal, Prof. Santanu Das, Prof. Pradip Mondal and Prof. Mukesh Kumar)

1st International Conference on Mechanical Design and Manufacturing (ICMDM 2023)

2nd International Conference on Energy Resources and Technologies for Sustainable Development (ICERTSD 2023)

Invited Talk Organized

- An Invited talk organized by Prof. Bidyut Pal on 19 December 2023 where Dr. Dilip Kumar Sarkar, Professor in the Department of Applied Sciences, University of Quebec (Chicoutimi), Canada presented a seminar on Superhydrophobic Surfaces and Some Energy Nanomaterials: Synthesis and Applications.
- An Invited talk organized by Dept. on 16th Jan 2024, where Dr Snehashis Pal, Assistant Professor and Research Scientist at the Faculty of Mechanical Engineering at the University of Maribor in Slovenia, Europe. presented a seminar on Additive Manufacturing Technologies and their Manufacturing Flexibility.
- An Invited talk organized by Dept. on 15th March 2024, where Dr. Pradip Majumdar, Ph.D.., ASME Fellow DSinnovtech, Illinois, USA presented a seminar on Challenges and Advances in Battery Storage in Electric Vehicles.
- A technical lecture series organized by Dept. in January 2023 where Dr. Arun Kanti Banerjee, ex Principal Research Scientist of Lockheed Martin Advanced Technology Center, Palo Alto, California, US. delivered a lecture series on flexible multi body dynamics.

Students' Achievement/Activities/ Higher Studies

- The students of the department find placement with the major players in the industry. All eligible UG students of AY2022-23 got placement offers through 'campus placement', average offered package being about 8 LPA.
- One of the students, Shobhit Das has been awarded the prestigious DAAD-WISE Fellowship at the Technical University of Munich. Bikkina Sai Deepika secured admission in IIM Rohtak.
- One of the students, Athena A Shaji secured Global Rank 2 in ASME International Sustainability Innovations Competition 2023.
- Some of the UG students and most of the PG students chose to go for higher studies and research/teaching, in India or abroad.
- Many students have participated in many competitions and events and fellowships nationally organised by IITs, CSIR, TATA Steel, L&T, Flipkart, SAE, ASME, Boeing, Microsoft, etc and have also secured prestigious internships and fellowships at institutes of international repute, like IISc, IITs, IASc, New Jersey Institute of Technology, Technical University of Munich, University of Alberta, etc (including DAAD-WISE fellowship.

Events hosted by students' chapters of the Department:

- IMechE Student Chapter, has organized an induction event for the batch of 2022-26 was held to introduce new students to the IMechE IIESTS Student Chapter on 04th August 2023. The event provided an overview of past achievements and upcoming activities, helping new members understand the chapter's objectives and opportunities.
- IMechE Student Chapter, has conducted conducted the SOFE competition at both chapter and regional levels.
- IMechE Student Chapter, Dr. Santanu Das, Dr. Bidyut Pal, with 45 students visited Victoria Works, Braithwaite & Co a train wagon manufacturing company on 11th Nov 2023. The visit provided students with insights into the manufacturing processes of train wagons. (Fig 1)
- IMechE Student Chapter collaborated with 'Think Again Lab' to host the NASA Space App Challenge Induction, focusing on space technology and innovation on 19th Sept 2023. (Fig 2)
- Society for Mechanical Engineers (SME), under mentorship of Prof. In-charge Bidyut Pal, organized IMPETUS 7 from 9th Feb 2024 to 11th Feb 2024. This Annual Technical Fest serves as the nexus between industry and academia from the dept.

Visit at Victoria Works, Braithwaite & Co

NASA Space App Challenge Induction program

Event	Students Achievements
TECHGIUM	S. Sowjanya and T. Sai Snehal Kumar were Finalists in "Techgium" organized by L&T Technology Services.
ASME E-FEST	Athena A. Shaji was ranked 2nd Globally in the ASME Sustainability Innovations Competition in E-Fest Digital 2023
IIT COMPETITION	Shreyas Kumar and the team qualified for the finals of the Boeing National Aeromodelling Competition at IIT Kharagpur and qualified for the first round at IIT Kanpur
MITACS GLOBALINK RESEARCH	Shobhit Das has completed the prestigious and fully funded Mitacs Globalink Research Internship at the University of Alberta, Canada.
DAAD-WISE FELLOWSHIP	Shobhit Das has been awarded the prestigious DAAD-WISE Fellowship at the Technical University of Munich.
SRFP	Shreyas Kumar and Abhishek Rajput have been the recipients of the prestigious Indian Academy of Sciences Summer Research Fellowship Program (SRFP).
IISC CENSE	Shobhit Das has got the opportunity to serve as a research intern at IISc CeNSE (Indian Institute of Science Centre for Nano Science and Engineering)
CSIR	Samim Molla and Subhamoy Chattaraj have achieved the esteemed Prof. GSR Summer Internship at CSIR, Chennai. Among the highly competitive 10 vacancies nationwide.
FLIPKART GRID 4.0	Shreyas Kumar was selected as a Machine Learning Intern at the New Jersey Institute of Technology and is working to publish a paper on Applications of ML in Nanomaterials
ASME	Pammi Kumari secured Global rank 6 in ASME International HPVC CDR event

New Infrastructure Developed

» An additive manufacturing set-up is installed at 3rd floor of Mechanical Engg Dept in the advanced manufacturing laboratory.

4.14 Department of Metallurgy and Materials Engineering (MME)

Scanning Electron Microscope Lab

Rolling Mill in Foundry Lab

The Department of Metallurgy was established at the Bengal Engineering College in 1939, offering a 3-year Metallurgy degree under Calcutta University, thus becoming the second oldest metallurgy department in the country. It was a trailblazer in introducing a post-graduate course in metallurgy in India, with an initial two-year program in Physical Metallurgy in 1953, which has since evolved into a four-year course.

Prof. N.N. Sen served as the first Professor and Head, overseeing Metallurgy, Chemistry, and Geology. Following its expansion, Chemistry and Geology became separate departments. The recruitment of Prof. W. Baukhloh in 1949 and subsequently Dr. A.K. Seal in the same year marked the commencement of significant research contributions in the field. Notably, two alumni, Sri P.R. Roy and Dr. C. Ganguli, have been honoured with the prestigious Padma Shri award by the Government of India.

The Department's influence has grown exponentially, with its B. Tech graduates gaining admission to some of the world's top universities like the University of Michigan, UC San Diego, University of Illinois at Urbana Champaign, University of British Columbia and contributing significantly to leading Indian metallurgical industries. Its Ph.D. program has thrived, and research areas now encompass steel, nonferrous alloys, composites, Nanoscience, and Nanotechnology, among others. It has made pioneering advancements in steel and alloys and forged numerous collaborative ventures with esteemed organizations, such as Tata Steel, SAIL, ISRO, BARC, NML, ICDC, and NMRL.

Faculty expertise spans multiple domains of metallurgy and materials engineering, including Physical Metallurgy, High Strength Steels, Tribology, Mechanical Behaviour of Materials, Nano-Technology, Powder Metallurgy, Multifunctional composites, Computational Materials Engineering, Diffusion Bonding, and Friction Stir Welding. M.Tech curriculum now incorporates modern specializations like manufacturing technology, paving the way for advances in additive manufacturing, multifunctional materials, and biomedical devices. This evolution underscores the department's commitment to remaining at the vanguard of materials engineering and bolstering India's science and technology aspirations.

Certainly! Reflecting on the various academic and industry interactions over the recent periods, the Department of Metallurgy has seen notable engagements through workshops, conferences, and seminars both in India and abroad, showcasing the proactive involvement of its faculty and students in expanding the horizon of metallurgical education and research.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

- Dr. Tapendu Mandal took a significant step towards addressing the critical areas of energy management and environmental sustainability in steel-based industries. On February 28, he organized a seminar in collaboration with the Indian Institute of Metals (IIM) focused on "Managing Energy & Environment in Steel-based Industries: Research, Technology Applications, and Development of Eco-friendly & Energy-efficient Equipment." This event cast a spotlight on the emerging tools and methodologies aimed at enhancing eco-efficiency within the industrial sector.
- In an international setting, Dr. Gautam Anand took the initiative to host an interdisciplinary workshop on "Multiscale Materials Modelling as part of Intelligent Sensors and Systems" at Cardiff Metropolitan University, UK, in May 2023. This workshop emphasized the avant-garde in materials modelling, intertwining it with the domain of intelligent systems and sensors, marking a stride towards futurist materials research and applications.
- Underlining the importance of academia-industry collaboration, Dr. Suman Guha led the organization of Metallum 2024 in March 2023 as a Faculty-in-charge. This student-driven technical event created a vibrant platform for discussions and knowledge exchange between students, industry professionals, and academicians.

Students' Achievement/Activities/ Higher Studies

The students have been equally vibrant in illustrating their capabilities and earning accolades:

- Mr. Rajan Kumar Verma stood out in Tata Steel's Mind-over-Matter competition as the second runner-up, clinching a cash prize along with a Pre-Placement Offer (PPO) at Tata Steel R&D, under the mentorship of Dr. Gautam Anand.
- The global academic realm has recognized our students' potential, as seen with Arnab Das gaining admission for higher studies at the University of Wisconsin-Madison, Varnait Jain joining the University of Liverpool, UK for PhD programme and Shomsubhra Dutta securing rank 63 in GATE, which led to his admission at IISc, Bengaluru.

These engagements and achievements underscore the department's vibrancy and leading stance in the domain of metallurgy and materials engineering, fostering a legacy of excellence and innovation.

4.15 Department of Mining Engineering (MIN)

In India, tertiary level education and training in Mining Engineering started at this Institute, way back in 1906. The Department was winded up in 1929 and re-established in1956. The department is dedicated towards in depth education, research and consultancy in Mining Engineering and its allied fields. The Department offers undergraduate and post graduate programme in Mining Engineering and post graduate programme in Geo-informatics. The Department of Mining Engineering is an approved QIP centre for postgraduate study in Mining Engineering. Research specializations available in the department include Mining Machinery, Carbon sequestration, Coal bed methane, GIS and Remote sensing, Mine Environment, Environmental Management, Mine Planning and Design, Mineral Dressing, Ergonomics, Occupational Health and safety and Rock Mechanics and Strata Control.

Coal Sampling Lab

Safety and Ergonomics Lab

Event Organized:

» Prof. N.C. Dey organized a student driven technical fest INITIUM 9.0 in April 2023 as Chairman in IIEST Shibpur.

Students' Achievement/Activities/ Higher Studies

» Ms. Gayatri Banerjee, Student of MTech in Geoinformatics has been awarded "National Geospatial Research Fellowship (NGRF)" (Edition 1)" By IIT Bombay FOSSEE GIS summer fellowship and internship 2023-2024, Stage II.

» Sri Deepak Kr Pandey, Final Year Mining Engineering student secured 9th Rank in All India GATE Examination.

4.16 Department of Physics

The Department of Physics boasts a century-long history, evolving from an era of revolutionary thought in physics to the present age of technological advancement. The year 2000 marked a significant milestone with the introduction of the M.Sc. course in Applied Physics. Over the past five years, the faculty members of the department have published over 100 research papers in prestigious international journals and numerous conference proceedings. In the academic year 2023-24, 7 students have been awarded PhD degree. Currently, 24 students have been working for their doctoral research in the department. Many alumni have been pursuing their research careers and some of them have secured scientific positions at premier research institutions in India, including SINP, VECC, IACS, TIFR, BARC, IPR, CGCRI, IITs as well as at renowned universities and institutes in abroad.

Various Special Instruments: (From left) XRD (Bruker D8 Advance Diffractometer), Fourier Transform Infrared Spectrophotometer, Plasma Jet.

The department is supported by multiple research projects funded by various agencies and has been awarded Phase-I of the DST-FIST project. The faculty and their research groups are actively engaged in several prominent areas of research: Experimental and theoretical studies on different aspects of condensed matter physics, nuclear physics and plasma physics, cosmology and theoretical high energy physic.

Physics Demonstration in Lab. during an Outreach Program for School Students

Workshop/Seminar/Conference/ Symposium/Webinar Organized

- The Department of Physics, IIEST, Shibpur has established a "Physics Demonstration Laboratory" on the fourth floor of Acharya Prafulla Chandra Roy Bhavan for the purpose of imparting physics education in an attractive and lucid manner to the young minds. This laboratory was inaugurated by Prof. Parthasarathi Chakrabarti, former Director, IIEST Shibpur on 15th June 2023. Prof. Y. K. Vijay, IIS (Deemed University), Jaipur, Rajasthan was invited speaker. This program includes an active participation of students of class 10 & 12 from various schools of Howrah along with UG and PG students of the institute. This training program was coordinated by Dr. Syed Minhaz Hossain.
- A one-day seminar was organized on November 30, 2023, to celebrate the 165th birthday of Sir Jagadish Chandra Bose. The event featured a popular talk delivered by Professor Partha Roy Chaudhuri from the Indian Institute of Technology, Kharagpur. Undergraduate students of science and technology from various colleges participated in the seminar. The program was convened by Dr. Sourav Pramanik and coordinated by Dr. Syed Minhaz Hossain.
- A pre-placement outreach program titled "Career Opportunities in the Department of Atomic Energy through Bhabha Atomic Research Centre Training Schools" was hosted by the Department of Physics at IIEST, Shibpur, in collaboration with the Variable Energy Cyclotron Centre (VECC), Kolkata, on January 25, 2024. A team of five senior representatives from VECC, Department of Atomic Energy, discussed research opportunities within the Department of Atomic Energy (DAE) and how B.Tech. and M.Sc. (Physics/Chemistry) students can secure positions within the DAE.

Invited Talk Organized

- Dr. Deshdeep Sahdev, Professor, Dept of Physics, IIT Kanpur (Former) delivered an invited talk on "Some fun aspects of condensed matter physics" on 8th January, 2024.
- Dr Debabrata Deb, Dept. of Theoretical Phys, IMSc, delivered an invited talk on "An Overview of the Indian Contribution to the Pulsar Timing Array Experiment" on 20th March, 2024.

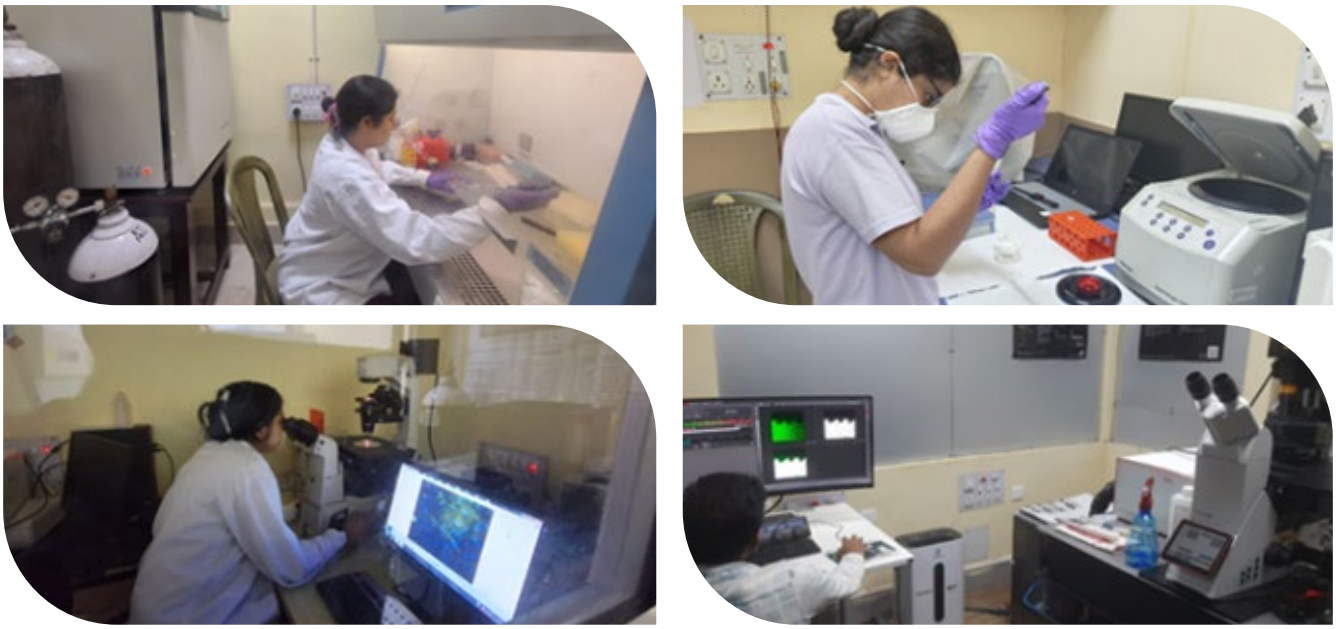
New Infrastructure Developed

- "Physics Demonstration Laboratory" has been setup on the fourth floor of Acharya Prafulla Chandra Roy Bhavan, Department of Physics.
- High frequency DSO and Function Generator has been installed at Low Dimensional Solid State Physics Laboratory (LDSSPL), Dept. of Physics.
- Shock Free Plasma Jet has been developed at Plasma laboratory, Dept. of Physics.

Centre

4.17 Centre for Healthcare Science and Technology (CHST)

The Centre for Healthcare Science and Technology (CHST) at IIEST, Shibpur has been introduced in year 2010 in erstwhile BESU with an objective to provide interdisciplinary research and training programs encompassing the fields of biotechnology, medicine, engineering, physics, chemistry, mathematics etc. to tackle challenging problems related to biomedical science and public health.



A. Biosafety cabinet (Translational Cancer Diagnostics Lab.); B. Microcentrifuge (Neuro-biotechnology Lab.); C. Epi-fluorescence microscope (Regenerative Engineering and Mechanobiology Lab.); D. Confocal Microscope (Dr. Bholanath Chakraborty Memorial Fundamental Research Lab. of Homoeopathy)

Workshop/Seminar/Conference/ Symposium/Webinar Organized

» One-day seminar entitled "Homeopathy and Quantum Physics: A Synergy to Look for".

New Infrastructure Developed

» Dr. Bholanath Chakraborty Memorial Fundamental Research Laboratory of Homoeopathy Recent advances in homeopathic research have witnessed another leap on the 12th December, 2023 as Dr. Bholanath Chakraborty Memorial Fundamental Research Laboratory of Homoeopathy gets inaugurated at Indian Institute of Engineering Science and Technology (IIEST), Shibpur.

» A state-of-the-art instrumentation facility worth over 10–15 Crores is being developed to support this research. It features Raman spectroscopy, Dynamic Light Scattering with Particle Size Analyzer, a Confocal Microscope with TIRF system, and planned additions like a High-resolution Scanning Electron Microscope, Nuclear Magnetic Resonance Spectroscopy, and High-Frequency Impedance Analyzer.

» New laboratory set up for Protein engineering and structural biology.

Schools

4.18 School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)

School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS) has been formally created by the clubbing of erstwhile Centre of Excellence for Green Energy and Sensor Systems (CEGESS) and M. N. Dastur School of Material Science and Engineering (MNDSMSE) in January 2021.

CEGESS was established in November, 2009 with the objectives to promote renewable energy in general and Solar Energy in particular, to conduct cutting-edge research as a frontline R&D incubator through a multidisciplinary approach in the field of renewable energy and sensor systems, and to contribute to the development of highly qualified and innovative personnel through specialized training and knowledge build-up in areas of renewable energy and sensor systems. The Research and education at CEGESS is closely associated with industry and several national and foreign academic institutions of repute with an aim to foster cutting edge research and establish ourselves as a leader in this field. Interests and activities in the centre include solar cell design, fabrication and characterization with a special focus on nano-materials, solar photovoltaic systems design and development, solar energy storage system, smart microgrid, sensor design, fabrication and characterization using novel materials and methods for agricultural, environmental, automobile and healthcare applications (including quantum dot-based biosensors) and development of SMART sensor system

Research Facilities of SAMGESS

MNDSMSE was established in 2001 to address the growing demand amongst the academicians, scientists and practising engineers. The knowledge of behaviour of materials is a prerequisite for the holistic development of science, engineering and technology with a focus to provide a synergic environment to pursue the interdisciplinary teaching and research. The school has the theoretical and experimental resources to address the scientific and engineering problems. Since last decade the school has been able to make modest footprints in its journey towards development and understanding the characteristics of advanced and emerging materials for efficacious application. From 2003, the School has been offering an M. Tech. Programme in Materials Engineering. Thrust areas of research for the School are Nano-structured semiconducting materials, Energy and Environment Materials, Smart materials, Composite materials, High strength steels, Materials modelling and Optimisation, and Bio-materials. In addition to research the school provides technical consultancy services to various industries and govt agencies.

At SAMGESS both the activities described above are being continued with integrated management of existing resources available to both CEGESS and MNDSMSE.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

- A collaborative research interaction held between Prof. N. Usha Rani and her team, Vignan's Foundation for Science Technology & Research (Deemed to be University), Vadlamdi, Guntur, Andhra Pradesh and SAMGESS, IIEST, Shibpur, during 25-26 April, 2023

New Infrastructure Developed

- Thermal Atomic Layer Deposition (ALD) Unit
- Single Side Etcher and Accessories (Custom Fabricated)
- I-V Measurement System for PERC/BIFACIAL/IBC Solar Cells
- Construction of Demo Model of Solar Powered Washroom

4.19 School of Community Science and Technology (SOCSAT)

The School of Community Science and Technology was established in 2004. A four-semester M.Sc. Course on "Food Processing and Nutrition Science" started in the Academic session (2007-2008). The objectives of the school were to formulate and implement specific programs like technology innovation and technology transfer and science and technology (S&T) awareness programs to the rural sectors, to impart food processing training sessions along with the demanded basic and applied research in food and nutrition and to promote sustainable growth of different marginalized communities especially women self-help groups in order to promote technology and create entrepreneurship. The prominent research area is waste to wealth, probiotics, functional foods, food processing and waste to energy. In recent years, SOCSAT has been published in reputed international journals and books. SOCSAT has witnessed significant campus placement in recent years.

Food Processing Lab.

4.20 School of Disaster Mitigation Engineering

In the spirit of developing interdisciplinary research facilities and the development of different mitigation processes against natural hazards, the School of Disaster Mitigation Engineering has been established by this university in 2007. The experimental workstation of the school is under construction near the 2nd gate of this University, where a 1.5 m x 1.5m Horizontal single Axis Seismic Table has been installed in October 2008 under the TEQIP program. Proposal for setting up Post Graduate Course in Disaster Mitigation Engineering/Earthquake Engineering are being framed for introduction shortly.

4.21 School of Ecology, Infrastructure and Human Settlement Management

The School came into existence in 2006 to conduct inter-disciplinary and cutting-edge research, postgraduate studies and to extend technical support services on issues having the critical interface of ecology, human settlements and infrastructure development. The School's activities focus on Spatial and Environmental Planning, Natural Resource Management, and Green Architecture. Identified thrust areas for the department include Spatial and Environmental Planning, Community based Natural Resource Management, Carrying Capacity Assessment for Urban Settlements, Human Settlement Planning for Ecologically Fragile Areas, Planning for Heritage Conservation, and Climate Change and Human Settlements. The areas in which research work is undertaken also include Natural Resource Extraction and Livelihood, Sustainability for Local Communities, Green Building Techniques, and Institutional Reform and Capacity Building for Urban, Rural and Natural Resource Governance.

4.22 School of Management Sciences (SOMS)

Computer Lab.

School of Management Sciences has emerged as an Institution of excellence in all facets of management education with highly specialized, sophisticated and 21st Century oriented courses and curriculum. The goal of SOMS is to achieve professional growth through holistic management education to shape future leaders for the

corporate through intermingling of functional knowledge of Marketing, Finance, Operations, Human Resource & IT Management.

The MBA program is designed to deliver the latest business education. The emphasis of the program is on an integrated understanding of the totality of business, its philosophy and socio-economic inter-relationship. The program is specially designed to develop and enhance the basic managerial skills and abilities of students and to equip them with tools & techniques of modern management for better decision-making. Different teaching methods like case studies, simulation games, group discussions, group seminars, scenario building and project work are used to make the teaching-learning process interesting. Students are encouraged to analyze, innovate and prepare themselves for professional challenges of the industry. The two years' program leading to the Masters in Business Administration

4.23 School of Mechatronics and Robotics (SMR)

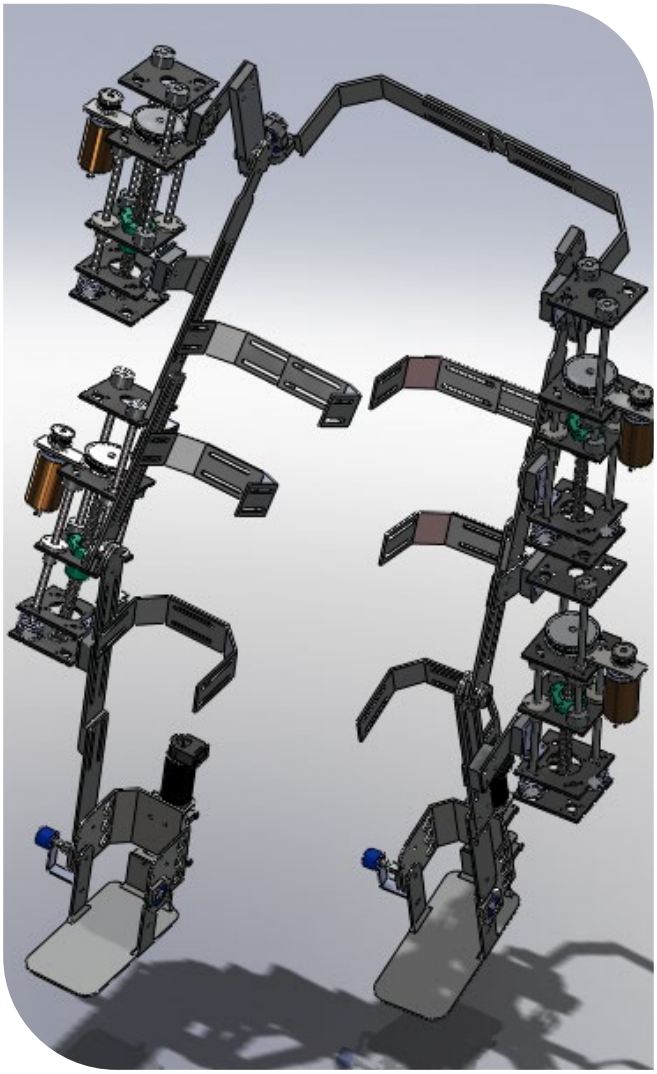
The beginning of this century is marked with multi-disciplinary technological advancement which has not only revolutionized Indian and global industrial market but also has put an impact on engineering education system. IIEST Shibpur responded to the changed technological scenario by introducing a new specialized engineering post graduate degree course in Mechatronics under the School of Mechatronics & Robotics. The course is unique with respect to similar degree programs offered by other Indian Universities and is framed accordingly to educate graduate engineers to become experts in the multidisciplinary area involving mechanical engineering, electrical engineering, electronics along with computer software. The School of Mechatronics & Robotics was established as an interdisciplinary school in 2007. The School undertakes different research and development activities in the areas of cutting-edge technology. This is a unique and new initiative for generating trained manpower in the futuristic multi-disciplinary area of mechatronics. The curriculum is designed to provide multidisciplinary knowledge and to endow the students with the ability to design mechatronics systems. The school is interdisciplinary in nature and faculty members from relevant departments/ school extend support to conduct classes / laboratories

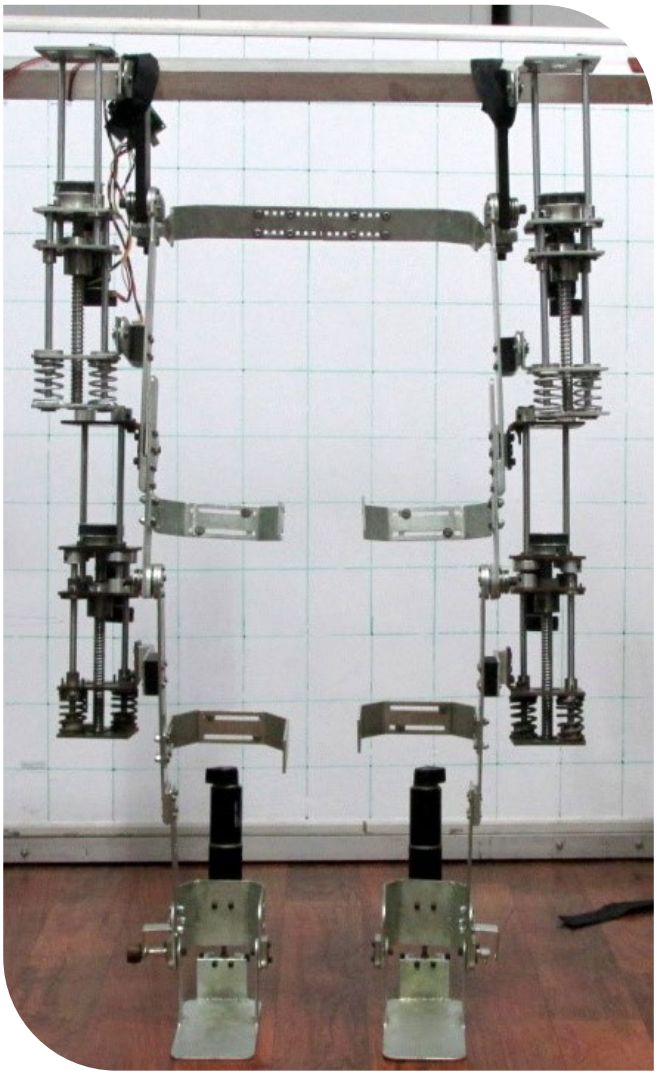
KUKA Industrial Robot

Kinova MICO2 Robot

Autonomous Mobile Robot Vehicle for Stair Navigation

Multimodal Intelligent Wheelchair Based Transporter for Navigation in Dynamic Environment





Active Multi Modal Lower Body Exoskeleton for Mobility Enhancement and Regeneration

Sensor Integrated Multi-Fingered Dexterous Robot Hand with Data Glove Interface

Students' Achievement/Activities/ Higher Studies

- Ms. Harini N., an M. Tech. Second year Student of the School, has attended VRITIKA program at NIT Rourkela on Artificial Intelligence & Robotics by SERB under Accelerate Vigyan Scheme from May 15 to July 13, 2023.
- Mr. Anshuman Vikram, a PhD student of the School, presented the paper entitled "Estimation of Respiratory Rate from Photoplethysmogram Signal Using Maximal Overlap Discrete Wavelet Transform" in the 3rd International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET- 2023) organised by NIT Patna.
- Mr. Mainak Mondal, graduated in 2023, admitted into PhD program at IIT Kanpur.

New Infrastructure Developed

- Computational Lab. developed

Major Recruiters

- Primetal, TCS Ninja, UDAPRO softwares and services, Cognizant, Alstom and Automotive Robotics India Pvt. Ltd.

4.24 School of VLSI Technology (VLSI)

The School of VLSI Technology was established on July, 2006 starting with a flagship course of M-Tech (VLSI Design) with an intake 12 students. There was a special initiative from Ministry of IT, Govt. of India with a Special Manpower Development Project (Phase II) for necessary help to establish School. The need to integrate to efforts of scientists and engineers working with different fields of microelectronics and semiconductors devices has been the primary motivation of creation of this school. Faculty members of this Institute are also running a number of industry and Govt. funded research projects with active participation of SOVLSIT. A number of tools have been developed to carry out the VLSI research. About 30 PhD theses have been completed during the last few years in the field of VLSI design and test. In the School of VLSI Technology, we have sufficient latest VLSI tools and hardware in our VLSI and Embedded systems Laboratories. The UG/PG/Doctoral students from Information Technology/Computer Science/Electronic Engg./Electrical Engg. are getting exposure with these industry standard tools and equipment. In eastern India, only two or three university/institutes have this type of laboratory.

MTech (VLSI Design) course under SMDP-II project was started during academic session 2006-2007 and continues to be a sought-after program of the institute. Students of SOVLSIT have established their credentials through recruitment of international VLSI Design Companies and selection in PhD admission to different research laboratories/ IIT/IISC/ISI/Foreign Universities. VLSI being an interdisciplinary field involving various aspects of electrical, communications, computer science, information technology, semiconductor physics and materials science, the SOVLSIT closely collaborates with other departments within IIEST and other reputed academic institutions in both India and abroad to cater to the needs of the engineers in the making.

The research and education at School of VLSI Technology is closely associated with industry and several other primary academic Institutions of repute with an aim to foster cutting edge research and establishes the School as one of the pronounced leaders in field of VLSI and Microelectronics. The school is having high-end EDA tools like Cadence, Synopsys, Mentor Graphics, Xilinx, Ansys, Matlab etc. The CAD laboratory is equipped with high-end workstation, server for accessing these, EDA Tools. The school is getting IC fabrication facilities Under India Chip Programme of Ministry of Electronics and Information Technology, Government India. The school is fabricating IC using foundry facilities from TMSC, SCL, UMC and so on. The school actively collaborates with National and International Research Organizations/Universities like Indian Statistical Institute, Calcutta, IIT Kharagpur, Calcutta University, Jadavpur University, Hiroshima University, Japan, University of Bremen, Germany, University of Florida, USA, Purdue University, USA, Duke University, USA. The school is also having collaboration with Global Foundries, Sankalp semiconductor, Intel, Qualcomm and many more companies.

Workshop/Seminar/Conference/ Symposium/Webinar Organized

- ISDCS 2023 conference at Hiroshima University, Japan from May 29 to 31, 2023.
- VLSID 2024 conference at ITC Royal Bengal, Kolkata from 6 Jan 2024 – 10 Jan 2024.

Invited Talk Organized

- Prof. Prabhat Mishra, University of Florida, USA, delivered a talk on the topic on "Explainable AI", on 26th June 2024.
- Prof. Kaushik Roy, Purdue University, USA, delivered a talk on the topic "Neuromorphic Computing".
- Prof. Swarup Bhuniya, University of Florida, USA, delivered a talk on the topic "Hardware Security".

Students' Achievement/Activities/ Higher Studies

- Mainakh Mukherjee (2022-2024 batch) got selected for Ph.D. in Purdue University, USA.
- Anushka Mukherjee (2022-2024 batch) got selected for Ph.D. in Purdue University, USA.

Major Recruiters

- Some of the major recruiters are- Qualcomm, Intel, Samsung, AMD, Western Digital, Keysight Technologies, Synopsys, Cadence, Mentor Graphics, Ansys, Texas Instruments, HCL, ARM, MathWorks

DEPARTMENT
OF
MATHEMATICS

DEPARTMENT OF
ARCHITECTURE TOWN AND REGIONAL PLANNING

DEPARTMENT
OF
MATHEMATICS

Department of Earth Sciences
(D.S.T. - F.I.S.T Sponsored Department)
पृथ्वी विज्ञान विभाग
(डि०एस०टि-एफ०आई०एस०टि प्रायोजित विभाग)

DEPARTMENT
OF
CHEMISTRY

PANDYA HALL

5 Sponsored Research and Industrial Consultancy

Sponsored Research and Industrial Consultancy

Highlights of R&D Projects and Consultancy Projects in 2023-24

5.2

R&D Project
(Funds Received)

56 No. of Projects

11,07,25,080
Amount Received (Rs.)

5.2

Consultancy
(Funds Received)

108 No. of Projects

5,42,77,131
Amount Received (Rs.)

5.3

New R&D Projects
Sanctioned in 2023-24

23 No. of Projects

1385.65
Total Amount Sanctioned
(Rs. in lakh)

5.4

New Consultancy Projects
Sanctioned in 2023-24

84 No. of Projects

630.15181
Total Amount Sanctioned
(Rs. in lakh)

Sponsored Research and Industrial Consultancy

5.1 Activities

The Research and Consultancy Cell has, of late, matured into the singular channel for diverse externally funded research and industrial consultancy at the Institute. As of now its principal role is to act as a facilitator for R&D activities at the Institute. But, in consonance with the 'make in India' thrust of the Government and in tune with the technology roadmap of the country the Cell is now gearing up to play a greater role to act as the hinge point for multi and interdisciplinary mega research for which the Institute is now well poised.

A tradition of uncompromising quality-concern has put the Institute in good treads and, over the last few years, a good number of government and non-government funding agencies like MNRE, MoE (MHRD), CSIR, DST, DeitY, DAE, DBT, BRNS, DRDO, ISRO, UNICEF, AICTE, UGC, Tata Steel, IBM etc have come forward to sponsor Research Projects. Presently the Institute is putting a purposeful thrust on collaborative research both at national and international level.

In order to enhance the level of intellectual productivity and efficacy, the Institute has established a "Research and Consultancy Cell (RACC)" of which the principal objective is to facilitate - on behalf of the institute, coordination in administration, managerial, liaison, monitoring etc. of sponsored research and consultancy work within the ambit of the administrative framework of the Institute. This allows research workers to devote more time to fruitful research without bothering much on not-too-technical but no-less-important other aspects of the project administration and implementation.

The Institute enjoys a reputation for excellence in research and development. Casting a glance at its academic departments, the Institute can boast of commendable performance of its faculty members, particularly their quality research output which is reflected by a good number of publications in peer-reviewed national and international Journals. A significant number of research projects funded by MHRD, MNRE, MeitY, DST, DBT, Digital India Corporation, DST-FIST, Indian Council of Medical Research, UNICEF, Ministry of Earth Science, CSIR, ISRO, DRDO, Ministry of Steel, Ministry of Defense, DAE-BRNS, TATA Steel, Electrosteel Casting Limited (ECL) and international funding agencies like CIDA, USAID, DelPHE, SANEI, UKRI-RCUK etc. bear testimony to the quality of research programmes carried out at the Institute. In the recent past Institute shared its research accomplishments with IISc (ACRC) Bangalore, IBM, TATA Steel, SAIL, Infosys, DRDL, CPRI, TCS, etc.

The number of sponsored projects and the funding have increased steadily. Besides the conventional fields, the Institute in recent years has brought many frontier areas of S&T under the purview of its sponsored research activities. Some of such areas include Advanced Materials, Green Energy and Sensors, Synthesis of new compounds and catalysis, Computational Chemistry, Robotics, Bio-Mechanics, Power Electronics, VLSI and Embedded Systems, Mechatronics, Earthquake Dynamics, Disaster Management, Environmental Remediation, Healthcare Science and Technology, Computational Biology, Mobile Computing, Nano Science and Technology, Remote-sensing and GIS, Space Technology, Structural Engineering, Communication, Sensor Network, Water Resource and Environment, Transportation Planning, Fluid Mechanics, Carbon Sequestration, Atomic and Nuclear Physics, Soft Computing, Image processing, Mine Safety, Housing and Human Settlement Planning, Electrochemistry, Sedimentology, Environmental Economics, Mathematical & Statistical Theory of Life Testing and Reliability, Rural Technology etc.

Casting a glance at its academic departments, the Institute can boast of commendable performance of its faculty members and research scholars, particularly their quality research output which is reflected by a good number of publications in peer-reviewed national and international journals. Institute shares its research accomplishments with other institutes, research organizations and industry.

Major augmentation in infrastructure for facilitating academic, research and administrative activities in the Institute has been undertaken. A total no. of about 104 research projects worth more than Rs. 41 Cr. and about 373 consultancy projects amounting to about Rs. 34 Cr. sanctioned to the Institute during the period of FY 2019-2020 to FY 2023-2024

5.2 Research Account Statement for the Last Two Financial Years

Table 5.1: Estimates in terms of Funds Received:

Sl.	Financial Year	Amount Received from Different Funding Agencies (Rs.)			Fund (in Rs.) Transferred to Institute Overhead From		Expenditure (Rs.)	
		R&D Project	Consultancy	Testing Fees	R&D Project	Consultancy	Manpower	Equipment
1	2023-24	11,07,25,080 For 56 projects	5,42,77,131 For 108 consultancy works	71,000 For 02 testing	28,71,604	1,22,54,165	1,32,07,934 Total 59 project personnel engaged	8,61,61,913
2	2022-23	2,60,00,845 For 47 projects	4,30,90,489 For 88 consultancy works	32,118 For 02 testing	41,08,646	1,01,65,668	1,95,64,912 Total 65 project personnel	6,56,26,942

Table 5.2: Estimates in terms of Actual Number of Projects (R&D and Consultancy) Executed and Total Available Funds:

Sl.	Financial Year	Total number of R&D and Consultancy Projects executed	Total Fund available for execution of the research and consultancy work (Rs.) [Unutilized fund – Financial Statement (Audit Report) for the Year 2023-24]
1	2023-24	415	11,78,51,650
2	2022-23	312	21,96,61,208

5.3 Highlights of Ongoing Sponsored Research Activities

- Ministry of Electronics and Information Technology (MeitY), GoI has sanctioned one consortium project on VLSI-IOT.
- Ministry of Electronics and Information Technology (MeitY), GoI has sanctioned four projects to Electrical Engineering Department under NaMPET-III scheme.
- National AI Hub for Cyber-Physical Systems, IIT Kharagpur (IITKGP-AI4ICPS I) Hub Foundation has sanctioned two projects.
- Ministry of Education sponsored two SPARC Projects are ongoing in the present tenure to facilitate global research network, improve research eco-system and academic standard.
- The Ministry of AYUSH, Govt. of India through the Central Council of Research in Homeopathy (CCRH) has sanctioned the establishment of Dr. Bholanath Chakroborty Fundamental Research Laboratory on Homeopathy. The laboratory will be equipped with several high-end equipment and will act as a coordinating centre for scientific researchers working in evaluation of medicines belonging to this AYUSH system.
- A collaborative research hub being executed by a research consortium led by New Castle University, UK with financial support from Research Council UK (RCUK) under the Global Challenges Research Fund to address the challenges of delta regions of Ganges-Brahamaputra-Meghna.
- School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS, formerly, Centre for Excellence for Green Energy and Sensors System, SAMGESS) has been recognized by Ministry of New Renewable Energy (MNRE) and also by DST Solar Hub with an objective to perform research and development on large scale silicon solar

photovoltaic cells, modules and systems including design, fabrication and characterization using novel materials and methods for which financial support has been sanctioned by DST (GoI) in the FY 2018-19. Several instrumental facilities have already been installed in the school.

» Ministry of Education has sanctioned one MoE-STARS project to the Department of Chemistry.

In 2023-24, total 24 new sponsored research projects were sanctioned with an amount of Rs. 13.85 Cr. from different agencies. The following tables and diagrams describe the details of new externally funded projects started during the year, ongoing projects, and completed projects during year 2023-24.

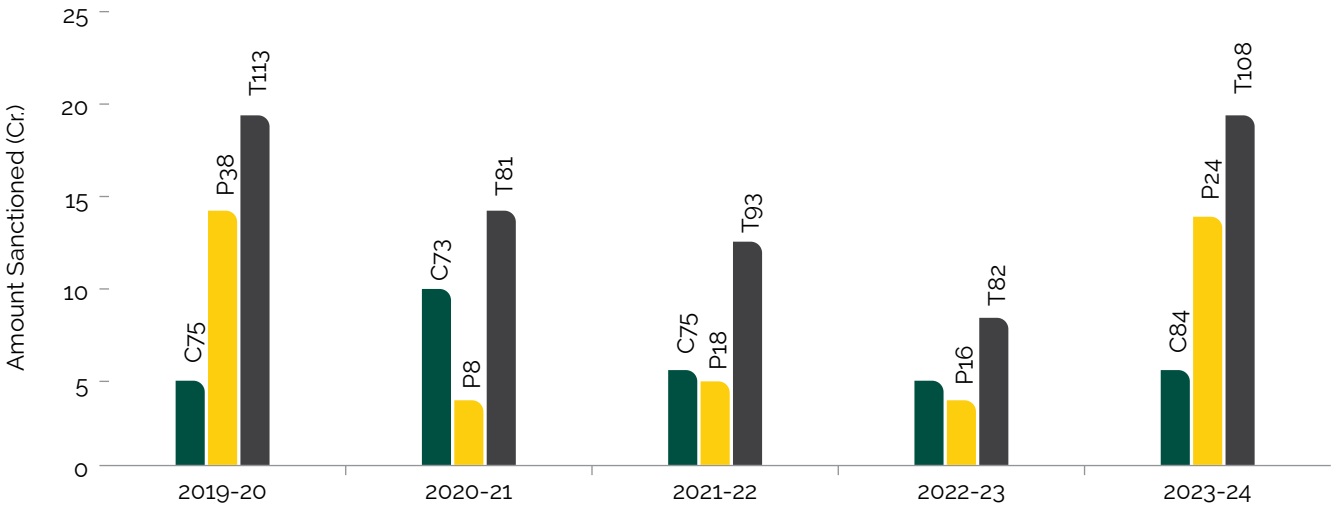


Fig. 1: No. of new sponsored research and consultancy projects sanctioned during the FY 2019-20 to FY 2023-24

C: No. of New Consultancy Project | **P :** No. of Research Project | **T :** Total Number of New Research and Consultancy Project

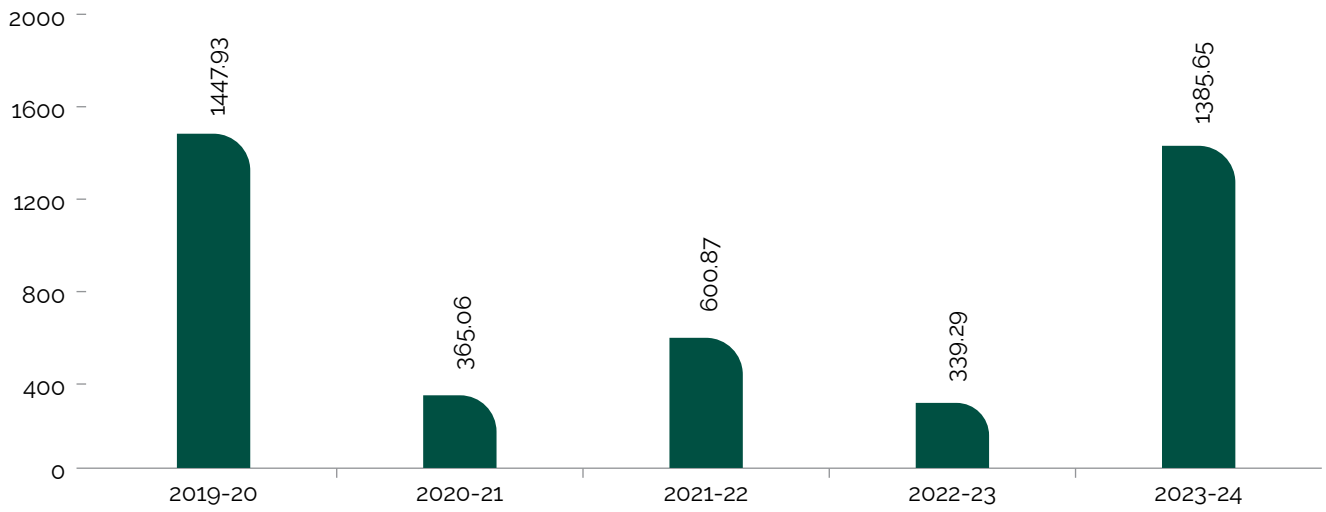


Fig.2: Year-wise Sanctioned R&D Project amounts

Table 5.3: New R&D Projects Sanctioned in 2023-24

Sl. No.	Department	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
1	Aerospace Engineering & Applied Mechanics	Ministry of Earth Sciences, GoI	64.69960
2		IIT KGP	2.26000
3	Chemistry	SERB, GoI	34.68696
4		SERB, GoI	52.14550
5		DST-WB (STB)	17.70000
6		MoE, Bangalore, STARS-2 Program	39.50000
7	CHST	Central Council for Research in Homeopathy, New Delhi	637.7148
8		DST-WB (STB)	17.91000
9		IITKGP-AI4ICPS I HF	23.59368
10	Civil Engineering	National Rural Infrastructure Development Agency (NRIDA), GoI	37.33000
11		SERB, GoI	23.52196
12	Earth Sciences	The West Bengal Power Development Corporation Limited, Murshidabad.	12.99000
		MoES, GoI	43.46800
13	Electrical Engineering	CPRI, Bangalore	34.00000
14	ETCE	SERB, GoI	35.12421
15	Information Technology	SERB, GoI	33.99939
16		SERB, GoI	32.09197
17		IIT KGP-AI4ICPS I HF	18.92000
18		SERB, GoI	21.22450
19	Math.	NBHM, DAE, GoI	15.15900
20	Mining Engineering	DST, GoI	35.00000
21	Physics	SERB, GoI	31.38388
22		SERB, GoI	25.23477
23	VLSI	Ministry of Electronics & Information Technology, GoI	96.00000
	Total		**1385.65**

Table 5.4: Completed R&D Projects in 2023-24

Sl. No.	Department	Name of the Principal Investigator	Funding Agency
1	Aerospace Engg. & Applied Mechanics	Joydeep Bhowmik	DRCDO
2	School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)	Hiranmay Saha	WBREDA
3	Chemistry	Chinmoy Bhattacharya	INSA-DST-ISRF
4		Arik Kar (Inspire)	DST-INSPIRE
5		Nanda Dulal Paul	SERB-DST
6		Laksmikanta Adak	SERB-DST
7		Shyamal Kukar Chattopadhyay	DST-WB(STB)
8		Jhuma Ganguly	DST-WB(STB)

Sl. No.	Department	Name of the Principal Investigator	Funding Agency
9	Centre for Healthcare Science and Technology (CHST)	Chitrangada Das Mukhopadhyay	DST-WB(STB)
10	Civil Engineering	Ambarish Ghosh	DST-WB(HESTB)
11		Kalyan Kumar Bhar	DST-GITA
12	Computer Science and Technology	Surajeet Ghosh	DST-WB(STB)
13	Earth Science	Nirnay Ghosh	SERB-DST
14		Susanta Chakraborty	MHRD-SPARC
15		Moumita Talukdar	DST-INSPIRE
16	Electrical Engineering	Debabrata Roy	SERB-DST
17		Mainak Sengupta	MHRD-SPARC
18	Electronics and Telecommunication Engineering	Partha Bhattacharyya	MLA-DEITY
19		Ankita Pramanik	TIH-IOT&IOF
20		Debasis Mitra	MLA-DEITY
21		Chirasree Roychaudhuri	DIC-MLA(VIS)
22	Information Technology	Ruchira Naskar	DST-ICPS-CSR IT
23		Hafizur Rahaman	MHRD-SPARC
24		Hafizur Rahaman	MHRD-SPARC
25		Hafizur Rahaman	MHRD-SPARC
26		Sukanta Das	MHRD-SPARC
27	Mathematics	Ujjal Debnath	SERB-DST
28		Binayak Samadar Chowdhury	DST-WB(STB)
29	Metallurgy and Materials Engineering	Manojit Ghosh	MHRD-SPARC
30		Swarup Kumar Ghosh	SERB-DST
31	Mining Engineering	Netai Chandra Dey	SERB-DST
32	School of Community Science and Technology (SOCSAT)	Sujay Kumar Mukherjea	FPI & H

Table 5.5: Details of All R&D Projects in 2023-24

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
1	2022-2023	Civil Engg.	Prof. Chaitali Ray	Analysis of Bridge with Hollow Core Stiffened FRP Deck Under Dynamic Loading Considering Fluid-structure and Soil-structure Interaction	Ansys Software Private Limited, Pune.	3 years	33.85000	28.06.2025
2	2022-2023	Earth Sciences	Dr. Pratik Kumar Das	Water in the Earth's mantle and its geodynamic implications: a first principles approach	DST, GoI	5 years	35.00000	05.04.2027
3	2022-2023	Math.	Tapan Kumar Kar	Development of mathematical modelling and computational techniques of some class age structured epidemic problems	SERB, GoI	3 years	6.60000	03.01.2026

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
4	2022-2023	Chem.	Mintu Nandi (NPDF) / Sudip Kumar Chattopadhyay (Mentor)	Information theoretic analysis of quorum sensing network in Vibrios	SERB, GoI	2 years	22.36800	02.11.2024/ 26.12.2024
5	2022-2023	ETC	Debasis Mitra & Rik Chattopadhyay	Development of the Microwave-Photonic Hybrid Wearable Sensor for in vivo Monitoring of Hip Stem Micromovements	SERB, GoI	3 years	8.25000	25.12.2025
6	2022-2023	AE&AM	Rana Roy	Assessing response of structures to bidirectional seismic excitations: Explorations to simple, efficient and design-oriented options	SERB, GoI	3 years	29.83640	22.02.2026
7	2022-2023	Civil Engg.	Ambarish Ghosh	Development of Bank Protection Methodologies for Various Vulnerable Reaches of Rivers in West Bengal through Model Studies and Preparation of Design Charts and Guidelines	East Hooghly Polyplast Pvt. Ltd.	2 years	12.00000	28.02.2025
8	2022-2023	Civil Engg.	Anuj Kishor Budhkar	Impact and Suitability of Electric vehicles to Indian roads	SERB, GoI	3 years	30.89372	06.03.2026
9	2022-2023	AE&AM	Prince Raj Lawrence Raj	Simulation and Experimental Studies of ammonium dinitramide (ADN) based green liquid propellants interaction studies with hot surfaces under different pressure regimes	SERB, GoI	3 years	39.10087	16.03.2026
10	2022-2023	Chem.	Dr. Gourisankar Roymahapatra, Associate Professor (P.I.) and Dr. Jhuma Ganguly, Associate Professor (Mentor)	Microgel of sugar based heteroaromatic moieties: Synthesis, mechanism of gelation, antibacterial potency and computational study	SERB under TARE, GoI	3 years	10.05000	13.10.2025
11	2022-2023	CST	Dr. Souvik Sengupta, Aliah University, Kolkata (P.I.) and Dr. Asit Kumar Das, IIEST, Shibpur, Howrah (Mentor)	Natural Language Processing and Machine Learning based enhancement in Education Technologies	SERB under TARE, GoI	3 years	10.05000	27.10.2025

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
12	2022-2023	Math.	Dr. Barnali Pyne, Woman Scientist-A & P.I. and Prof. Tapan Kumar Kar, IIEST, Shibpur (Mentor)	Study of Levy flights in a bounded domain using fractional calculus	DST, GoI, Women Scientists Scheme -A (WOS-A)	3 years	29.71599	24.03.2026
13	2022-2023	ETC	Dr. Tamaghna Acharya	RES-SAC-2022-005: Techniques for coexistence & integration of communication satellites and terrestrial IMT systems	ISRO, Dept. of Space, GoI, Bengaluru	3 years	26.69880	30.03.2026
14	2022-2023	AE&AM	Dr. Amit Roy Chowdhury	Designing, Development and Performance Evaluation of Bioactive Porous Titanium Developed by Laser Additive Manufacturing and Reactive Surfacing for Implant Application	SERB, GoI	3 years	38.76400	01.03.2026
15	2021-2022	SAMGESS	Santanu Maity	Development of artireflective and self-cleaning coatings on solar cover glass with enhanced power output for silicon based solar panels and devices.	DST, GoI	3 years	16.66000	30.08.2024
16	2021-2022	SAMGESS	Konika Das (Bhattacharya)	Going Remote - Solar Energy for Lighting and Hygienic Sanitation with Smart Exhaust System for Rural Applications	DST, GoI	3 years	143.33470	21.10.2024
17	2021-2022	ETC	Debasis Mitra	AI based Detection of Acute Respiratory Distrees Syndrome (AI-DARDS): An artificial intelligence aided non-contact framework for detecting acute respiratory distress syndrome using microwave sensors	DBT, GoI	3 years	24.12696	27.10.2024
18	2021-2022	AE&AM	Joydeep Bhowmik	Development of a novel Unmanned Aerial Aquatic Vehicle (UAAV) with advanced retractable wing and dual propulsion system	SERB-DST, GoI	3 years	36.11690	06.09.2024
19	2021-2022	Chem.	Mrinal K. Bera	Electrochemistry in organic synthesis: An incredible tool for environmentally benign synthesis of valuable carbocyclic and heterocyclic compounds.	SERB-DST, GoI	3 years	45.79696	28.12.2024
20	2021-2022	Civil Engg.	Debojyoti Pandit	Development of a numerical method to predict loading history from a given shape of a one-dimensional structure	SERB-DST, GoI	3 years	14.70810	30.12.2023

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
21	2021-2022	Chem.	Nanda Dulal Paul	Design and Synthesis of new cheap and earth abundant transition metal catalysts and development of new catalytic methodologies for the dehydrogenative functionalization of alcohols.	CSIR	3 years	23.93360	09.02.2025
22	2021-2022	Chem.	Chinmoy Bhattacharya	Modulation of scheelite InVO4, CaWO4 semiconductor - employing carbon-supported materials (graphene, g-C3N4, C-dots) as electron flow mediator and electrocatalysts for photoelectrochemical H2-O2 production direct splitting of water.	DST, GoI	3 years	28.49703	07.10.2024
23	2021-2022	AE&AM	Pratim Kumar	Synthesis, Prilling and Coating of Ammonium Dinitramide (ADN): A promising oxidizer	DRDO, GoI	3 years	1.06000	18.01.2025
24	2021-2022	CST	Abhik Mukherjee	Development of compact and efficient grid tied solar powered inverter (SPI) systems	DST, GoI	3 years	25.93080	02.09.2024
25	2021-2022	Civil Engg.	Sujit Kumar Dalui	Interference effects on irregular plan shape tall buildings under wind excitation	DST-WB	3 years	13.00000	20.03.2025
26	2021-2022	AE&AM	Pratim Kumar	Thermal decomposition and combustion studies of prilled and coated ammonium nitrate (AN) and potassium dinitramide (KDN) based novel green oxidizers and propellants for future space and defense applications	SERB-DST, GoI	3 years	45.56816	03.03.2025
27	2021-2022	Physics	Manish Pal Chowdhury	Chemiresistive-magnetic hybrid gas sensor for NH3 gas detection	UGC-DAE CSR (CRS)	3 years	2.28120	30.03.2025
28	2021-2022	AE&AM	Amit Roy Chowdhury	Antibiofilm peptide-functionalized titanium implants	SERB-DST, GoI	3 years	6.05000	09.03.2025
29	2021-2022	AE&AM	Prince Raj Lawrence Raj	Three-Dimensional Ice Accretion Estimation of SARAS MK II Aircraft Under various flying and cloud conditions (Simulation Studies)	CSIR-NAL	11 months	33.94270	23.10.2022

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
30	2020-2021	AE&AM	Subhabrata Koley	Micromechanics based intra and inter-laminar damage models with emphasis on spatial randomness boundary layer and interface.	DST, GoI	5 years	112.40000	03.08.2025
31	2020-2021	Elec. Engg.	Mainak Sengupta	Design and development of magnetic core power inductor (HF-Mag)	MEITY	33 months	49.24000	27.02.2023
32	2020-2021	Elec. Engg.	Mainak Sengupta	Design and development of WBG device based high current converters for industry applications	MEITY	36 months	116.98000	27.05.2023
33	2020-2021	Elec. Engg.	Mainak Sengupta	MEMS for electric machines and drives (MEMS Machines)	MEITY	36 months	42.09000	27.05.2023
34	2020-2021	ETCE	Ankita Pramanik	Underground mine monitoring system	IBM	36 months	19.74627	28.02.2024
35	2020-2021	School of VLSI Technology	Sarit Chakraborty	Design optimization of Micro-Electrode-Dot - Array based Digital Microfluidic Biochips (MEDA-DMFBs) for Cyberphysical Systems	SERB-TARE	36 months	10.05000	13.12.2023
37	2019-2020	CHST	Howa Begam	Development of injectable bone substitute using biphasic calcium phosphate/ biopolymer composite loaded with platelet rich plasma for bone defect	ICMR	3 years	3.14560	06.10.2023
38	2019-2020	IT	Prasun Ghosal	Exploring the feasibility of search space minimization in drug designing system using mRNA-Ribosome mathematical modeling and simulation	DST	3 Years	6.6000	08.03.2023
39	2019-2020	Chemistry	Laksmikanta Adak	Synthesis of iron complexes and their catalytic role in 1.4-addition reactions of organoboron reagents to alpho.beta-unsaturated carbonyl and related compounds	DST-WB(STB)	3 Years	6.3000	02.03.2023
40	2019-2020	Chemistry	Nanda Dulal Paul	Sustainable and economically affordable synthetic approaches towards bioligically and medicinally active molecules.	DST-WB(STB)	3 Years	3.3000	10.03.2023
41	2019-2020	Civil	Chanchal Majumder	Arsenic-organic interaction: Removal by functional carbon nanocomposite and optimization of the process parameters.	DST-WB(STB)	3 Years	14.4600	

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
42	2019-2020	Civil	Pritam Saha	Development of operational strategies for e-rickshaws for improving air quality on roads	DST-WB(STB)	3 Years	11.9580	
43	2019-2020	ETC	Ankita Pramanik	Development of UV and IoT based sensor for online water quality monitoring	DST-WB(STB)	3 Years	14.9580	
44	2019-2020	Chemistry	Nanda Dulal Paul	Exploring Homogenous catalysis using transition metal complexes of redox noninnocent ligands	DST	3 Years	32.5970	05.02.2023
45	2019-2020	SEIHSM	Souvanic Roy	GCRF Living Deltas Hub	UKRI-RCUK	5 Years	201.0126	12.02.2024
46	2019-2020	AE&AM	Amit Roy Chowdhury	Functional Optimization and Development of Polymer-Carbon Nanocomposites for Customized Bone Grafting	DST	3 Years	83.6986	27.10.2022
47	2019-2020	Civil	Anirban Gupta	Fist Program - 2018 [TPN - 20199]	DST	5 Years	148.0000	19.09.2024
48	2019-2020	Civil	Anirban Gupta	Low carbon option for wastewater treatment and reuse - A case study in the East Kolkata Wetlands	WBPCB	2 Years	10.0016	30.06.2021
49	2019-2020	Civil	Anirban Gupta	Determination of volume flow of sewage at point and non-point sources of the East Kolkata Wetlands, the water quality and hydrological parameters at various points	WBPCB	2 Years	10.1140	30.06.2021
50	2019-2020	CST	Abhik Mukherjee	Summarizing Content Streams on Online Social Media during Emergency Events	ICSSR-MHRD	2 Years	13.6500	31.03.2021
51	2018-2019	Physics	Abhijit Majumdar	Synthesis and Characterization of Piezoelectric & Photoactive Nanocomposite and their application in Root Canal Disinfection	Science & Technology and Biotechnology (GOWB)	3 Years	16.5500	31.05.2022
52	2018-2019	SAMGESS	Partha Chaudhri	DST Solar PV Hub Pase - II	DST	5 Years	2621.4340	26.06.2025
53	2017-2018	Chemistry	Arik Kar	Core@shell semiconductor nanomaterials for the photocatalytic continuous flow treatment of xanthene dyes	The Royal Society, Independent Scientific Academy of the UK	5 Years	26.9439	05.10.2022
54	2017-2018	Chemistry	Chinmoy Bhattacharya	Modifications of Aurivillius Type Semiconducting Photocatalysts through Incorporation of Dopants and Cocatalysts for Improvement of Photoelectrochemical water Oxidations Behaviour	CSIR	3 Years	9.0000	30.04.2020

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
55	2017-2018	CHST	Ananya Barui, Chirasree Roychaudhuri & Ashoke Sutradhar	Bholanath Chakraborty Laboratory for Fundamental Research in Homeopathy	Central Council for Research in Homeopathy (CCRH), Ministry of Ayush, Govt. of India	10 Years	30.0000	03.04.2027
56	2023-2024	Civil Engg.	Pritam Saha	Performance Evaluation of Cell Filled Concrete, Roller Compacted Cement Concrete and Panelled Concrete Roads	National Rural Infrastructure Development Agency (NRIDA), Government of India	2 years	37.33000	14.06.2025
57	2023-2024	Physics	Mousumi Basu	Investigation on the Performance characteristics of Single Mode Semiconductor core optical fibers and waveguides in view of nonlinear pulse dynamics.	SERB, GoI	3 years	31.38388	27.06.2026
58	2023-2024	AE&AM	Koustuv Debnath	Morphodynamic Evolution of Curved River Bend: Processes, Mechanisms and Protection	Ministry of Earth Sciences, GoI	5 years	64.69960	23.07.2028
59	2022-2023	Earth Sciences	Bhabani Prasad Mukhopadhyay	Hydro-Geological impact assessment on account of the ash pond due to storage of ash slurry in the ash pond and mitigation measures to be taken for avoiding any possible pollution on account of the same on water quality in that area at Sagardighi Thermal Power Plant (2 x 500 mw extension project), District- Murshidabad, West Bengal, India.	The West Bengal Power Development Corporation Limited, Murshidabad.	2 years	12.99000	16.08.2025
60	2023-2024	VLSI	Hafizur Rahaman	Design and Development of System on Chip based next Generation IoT System for Industry 4.0 with Functional Safety and Security Features.	Ministry of Electronics & Information Technology, GoI	5 years	96.00000	02.08.2028
61	2023-2024	CHST	Ananya Barui	Green Synthesis of Silver Nanoparticles using various plant based Homeopathic Mother tinctures and evaluation of the efficacy of the Homeopathic drug capped Silver Nanoparticles as potential anti-bacterial, anti-oxidant, anti-inflammatory and anticancer agents	Central Council for Research in Homeopathy, New Delhi	1 year	12.66840	03.09.2024

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
62	2023-2024	Information Technology	Ruchira Naskar	Development of an IoT based forensic infrastructure for extraction, analysis and detection of cybercrime evidence from digital images and surveillance videos in an IoT framework.	SERB, GoI	3 years	21.22450	06.10.2026
63	2023-2024	Chemistry	Nanda Dulal Paul	Eco-Friendly and Economically Affordable Bio-Inspired Metal-Ligand Cooperative Approaches for Sustainable Synthesis of Biologically and Medicinally Active Molecules	MoE, Bangalore, STARS-2 Program	3 years	39.50000	27.11.2026
64	2023-2024	Chemistry	Ajit Kumar Mahapatra	Development of new small molecule fluorescent chemodosimeters: Toxic analytes detection and investigation of their enzymatic reactions	SERB, GoI	3 years	34.68696	31.12.2026
65	2023-2024	Civil Engg.	Pritam Saha	Development of a low-cost indigenous driving simulator to evaluate the safety performance of roadways at critical visibility conditions	SERB, GoI	3 years	23.52196	01.01.2027
66	2023-2024	Information Technology	Ruchira Naskar	Affective recognition from human facial videos for fighting DeepFakes and validation by correlation with human physiological signals	SERB, GoI	3 years	33.99939	31.12.2026
67	2023-2024	Earth Sciences	Moumita Talukdar	Petrochemical investigation along two N-S transects in the Granulite Terrane of Southern India: Reconstructing the crustal architecture and the thermotectonic events during the late Archean/ early Palaeoproterozoic and Neoproterozoic time	MoES, GoI	3 years	43.46800	25.12.2026
68	2023-2024	Min. Engg.	Shreedevi Moharana	Quantifying the variability of water use efficiency in upscaling from leaf to ecosystem scale under changing climatic and biophysical conditions	DST, GoI	5 years	35.00000	31.08.2028
69	2023-2024	ETC	Partha Bhattacharyya	Development of Prototype Exhaled-Breath-Sensor-Array Using 2D Junction Devices for Detection of Fatty Liver Disease	SERB, GoI	3 years	35.12421	01.02.2027

Sl. No.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
70	2023-2024	Chemistry	Nanda Dulal Paul	Exploring Applications of Well-Defined Transition Metal Complexes of Redox Noninnocent Ligands: From Catalysis to Molecular Electronics	SERB, GoI	3 years	52.14550	06.02.2027
71	2023-2024	Information Technology	Sukanta Das	An Architecture for In-memory Computing	SERB, GoI	3 years	32.09197	29.01.2027
72	2023-2024	CHST	Amlan Roychowdhury	Designing novel structure-based inhibitors targeting ribosome biogenesis as an impending stratagem in cancer treatment	DST-WB(STB)	3 years	17.91000	11.02.2027
73	2023-2024	Chemistry	Papu Biswas	Design of Transition Metal Incorporated Ordered Mesoporous Carbon Based Electro-Catalysts for Small Molecule Assisted Hydrogen Generation and Zinc Air Battery	DST-WB(STB)	3 years	17.70000	18.02.2027
74	2023-2024	CHST	Ananya Barui	Development of AI Augmented Multispectral Microscope for Precise Diagnosis of Oral and Prostate Cancer.	IITKGP-AI4ICPS I HF	2 years	23.59368	14.03.2026
75	2021-2022	Math.	Santanu Saha Ray	Analytical and numerical solutions for Stochastic integral and Differential Equations in Mathematical Modeling	NBHM, DAE, GoI	3 years	15.15900	31.08.2024
76	2023-2024	Physics	Abhijit Bisoi	STRUCTURAL EVOLUTION AND COLLECTIVITY IN ^{49}V AND ^{50}Mn.	SERB, GoI	3 years	25.23477	19.03.2027
77	2024-2025	Elec. Engg.	Atanu Banerjee	Design and Development of Multilevel Inverter based Distributed Power Flow Controller (DPFC) FACTS for a Grid Integrated System with Renewable Energy Sources	CPRI, Bangalore	2 years	34.00000	04.04.2026
78	2023-2024	Information Technology	Arindam Biswas	AI-based crop health monitoring and risk management for rice agro-ecosystems	IITKGP-AI4ICPS I HF	2 years	18.92000	14.03.2026
79	2023-2024	AE&AM	Amit Roy Chowdhury	Modelling and simulation, cell proliferation and growth, antibacterial testing	IITKGP	2 years	2.26000	28.02.2026

5.4 Major Consultancy Projects

Important funding agencies like Coal India Limited, Western Coalfields Limited, Eastern Coalfields Limited, ArcelorMittal Design and Engineering Centre Pvt. Limited, West Bengal Medical Services Corporation Limited, National Mission for Clean Ganga, P.W.DTE, Govt. of West Bengal, Haldia Development Authority, IIT Kharagpur, Larsen & Toubro Limited, ITD Cementation India Ltd., Kolkata Port Trust, Rail Vikas Nigam Limited, Kolkata Metro Rail Corporation Limited, Hooghly River Bridge Commissioners, Second Vivekananda Bridge, VisvaBharati University, Mackintosh Burn Limited, Kolkata Metropolitan Development Authority, Gorkhaland Territorial Administration, Bridge and Roof Co. (India) Ltd., Singareni Collieries Company Limited (SCCL), Hindalco Industries Ltd., PDCL etc. are providing significant consultancy activities.

In 2023-24, a total 84 new consultancy works were sanctioned with an amount of Rs. 6.30 Cr. from different agencies. The table below shows particulars of new consultancy work sanctioned and carried out during year 2023-24.

Table 5.6: List of New Consultancy Projects Sanctioned in 2023-24

Sl. No.	Dept.	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
1	AE&AM	Conveyor & Ropeway Services Pvt. Ltd.	2.24200
2		ArcelorMittal Design and Engineering Centre Pvt. Limited	0.70800
3	Civil	National Mission for Clean Ganga	1.77000
4		National Mission for Clean Ganga	1.77000
5		Karukrit Advertising Private Ltd.	1.18000
6		ITD Cementation India Limited	1.18000
7		Ram Kripal Singh Construction Pvt. Ltd.	3.54000
8		Senbo Engineering Limited	1.77000
9		Infinity Engineering	2.76120
10		Earthera Agro Green Private Ltd.	0.88500
11		TPF Engineering Pvt. Ltd.	11.80000
12		Ram Kripal Singh Construction Pvt. Ltd.	10.62000
13		Oswal Residential Buildings LLP	7.37500
14		Pobi Technologies & Construction Pvt. Ltd.	4.13000
15		Development Consultants Pvt. Ltd.	3.54000
16		GB Construction	4.72000
17		WAPCOS Ltd.	17.70000
18		WPIL Limited	4.72000
19		Descon United Technical Service	0.59000
20		Descon United Technical Service	0.82600
21		Senbo Engineering Limited	0.70800
22		Bismi Construction	0.70800
23		Bata Projects Private Limited	7.96500
24		Ganges Retreat Private Limited	7.96500
25		Geotechnical Engineers Consortium	3.30400
26		Constell Consultants Pvt. Ltd.	2.24200
27		Kalyani Municipality	18.88000
28		Mackintosh Burn Limited	1.94700
29		Shikshayatan Foundation	4.72000
30		Bengal Beverages Private Limited	3.54000
31		Effluent & Watertreatment Engineers (P) Ltd.	1.77000
32		G. P. Projects Limited	9.44000
33		Haldia Development Authority	1.41600
34		Bhartia Infra Projects Limited	3.36300

Sl. No.	Dept.	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
35		The Executive Engineer, Raiganj Division, PHE Dte.	2.36000
36		Ganges Retreat Private Limited	7.67000
37		Bata Projects Private Limited	7.67000
38		Geotechnical Engineers Consortium	2.47800
39		Titagarh Rail Systems Limited	8.85000
40		Meridian Medical Research and Hospital Ltd.	1.18000
41		Jagadhatri Ganga Darshan	2.36000
42		Wist Water Solutions Private Limited	1.18000
43		Aakanksha Enterprises	1.88800
44		The National Library	0.35400
45		Mishra and Mishra Consultancy Services Pvt. Ltd.	2.00600
46		The National Library	0.35400
47		Descon United Technical Service	0.35400
48		C.P. Kukreja Architects	3.54000
49		Gaja Engineering Pvt. Ltd.	5.90000
50		Senbo Engineering Limited	0.35400
51		Executive Engineer, Jalpaiguri Division, PHED, Govt. of West Bengal.	76.74007
52		Ram Kripal Singh Construction Pvt. Ltd.	17.70000
53		Central Pollution Control Board	15.77070
54		Eco Protection Engineers Pvt. Ltd.	1.94700
55		Executive Engineer, Barasat Division, PWD, Govt. of West Bengal.	2.89100
56		Mas Investment & Financial Consultants Pvt. Ltd.	4.72000
57	Mining	Gujarat Mineral Development Corporation Ltd.	12.98000
58		Bharat Coking Coal Ltd.	0.53100
59		MINSOL Ltd.	9.44000
60		Gainwell Commosales Private Limited	10.62000
61		Eastern Coalfields Ltd.	4.89700
62		Essar Oil and Gas Exploration and Production Ltd.	28.08400
63		Gainwell Commosales Private Limited	9.44000
64		Bharat Coking Coal Ltd.	1.47500
65		Eastern Coalfields Ltd.	3.54000
66		MINSOL Ltd.	11.80000
67		Eastern Coalfields Ltd.	2.83200
68		Gainwell Commosales Private Limited	14.16000
69		Gainwell Commosales Private Limited	8.26000
70		The Singareni Collieries Company Ltd.	76.63864
71		Eastern Coalfields Ltd.	4.07100
72		Eastern Coalfields Ltd.	4.89700
73		Bharat Coking Coal Ltd.	2.36000
74		Gainwell Commosales Private Limited	10.62000
75		Eastern Coalfields Ltd.	6.49000
76		Bharat Coking Coal Ltd.	12.98000
77		Gainwell Commosales Private Limited	8.26000
78		Jitusol Developers Private Limited	15.04500
79		MINSOL Ltd.	1.22720
80		Gainwell Commosales Private Limited	9.44000
81		Gainwell Commosales Private Limited	10.62000
82		Eastern Coalfields Ltd.	10.62000
83		Bharat Coking Coal Ltd.	2.24200
84		Coal Mines Associates Traders Pvt. Ltd.	16.52000
		Total	**630.15181**

6

Institution's Innovation Council

Institution's Innovation Council (IIC)

In 2018, the Ministry of Education (MoE and erstwhile MHRD) in collaboration with AICTE had launched the Institution's Innovation Council (IIC) program through MoE's Innovation Cell (MIC) for Higher Education Institutions (HEIs) to encourage the creative energy of the student population and to systematically foster the culture of innovation, startup and entrepreneurial ecosystem in educational institutions. Primarily, the IICs' role is to engage a large number of faculty and staff, and encourage, inspire, and nurture young students in various innovation and entrepreneurship-related activities such as ideation, problem-solving, proof of concept development, design thinking, IPR, project handling and management at pre-incubation/incubation stage so that innovation and entrepreneurship ecosystem gets established and stabilized in HEIs. The MIC envisioned creating a network of IICs across selected HEIs to stimulate innovation in institutions through multitudinous modes leading to an innovation-boosted ecosystem in these campuses.

IIEST, Shibpur has been a part of this program since its inception. Currently, IIC6.0 is in effect. IIC6.0, IIEST Shibpur has been conducting various activities, as mandated by the MIC, throughout the year to foster a culture of innovation among students and faculties. Moreover, an Institute Innovation Laboratory (IIL) has been set up where students and faculties can work on their innovative ideas. The laboratory provides anytime access. The activities in the laboratory are linked with IIC6.0. Currently, the laboratory has adequate infrastructure and equipment that the students and faculties can use for their work. A 3D-printer has been procured and installed in the laboratory.

6.1 Selected Events Organized by IIC6.0

A summary of a few selected events organized by IIC6.0 is given below.

My Story – Motivational Session by Successful Innovator

Type: Calendar Activity

From Left to Right: Dr. Gayathri Vasudevan, Smt. Tejaswini Ananth Kumar (Chairperson –Board of Governors), Prof. Parthasarathi Chakrabarti (Director), Prof. Arindam Biswas (President, IIC6.0)

We cordially invited Dr. Gayathri Vasudevan, the Executive Chairperson of LabourNet, to give a motivational talk in this event held on 21st December 2023 for the students and faculty of the Institute as an expert speaker on entrepreneurship. The aim of the activity was to familiarize the students with the process of identifying local entrepreneurial challenges that demand attention from a new venture founder. It could potentially facilitate the establishment of an ecosystem within the institute, teaching students how to develop a product that is essential for local society and ultimately commercialize it in a way that positively affects the economy. In addition to detailing her personal experiences and obstacles while establishing her business, she delivered an interesting and engaging presentation on identifying local entrepreneurial challenges. A healthy question-answer session was held between the speaker and students. Prior to the invited speaker's motivational speech, President's (IIC 6.0) welcome address enthusiastically kicked off the event, followed by the inaugural address by the Hon'ble Director. At last, the convener presented a vote of thanks in recognition of the event's successful conclusion. During the whole session, Smt. Tejaswini Ananth Kumar (Chairperson - Board of Governors) was also present and delivered an inspiring talk about making the institute a green campus.

National Science Day

Type: Celebration Activity

Prof. Ananda Dasgupta, IIESR Kolkata, is delivering a very engaging talk on fractal in nature

IIC6.0 celebrated National Science Day on 28th February 2024. About 100 school children and teachers from three nearby schools (BE College Model School, SSPS Vidyalaya, and Ramkrishna Adarsha Vidyalaya, Howrah) were invited to participate in the event. The event aimed at promoting science and innovations among school children. The event was inaugurated by the Hon'ble Director, Prof. Parthasarathi Chakrabarti. The resource persons engaged the school children demonstrating various innovative experiments in physics and chemistry. They demonstrated various engaging scientific experiments to promote science among school children. Dr. Papu Biswas demonstrated the importance of colours in inorganic chemistry. Dr. Syed Minhaz Hossain demonstrated the role of different types of scattering behind the colours we see around us. Demonstration and flying of an unmanned aeroplane by Dr. Joydeep Bhowmik were other attractions for the school children. The teachers of the school were also fully engaged in the activities. Prof. Ananda Dasgupta presented a very engaging talk on fractal in nature. A very fruitful interaction took place with the school students and teachers.

My Story – Motivational Session by Successful Entrepreneur/Start-up Founder

Type: Calendar Activity

Mr. Souvik Chaudhuri is Interacting with Students and Faculty on Entrepreneurship

We invited Mr. Souvik Chaudhuri, co-founder of e-Junction Media, to be an expert speaker for this event held on 24th January 2024 and share his experience and expertise in entrepreneurship with the students and faculty members of the Institute. The objective was to acquaint the students with identifying core areas an entrepreneur should focus on when starting a new startup venture. It may facilitate building an ecosystem in the Institute so that the students learn to work towards developing a product needed for society and ultimately commercialize it to impact the economy positively. Besides sharing his personal experiences and challenges in establishing his company, he delivered an insightful and interesting talk on "Business Model Canvas (BMC)," which is a simple yet potent tool for understanding the entire ecosystem of any company. One major problem that any startup faces today is focusing too much on one particular business component. It is one of the reasons why most startups fail to survive beyond a specific window of time. The BMC provides us with a framework wherein all business components are well thought out and documented. The context becomes more important as the audience has a solid foundation in technology sciences but ideally needs the essential business component. Mr. Chaudhuri cited several case studies to help the audience understand the granularity of the model and its actual application in the real world.

National Youth Day

Type: Celebration Activity

Prof. Parthasarathi Chakrabarti (Director) is addressing the gathering on the occasion of National Youth Day 2024

The institute celebrated Vivekananda Jayanti on 12th January declared as National Youth Day by the Govt of India jointly with the Institution's Innovation Council (IIC 6.0) and Vivekananda Youth Circle (VYC) of the institute, a society dedicated to upholding the ideals, teachings, and philosophy of Swami Vivekananda. IIC 6.0 took the initiative to meet one of the mandates set forth under the aegis of celebration activities for the academic year 2023-24. The event created a platform to appreciate Swami Vivekananda's vision of Self-Reliant India and Technical Education. The event was organized in two parts, morning and evening sessions. In the morning, teachers, students, and staff assembled at the premise of the statue of Swami Vivekananda, and the Hon'ble Director, Prof. Parthasarathi Chakrabarti inaugurated the National Youth Day program by garlanding the statue of Swami Vivekananda and addressed the gathering. Swami Tejomayananda Saraswati, an educator and Indian spiritual leader with a profound expertise in teaching yoga and meditation graced the occasion with his benevolent presence. The Registrar, Dean of Students' Welfare and President IIC 6.0 were present in the event. The evening session was organized at the Institute Hall. Students, teachers, staff members of the institute, and devotees participated in the function. Hon'ble Director, Prof. Parthasarathi Chakrabarti chaired the session and highlighted the work of Swami Vivekananda in his speech and provided a deeper understanding of Swami Vivekananda's contribution to the field of higher education. Dean of Students' Welfare also emphasized on Swami Vivekananda's ideas and philosophy of education. Swami Tejomayananda Saraswati addressed the gathering inculcating the need for value education and culture. The event was concluded by screening a documentary on education as envisaged by Swami Vivekananda. Shri Anup Roy Chowdhury from Ramakrishna Mission Institute of Culture, Golpark, Kolkata who directed the documentary was present.

Evening celebration of National Youth Day 2024 From left to right: Prof. BK Ghorai - Dean (FW); Prof. S Mukhopadhay – Dean (SW); Prof. Parthasarathi Chakrabarti (Director); Swami Tejomayananda Saraswati (Educator and Indian Spiritual Leader); Shri Anup Roy Chowdhury (Ramakrishna Mission Institute of Culture, Golpark)

Exposure and Field Visits for Problem Identification

Type: Calendar Activity

Dr. Syed Minhaz Hossain and his Team are Demonstrating Science Experiments to the School Students

covering various topics on science, maths, and basic understanding of a problem by Dr. Syed Minhaz Hosain and his team. He also demonstrated science experiments to the students and gave them an opportunity to think and reason the physical phenomena of the experiments. Interaction with teachers was done to identify scope of improvement in teaching, books and study material. Dr. Debabrata Majumdar, expert in science and teaching in school education also demonstrated basic techniques how to understand and solve simple maths operations which are often misunderstood by most students. Demo of flying robot bird was given by Dr. Joydeep Bhowmik. The working principle with simple physics was shown as how birds fly against gravity. The venue of the program is located at about 100 km from IIEST Shibpur. The journey started at 7:30 am and return at 6:30 pm. The students enjoyed the program.

Workshop on Entrepreneurship Skill, Attitude and Behavior Development

Type: Calendar Activity

An event titled 'Workshop on Entrepreneurship Skill, Attitude and Behavior Development' was organized for the students and faculty members of IIEST, Shibpur by IIC6.0, in association with Entrepreneurship Development Cell (EDC) and LML (Leading Meaning Life), e-forum at IIEST-Shibpur, on 11th January 2024 from 5.00 p.m onwards at the Institute Hall, IIEST-Shibpur. The resource person for the event was Mr. Avelo Roy, Managing Director and Startup Mentor at Kolkata Ventures. His efforts through Kolkata Ventures in past few years have resulted in many revenue generating startups responsible for around 4700 new jobs created in 10 states of East India. The primary objective of this workshop is to equip the students of IIEST, Shibpur with essential practical skills, mindset cultivation techniques, and behavioural strategies imperative for achieving success in entrepreneurship. Mr. Roy also motivated the students through entrepreneurship education using lean startup methodology and principles of Bhagavad Gita. The event was initiated with the welcome address given by President IIC6.0, Prof. Arindam Biswas. More than hundred students, faculty members participated in this3 hours long interactive event. The event created a platform for sharing of knowledge and resolving the personalized queries raised by students regarding their entrepreneurial ideas and endeavours.

Workshop on Entrepreneurship Skill, Attitude and Behavior Development From left to right: Prof. Arindam Biswas (President, IIC6.0); Mr. Avelo Roy (Managing Director and Startup Mentor at Kolkata Ventures); Dr. Bidyut Pal (Convener, IIC6.0); Dr. Jnui Deb Mallick Datta (NISP Representative, IIC6.0)

IIC Regional Meet

Type: MIC-driven Activity

As per the mandate of the MIC, Institution's Innovation Council (IIC6.0), IIEST Shibpur nominated two faculty members (Dr. Bidyut Pal, Convener IIC6.0 and Dr. Nirnay Ghosh, Internship Coordinator, IIC6.0) to attend the IIC Regional Meet held on 12th January 2024, at the Sister Nivedita University (SNU) Kolkata. The members attended the meet and presented a poster to the Jury Members, highlighting the recent and ongoing innovation and entrepreneurship related activities at IIEST Shibpur. The participants attended various programs and participated in various activities (organized by SNU Kolkata) throughout the day.

Dr. Nirnay Ghosh (Internship Coordinator, IIC6.0) and Dr. Bidyut Pal (Convener IIC6.0) at the IIC6.0 regional meet held at SNU, Kolkata

6.2 Key Functionaries

Director - Prof. Parthasarathi Chakrabarti

President - Prof. Arindam Biswas

Vice President - Dr. Soumen Mitra

Convener - Dr. Bidyut Pal

Coordinators:

Innovation Activity Coordinator - Dr. Syed Minhaz Hossain

Startup Activity Coordinator - Dr. Prince Raj Lawrence Raj

Internship Coordinator - Dr. Nirnay Ghosh, Dr. Malay Kule, Dr. Shayamalendu Kandar

IPR Coordinator - Dr. Paramita Chattopadhyay

Social Media Coordinator - Dr. Madhumita Roy

ARIIA Coordinator - Dr. Pritam Saha

NIRF Coordinator - Dr. Abhijit Bisoi, Dr. Debasis Mitra

Yukti Coordinator -Dr. Joydeep Bhowmik

NISP representative -Dr. Jnui Deb Mallick Datta

External Experts:

IP Expert/ Patent Expert - Prof. Anirban Mazumder, NUJS

Startup/ Alumni Entrepreneur - Mr. Ayan Roy and Mr. Soumyodeep Das, VBRIDGE

Expert from nearby Industry/ Industry association/ Ecosystem Enablers - Mr. Gautam Ray, CESC Ltd.

Student Members:

Tathagata Ghosh, Murli Manohar Mishra, Md Shabaz Ansari, Subhamoy Chattaraj, Prasoon Ravi, Disha Trivedi, Nitish Kumar, Pulkit, Shreya Das, Sayak De Bhowmik, Sushant Kashyap, Srijana Mishra, Rohan Das, Amartya Singh, Kasturi, Sayandeep Maitra, Anuvab Sen, Prince Kumar, Ayandeep Garain, Subhajit Mondal, Ishita Chaudhary, Ritu Kulshrestha, Joybrata Dhar, Arihant Jain, Soumili Mahato, Soham Nath, Souvik Nath, Utsab Kundu, Dhruv Jhunjhunwala, Rounak Choudhury, Shreyash Pandey, Shivang Agrahari, Arya Jain, Dibyashree Panda, Soumil Dev, Avinash Kumar, Chhandam Daripa, Subhankar Mondal, Janhvi Singh, Arnav Anand, Adiptya Ghosh, Karan Tomar, Devajothi Sardar, Parnasree Mahata, Prajina V P, Sandip Kumar Murmu, Raksha Pahariya, Arghya Paul

6.3 Resource Strength (Human Capital and Physical Capital)

Total No. of IIC Members - 60

Total No. of IAs - 10

Incubation Unit - 1

IP Facilitation Unit - 1

Institute Innovation Laboratory - 1

6.4 Facilities, Infrastructure of Pre-Incubation & Incubation in Promotion of Innovation and Entrepreneurship in the Campus

Tagore Centre for Green Technology Business Incubation (TCGTBI), the incubation facility of Indian Institute of Engineering Science and Technology, Shibpur (IIEST, Shibpur) is a registered society under the Societies Registration Act, 1860. TCGTBI has been set up with support from National Science and Technology Development Board (NSTEDB), Department of Science and Technology, Government of India, to promote innovation and entrepreneurship by converting and translating technology ideas and innovation in various disciplines of science and engineering into products, processes and services for commercial exploitation and the benefit of the society.

TCGTBI, the technology agnostic business incubator, is a specialized facility or program, designed to support and nurture the growth of startups and early-stage companies. Some common facilities, supports, and services provided by TCGTBI are crucial as initial hand-holding for the budding entrepreneurs.

Highlights of TCGTBI

- Secure, research-focused, innovative, entrepreneurial ambience.
- Vast alumni network of the Host Institute
- Situated at the Heart of the city with Super communication facility
- Institutional Association with other Entrepreneurship bodies viz. NEN, ISBA etc.
- Technology mentorship and provision for continuous innovation & product improvement
- Co-working space, consisting dedicated A/C cubicle space with LAN and Wi-Fi connectivity with High speed Internet, Reprographic facilities, Fully equipped Conference Room, Self-service pantry, 24 x 7 operation on demand
- Access to Workshop and Large Seminar facility, access to Library & laboratory, Capital Equipment Facility for shared usage and Product Display Arena

Supports Provided by TCGTBI

- Offers Incubation Support
- Mentoring support provided by a vibrant, highly experienced and dedicated Mentor's Pool
- Provides Business development supports viz. Marketing, legal, accounting assistance
- Facilitation for IP Protection
- Access to Angel investors and Venture capitalists
- Support for Networking Activities
- Links to higher education resources, resources of student pool and strategic partners
- Security and multi-purpose staff support
- Organise Seminars, Workshops, Expert Lectures on every relevant business domain for incubates, start-up businesses, prospective student entrepreneurs and others
- Facilitate Technology Commercialization
- Promote Study-based activities and Research on the areas of Innovation, IP and Entrepreneurship

6.5 Achievements

- Number and different types of I& E and IPR activities Conducted: 20
- No. of student's faculty ideas generated: 15
- No. of student's faculty Innovation/prototypes developed: 05
- No. of Technology/Invention Transfer: NIL
- No. of Student & Faculty Startups/Ventures established

  (Student) Completed – 3, Under processing - 5

  (Faculty) Completed – 1, Under processing - 2

Amount spent on promotion and creating awareness on innovation and entrepreneurship in the campus + amount grant or fund supported to student and faculty lead innovations, startups and IPR is Rs.2,50,000.00

6.6 Highlight of Few Best IIC Faculty/Student Members and Their Achievements/ Rewarded for the Innovations at Different Forum

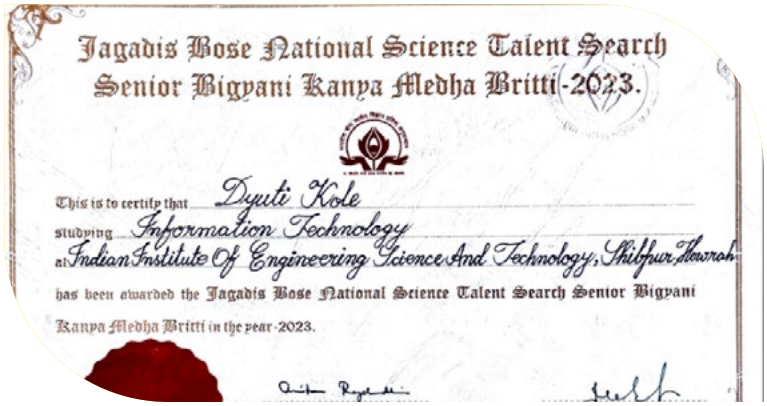
» **Rajan Kumar Verma,** an **MTech** final year student from the Department of Metallurgy and Materials Engineering, secured the second runner-up position in Tata Steel's "Mind Over Matter Season 9." This is the first time a student from IIEST Shibpur has been placed in the top three of this prestigious competition. Rajan's exceptional performance earned him a placement in Tata Steel R&D, a cash prize of ₹50,000, and a pre-placement offer from Tata Steel. The competition took place on December 18, 2023, at Tata Steel Research and Development, Jamshedpur. Rajan expressed his gratitude to the institute for supporting his participation. His achievement was celebrated in the local newspaper and Tata Steel's official press release.

Rajan Kumar Verma, 2nd Runner-up in Tata Steel's "Mind Over Matter Season 9" Receiving a Cash Prize

» **Soumoditta Das,** a 3rd-year UG student from the Department of Architecture and Planning, demonstrated outstanding talent across various competitions. Soumoditta secured the second position in the ABID Gate Design Competition held by ABID Interior Design, working alongside team members Debasish Panja, Apurv Mirgule, and Sunanda Roy. Soumoditta also achieved first position in the Micro Environment Design competition at Arch cult, hosted by NIT Trichy.

Soumoditta Das Secured Second Position in ABID Gate Design Competition

» **Dyuti Kole**, a first-year student pursuing Information Technology at IIEST Shibpur, showcased her exceptional scientific acumen by achieving the top position in the SBKMB category of the prestigious JBNSTS Examination. Her accomplishment not only underscores her proficiency in scientific knowledge and skills but also highlights her dedication and commitment to academic excellence. This recognition at JBNSTS reflects Dyuti's capability to excel in competitive environments and signifies her potential as a promising talent in the field of Information Technology.


Jagadis Bose National Science Talent Search
Senior Bigyani Kanya Medha Britti-2023.

This is to certify that Dyuti Kole
studying Information Technology
at Indian Institute Of Engineering Science And Technology, Shibpur, Howrah
has been awarded the Jagadis Bose National Science Talent Search Senior Bigyani Kanya Medha Britti in the year-2023.

Dyuti Kole Received Certificate in Jagadis Bose National Science Talent Search Senior Bigyani Ratna Medha Britti 2023

» **Pratyush Roshan Mallik,** a 3rd-year student from the Department of Aerospace Engineering and Applied Mechanics at IIEST Shibpur, achieved a notable feat in the Luminosity Drone theme at the national finals held at IIT Bombay. Pratyush and his team, consisting of Aman Raj, Chandan Priyadarshi, and Gaurav Sharma, secured the 4th position in this competition, where teams autonomously navigated nano quadcopters to detect, identify, and localize Infrared LEDs using onboard cameras. Their impressive performance earned each team member Rs. 2,500 along with Rs. 5,000 for travel expenditures. This achievement highlights Pratyush's technical proficiency and collaborative skills in a competitive national arena.

Certificate of Merit

This is to certify that Pratyush Roshan Mallik, a student of Indian Institute of Engineering Science and Technology (Formely Bengal Engineering and Science University), West Bengal has participated in the Grand Finale of **e-Yantra Robotics Competition (eYRC 2023-24)** held on 22nd - 23rd March 2024.

He/She is a member of the team having the following team members:

1. Aman Raj
2. Pratyush Roshan Mallik
3. Gaurav Kumar Sharma
4. Chandan Priyadarshi

This team has been selected as one of 7 **finalists** out of 441 **teams** in the Luminosity Drone theme and has been placed at 4th **position** in this theme.

Prof. Kavi Arya
Principal Investigator, e-Yantra
Professor
Department of Computer Science and Engineering
Indian Institute of Technology Bombay

Pratyush Roshan Mallik achieved a notable feat in the Luminosity Drone theme at the national finals held at IIT Bombay

» **Pulkit Kapoor**, a 4th-year student from the Department of Electrical Engineering at IIEST Shibpur, achieved joint first prize for his outstanding performance in Unmesh-2023, the flagship summer internship program offered by CESC Limited. Pulkit competed against hundreds of applicants from other esteemed institutions in the eastern region. He secured his internship through a rigorous selection process and spent two months at CESC, focusing on the project "A Suitable Protection Philosophy for CESC Distribution Network with High Penetration of Renewable Energy Generation." Pulkit conducted extensive research and meticulously documented his findings. His dedication and the quality of his final project presentation impressed the jury, leading to him being awarded the joint first prize.

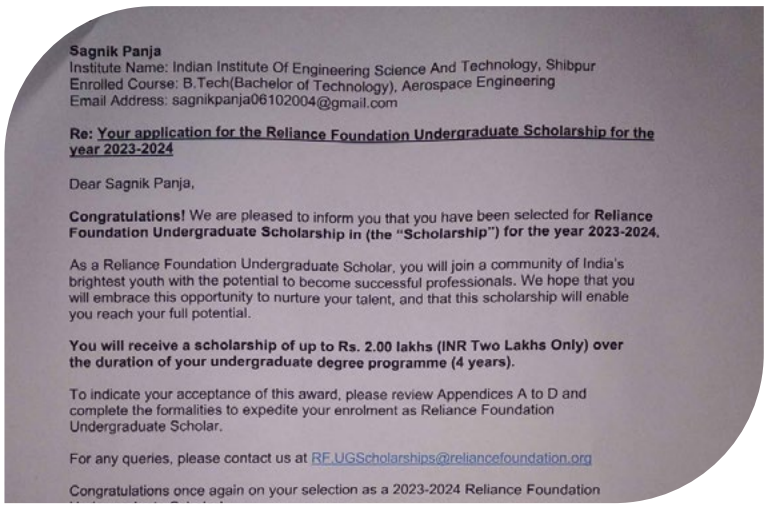
Pulkit Kapoor achieved joint first prize for his outstanding performance in Unmesh-2023, the flagship summer internship program offered by CESC Limited

» **Aritra Bose**, a 3rd-year student in Information Technology at IIEST Shibpur, has demonstrated remarkable prowess in a variety of prestigious competitions and programs. His team, "Coders Hustle", achieved a notable rank of 71 at the ACM ICPC 2023 Regionals in Chennai, showcasing his strong coding abilities. In the Google Coding Competitions Farewell 2023, Aritra secured a Global Rank of 901 and an All India Rank of 404 in Round A, highlighting his proficiency in competitive programming. Additionally, his team "Code Rebels" earned a worldwide rank of 252 in the Reply Code Challenge 2023, scoring 40,589 points. Aritra's participation in Flipkart GRiD 5.0 saw his team, "Grid Runners", qualify for the Level 2 Submission Round in the Software Development Track, emphasizing his skills in software engineering. Moreover, he was selected as a contributor for the GirlScript Summer of Code 2023, further illustrating his commitment to open-source development. Aritra's accomplishments underscore his technical

excellence and dedication to advancing in the field of Information Technology, reflecting IIEST Shibpur's commitment to fostering talent and innovation.

Aritra Bose and his Team Received a Certificate of Appreciation

- **Sagnik Panja**, pursuing Aerospace Engineering and Applied Mechanics from 2023 to 2027 at IIEST Shibpur, received the prestigious Reliance Foundation Scholarship on February 15, 2024. This scholarship, awarded by the Reliance Foundation, provides Sagnik with ₹50,000 per year in recognition of his academic excellence and potential in his field of study. This scholarship is highly competitive, with only 5000 students selected across India, highlighting Sagnik's exceptional achievements and promising future in Aerospace Engineering.



Sagnik Panja
Institute Name: Indian Institute Of Engineering Science And Technology, Shibpur
Enrolled Course: B.Tech(Bachelor of Technology), Aerospace Engineering
Email Address: sagnikpanja06102004@gmail.com

Re: Your application for the Reliance Foundation Undergraduate Scholarship for the year 2023-2024

Dear Sagnik Panja,

Congratulations! We are pleased to inform you that you have been selected for **Reliance Foundation Undergraduate Scholarship in (the "Scholarship") for the year 2023-2024.**

As a Reliance Foundation Undergraduate Scholar, you will join a community of India's brightest youth with the potential to become successful professionals. We hope that you will embrace this opportunity to nurture your talent, and that this scholarship will enable you reach your full potential.

You will receive a scholarship of up to Rs. 2.00 lakhs (INR Two Lakhs Only) over the duration of your undergraduate degree programme (4 years).

To indicate your acceptance of this award, please review Appendices A to D and complete the formalities to expedite your enrolment as Reliance Foundation Undergraduate Scholar.

For any queries, please contact us at RF.UGScholarships@reliancefoundation.org

Congratulations once again on your selection as a 2023-2024 Reliance Foundation

Sagnik Panja received the prestigious Reliance Foundation Scholarship

- **Ananya Sutradhar**, a 3rd-year student in the Computer Science and Technology department at IIEST Shibpur, achieved a significant milestone by being selected as a Generation Google Scholar '23. This prestigious recognition from Google reflects Ananya's exceptional academic achievements and potential in the field of technology. She was awarded a scholarship amounting to $2500, underscoring her dedication to excellence in academics and technological innovation.
- **Sushma Vemunuri,** a fourth-year student in the Electrical Engineering department, secured the first runner-up position in "Women of Metlle Season 6", organized by Tata Steel. Sushma was awarded a prize money of ₹200000, underscoring her dedication to excellence in technological innovation.

6.7 Highlight Selected Startups Established by Students/ Faculties and Facilitated by TCGTBI with Mention of Founder/Cofounder Name

Addauto Technology Private Limited

This is a student startup working towards development of the following:

1. Real time fog detection using Raspberry Pi and Python. The product aims to solve the problems of less visibility during the fog by increasing the view point in real time. This device, priced reasonably, will be useful in avoiding accidents in roads, highways, railways.
2. IOT-based Real Time Home Care Surveillance System, which aims to solve issues related to energy saving and home or room safety for domestic houses, high rise buildings and hotel rooms etc. These devices can save electricity, check wastage of water and also can save the plants by the hydroponics farming.

   Name of the Founder: Avik Kumar Das, PhD Student

   Name of the Co-founder: Ardhendu Sarkar, PhD Student

Creatron Technologies Private Limited

This is a student startup working towards building green field compressed bio-gas generations plants. Bio-CNG can be used as alternative fuel towards transportation while capture carbon di-oxide waste from environment. Creatron Technologies Private Limited will also manufacture organic fertilizers.

Name of the Founder: Subhasish Dey, PhD Student

Babypanda Store LLP

This is a student startup primarily focused in the domain of sustainability. BABYPANDA STORE LLP proposes for the development of biodegradable bristles from plant-based material for bamboo toothbrushes. The proposed bristles will be made-up of entirely allergy-free, skin-safe, non-toxic and biodegradable materials. The whole bristle material will be infused with naturally sourced anti-microbial compounds, which prevent any buildup of microbial bio-films in the brush.

Name of the Founder: Hrithik Raj, UG Student (Graduated)

Name of the Co-founder: Ankur Saiba, UG Student (Graduated)

Locer (not registered)

A retail-tech SaaS startup established by current 4th year students of IIEST Shibpur that aims to digitise, modernise and organize the entire unorganized retail sector of India.

Name of the Founder: Raushan Singh, UG Student

Name of the Co-founder: Prajwal Velupala, UG Student

Scrub100 (not registered)

This student initiative proposes to develop a high-speed cleaning device that is designed to remove particulate matter from any surface with ease. This versatile tool can effectively remove dirt, dust, and rust, making it ideal for cleaning a wide range of surfaces, including floors, walls, and machineries. Scrub100 would be equipped with a liquid dispensing feature, allowing users to easily apply and distribute liquids such as water or rust remover. Scrub100 can be a useful tool for not only cleaning surfaces but also for a wide range of applications that require liquid distribution.

Name of the Founder: Joybrata Dhar, UG Student

Name of the Co-founder: Arnab Pal, UG Student

Silpgram (not registered)

This student initiative proposes to develop an online platform for promotion and sales of India's traditional paintings like Manjusa (art from Bhagapur, Bihar), Potochitro (from Medinipur,West Bengal) and many more.

Name of the Founder: Tejash Raj, UG Student

M.R. Scientific Continuum Ptd Ltd

This faculty initiative proposes to develop Cold Plasma Technology Solutions, viz.cold plasma pen, which is an innovative product that offers a portable and effective solution for surface decontamination. It is a unique product that has the potential to change the conventional approach for decontamination of surfaces.

Name of the Founder: Dr. Manish Pal Chowdhury, Faculty Member

BEC Cafeteria (not registered)

This student initiative aims to establish a night canteen for students, incorporating innovative technologies and promoting eco-friendly practices.

Name of the Founder: Ardhendu Sarkar, PhD Student

Name of the Co-founder: Avik Kumar Das, PhD Student

Society of Humanity Education and Research (not registered)

This student initiative aims to provide easy and fast library management solutions. It proposes to incorporate cutting-edge technology to revolutionize AI, IoT, Web and android, offering unprecedented solutions to longstanding challenges. i.e. through managelibs, it will redefine the way libraries operates, providing a unique and forward-thinking approach to manage it.

Name of the Founder: Rajkumar Verma, UG Student

Rhythm (not registered)

This student initiative aims to provide an opportunity to learn the extracurricular activities in a systematic way. It proposes to use advanced technology, including AI, animation and social media addiction technique to personalize the learning experience and connect users with the best instructors and resources.

Name of the Founder: Nitish Kumar, UG Student

Detail of Social media & Connections of IIC institute

https://twitter.com/iic_iiests

https://www.linkedin.com/in/iic-iiest-shibpur/

https://www.facebook.com/iic.iiests/

https://www.youtube.com/iiciiestshibpur

https://www.instagram.com/iic_iiests/

7

Training and Placement

Training and Placement

7.1 The Mandate

Training and placement of students are administered by the Human Resource Management (HRM) Department of the Institute. The Mandates of the Department include, inter alia, the following.

- Job Placements of the students of the Institute through Campus and Off-campus selection processes
- Internship of students of the Institute at various industries and research institutes
- Internship of students of other institutes at IIEST
- Facilitation for other options: Preparatory programme for competitive examinations and other educational options abroad
- Industry Interaction Programme/ Academic collaborations
- Entrepreneurship Development
- Innovation and IPR awareness and facilitation
- Career Counselling
- Offering PhD Programme in specific inter-disciplinary areas

This predominantly is a service department catering to all UG, PG and PhD students in terms of their placement and training.

7.2 Industry-Connect and Allied Events

Some of the related Industry-Connect and allied events facilitated by HRM Department during 2023- 2024 where IIESTS students took part:

Sl.	Event Title	Hosted by
1	Amazon Enabling Abilities 2.0	Amazon
2	Machine Learning Summer School	
3	Women of Mettle-a pioneering scholarship programme	Tata Steel
4	Campus Connect Initiative	Microsoft
5	India Semiconductor Work force Development Program	IISc, B'lore
6	Amazon Hack On	Amazon
7	Cognizant Digital Nurture Technoverse East 2024 hackathon	Cognizant
8	Higher Education Special Interest Group	GAABESU & Alumni
9	Webinars (Prerecorded)	GAABESU & Alumni
10	DigitalX Technology India: Campus Engagement Session 2024	Natwest
11	Guest lecture session 08-04-2024: To share insight on the latest technology trends	LTI Mindtree
12	Guest lecture session-Topic "Outdoor experiences fuel Student Growth"	Tata Steel
13	Understanding Different Leadership Styles: Adapting Stylesin Various Situations	GAABESU

Sl.	Event Title	Hosted by
14	Lifeofan IAS officer & UPSC civil services as a Career Option	IAS Academy, Chennai
15	Guest lecture: Alstom Train Design Carbody Design & Calculations	Alstom
16	"Train Building is Nation Building"	Alstom
17	Trailblazers 'Talk Topic: "Building Brands in Steel."	TataSteel
18	TECHgium 7th Edition	L&T
19	Conversations Café ELP	AdityaBirlaGroup
20	Innovation Challenge–Task Whiz	Atlassian
21	Orientation Course for Engineering Graduates and Science Postgraduates (OCES)	BARC
22	Code Vita (Programming Competition)	TCS
23	"Trailblazers' Talks" leadership series	TataSteel
24	TELIPORT, a competition in technology, design, & Innovation	TataElxsi
25	TATA Imagination Challenge 2023	TATA
26	Accenture Innovation Challenge 2023	Accenture
27	Tata Technologies-InnoVenthackathon 2023	Tata Technologies
28	Webinar-Alstom India Scholarship 2023-24	Alstom
29	Flipkart GRiD 5.0 E-School Campus Case Challenge	Flipkart
30	A virtual lecture on the topic "Emerging Technologies and Present times"	LTI Mindtree

7.3 Placement Statistics

The details of the UG and PG placements for the last 3 years with department wise break up are furnished in Table 7.3.1 and Table 7.3.2, respectively. Table 7.3.3 records the details of the placement of the students from schools /centers at the PG level. Table 7.3.4 documents the Internship / Summer Training data for the last 3 years.

Table 7.3.1 : UG Placement

	Dept.	CST	ETCE	EE	IT	ME	CE	MME	MIN	AE& AM	ARCH	TOTAL
2023-2024 2024 passout batch (up to 31.03.24)	Total Number of Offers including multiple offers	80	34	64	73	60	46	18	13	3	2	393
2022-2023 2023 pass out batch		101	56	93	100	87	86	45	45	18	3	634
2021-2022 2022 passout batch		104	59	87	110	79	103	45	30	21	4	642

Table 7.3.2 : PG Placement (MTech & Dual Degree)

	Dept.	CST	ETCE	EE	ICE	ME	CE	MME	MIN	AE & AM	Physics	Chemistry	Math	Earth Sc	TOTAL
2023-2024 2024 passout batch (up to 31.03.2024)	Total Number of Offers including multiple offers	12	3	7	6	1	9	0	0	0	0	3	3	0	44
2022-2023 2023 passout batch		6	9	16	8	8	21	0	0	2	0	1	4	4	79
2021-2022 2022 passout batch		15	19	8	18	11	5	6	0	3	1	0	5	0	91

Table 7.3.3 : PG Placement (School/Centre)

	Department / Course	Bio Medical	VLSI	Mat. Sc.	Mechatronics	Safety & Occu-pational Health	REST	MBA	FPNS	TOTAL
2023-2024 2024 passout batch (up to 31.03.24)	Total Number of Offers including multiple offers	3	2	0	3	0	2	2	4	16
2022-2023 2023 passout batch		9	10	2	6	0	2	3	8	40
2021-2022 2022 passout batch		4	12	3	16	1	7	3	3	49

Table 7.3.4: Vacational Training / Internship

Year	Internship / Training	
2023-2024 (Summer Vacation 2023)	No. of Companies / Organisations offering Internship	30+
2022-2023 (Summer Vacation 2022)		40+
2021-2022		34+

The above figures do not include Internships in different Industries and Academic Institutions organised through individual initiatives of the students.

Figures 7.3.1 and 7.3.2 below depict the status of Total Offers made to the students of 2024 Pass-out Batch, for Full Time Employment (FTE), vis-à-vis Total Number of eligible / interested students, from UG and PG courses, respectively (Till 31.03.2024).

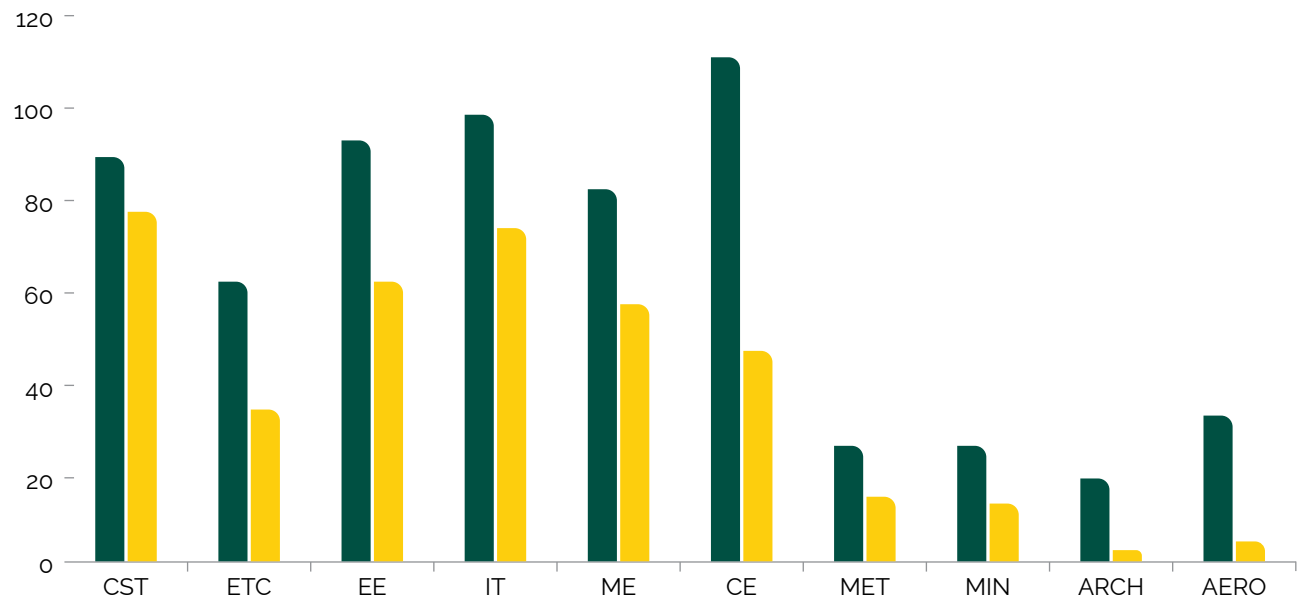


Fig. 7.3.1 : Eligible UG Batch Size vs. Total Offers made through Institutional Placement Process for 2024 Pass-Out Batch (up to 31.03.2024)

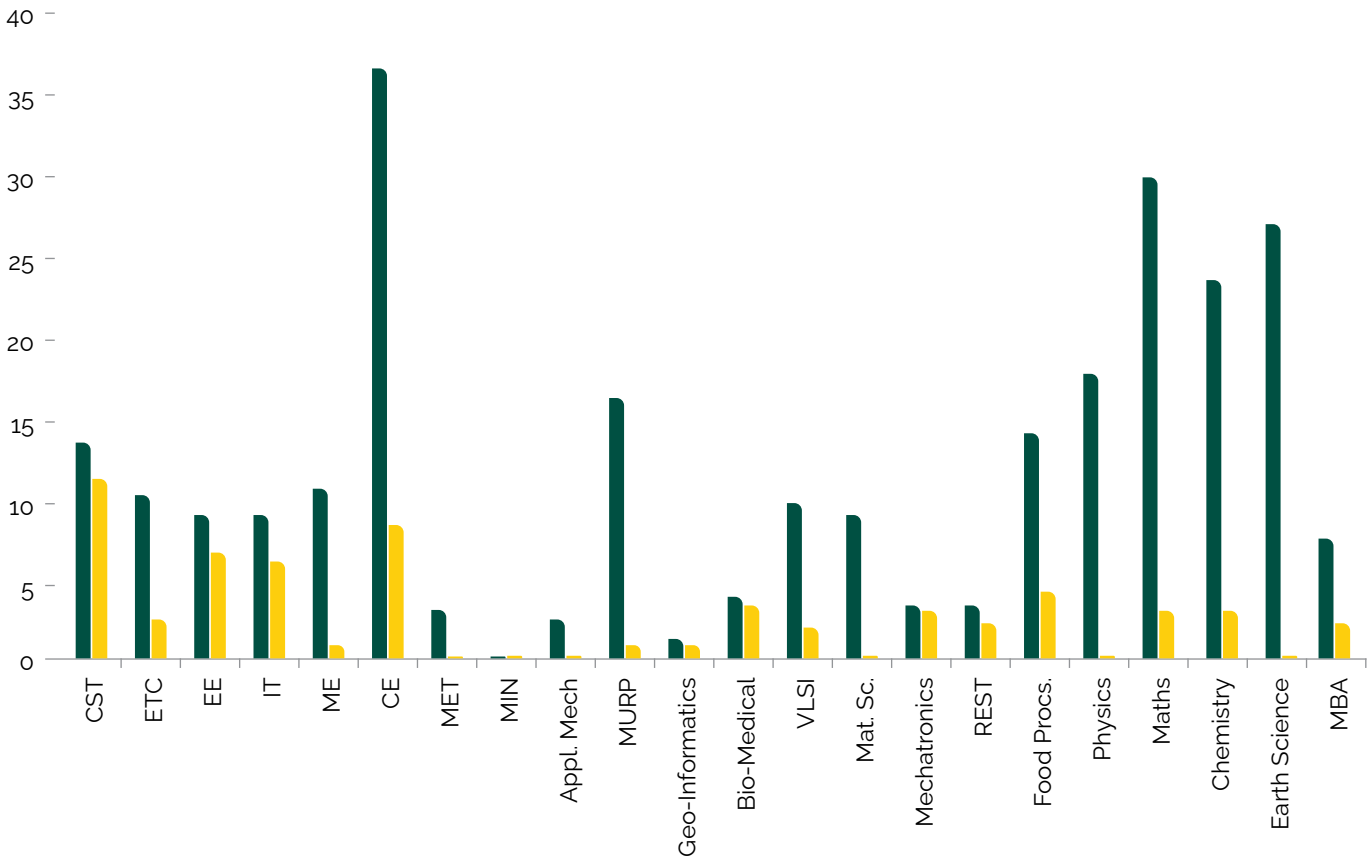


Fig. 7.3.2 Eligible PG Batch Size vs. Total Offers made through Institutional Placement Process for 2024 Pass-Out Batch (up to 31.03.2024)

7.4 Recruiters

Different Recruiters, as detailed in Table 7.4, through their On / Off Campus selection processes have recruited IIEST students of 2024 pass-out batch in different profiles.

Table 7.4: Recruiters of 2024 Pass-Out Batch (Till 31st March, 2024)

Recruiters	Recruiters
C-DOT	Multiwyn Tiles Pvt. Ltd.
Century Textiles & Industries Ltd.	NatWest Group
CESC Ltd.	Nuvoco Vistas Corp. Ltd.
CHUBB Ltd.	Omnifi AI Technology Pvt. Ltd. (Arthmate)
DeltaX	Physics Wallah
Deutsche Bank	Primetals Technologies Ltd.
DX Corr Hardware Technology	PWC India
Electrosteel Casting Ltd.	RMES India Pvt. Ltd.
Electrosteel Casting Ltd. (Srikalahsthi Works)	S.K. Samata& Co. Pvt. Ltd.

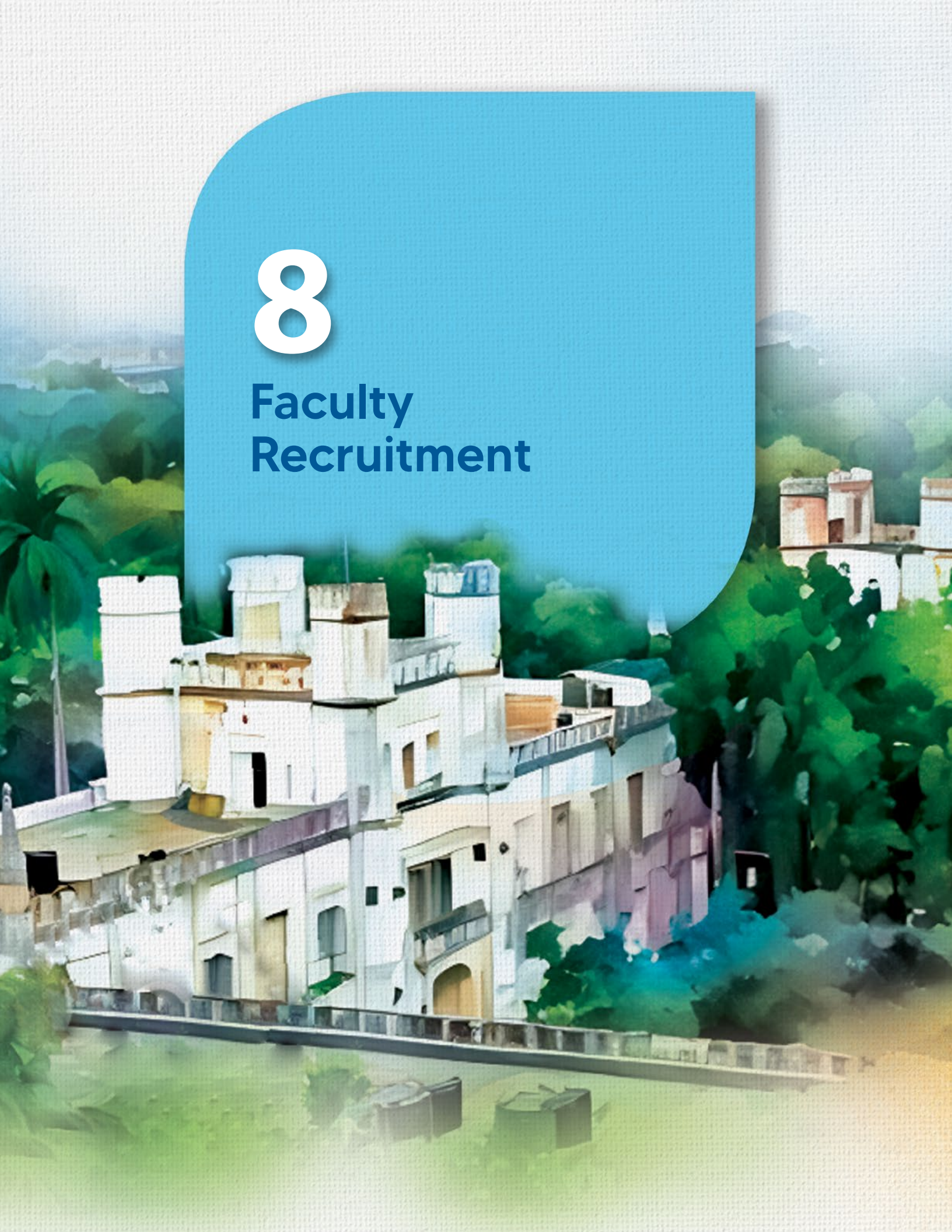
Recruiters	Recruiters
Engineers India Ltd. (Management Trainee)	Tiger Analytics
Eveready Industries India Ltd.	Titagarh Rail Systems Pvt. Ltd.
Exide Industries Ltd.	Tresca Software Pvt. Ltd.
GKW Consult GmbH	Vedanta Ltd.
Google India	Veritas Technologies Ltd.
Gulf Asia Engineering & Projects Pvt. Ltd.	Vikram Solar Ltd.
Mecon India Ltd.	VISA Steel Ltd.
Media.Net (SDE)	Wacker Metroark Chemicals Pvt. Ltd.
Media.Net (SRE)	Wells Fargo
MeritusIntelytics Pvt. Ltd.	Worley
Microsoft	WSP
Mjunction Services Ltd.	ZifoRnD Solution

7.5 Vacational Training or Summer Internship

Besides, final Placements, many students, predominantly from Pre-final Year, also had the opportunity for Vacational Training (VT) or Summer Internship Programme in reputed industrial / academic institutions - some of which are also maturing to Pre-Placement Offers. Some of the organization that could successfully conduct the Internship during Summer Vacation 2023 are listed in **Table 7.5** below:

Table 7.5 : Some of the Organisations where the Students had undergone their Internship during Summer-2023

Recruiters	Recruiters
Accenture	ONGC
Amazon	Placewit
Condenation / Trilogy Innovation	POSCO Kolkata
CESC Ltd	Primatals Technologies
Deutsche Bank	PWC
Gas Authority of India Ltd	Rainsoft Global Software
Google India	Salesforce
GRSE	Tata Steel
IBM	Tata Steel Long Product
IOCL	TCS Innovation Lab / R & I
ISRO	Texas Instruments
Mecon Ltd.	Variable Energy Cyclotron Centre
Media.Net	VVDN Technologies
Micro-Soft IDC	WBPDCL
MSPDCL	WDN Technology
NatWest Group	Wells Fergo
Neyveli Lignite Corporation India Ltd.	



8
Faculty Recruitment

Faculty Recruitment

8.1 Status of Regular Faculty Recruitment

The selection process for the recruitment of faculty positions in 20 (twenty) Academic units of the institute was initiated against the Rolling advertisement (No. JU/RO/19/57, dated: 11.06.2019 and subsequent notifications). A total number of 78 candidates were selected for appointments in various positions in 19 (nineteen) Academic units.

Faculty data as on 31.03.2024

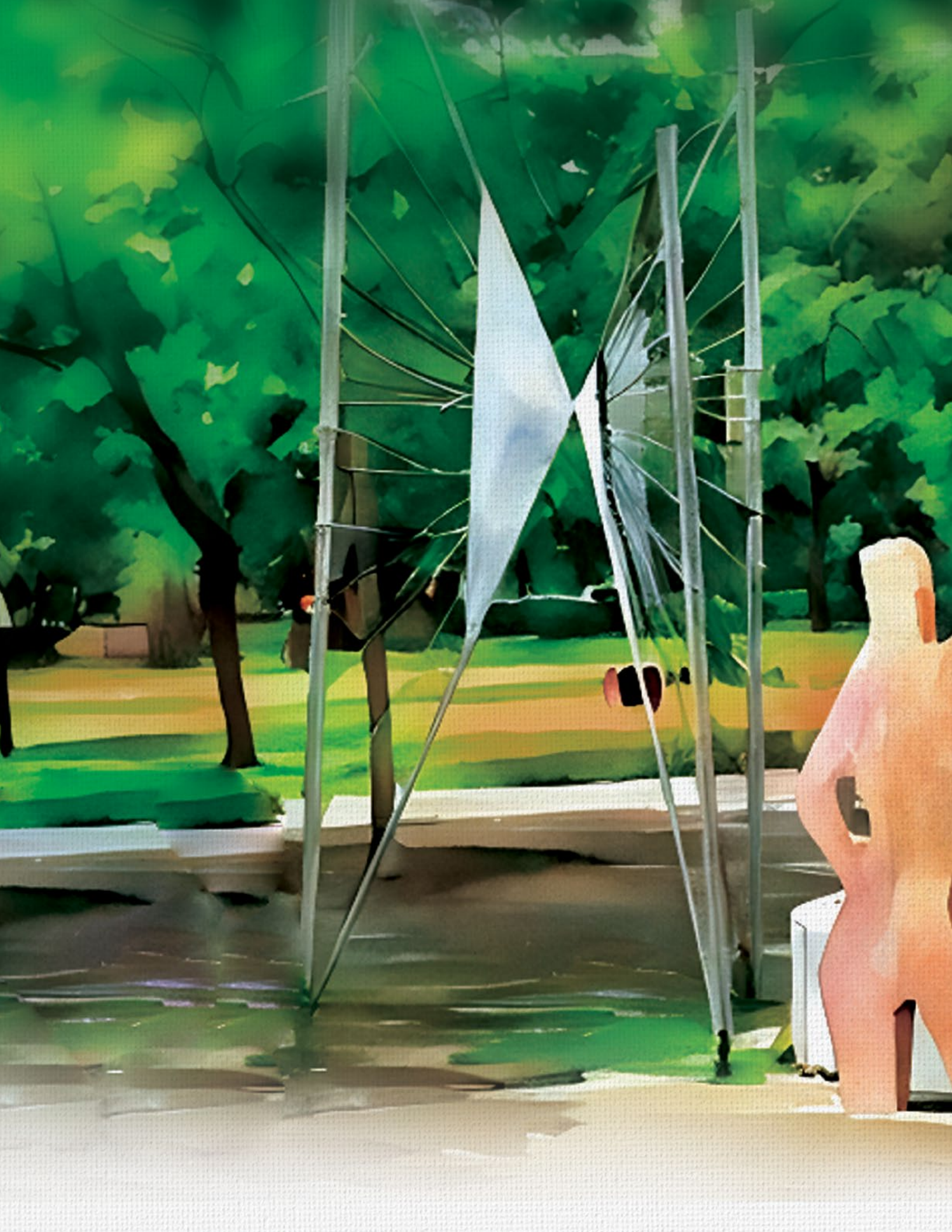
Sl. No.	Numbers of Faculty Members	Male	Female
1	Permanent Faculty Members	177	36
2	Contractual and Temporary Faculty	17	6
3	Visiting Faculty/ Adjunct Faculty / Honorary Faculty	9	0
4	Professor	58	13
5	Associate Professor	54	12
6	Assistant Professor	65	11

Sanctioned Faculty Strength: 303, Currently in position: 213 (UR: 162; SC: 32; ST: 2; OBC: 17), Vacancy: 90

For the 2nd phase of recruitment, relevant notification No. RMS/452/23, dated 18-10-2023 has been issued. The applications received till the closing date of 22nd November, 2023 are currently in process.

8.2 Special Drive for Faculty Recruitment Against Backlog Reserved Vacancies (Supplementary Advertisement)

Faculty Recruitment against Backlog Reserved Vacancies (Supplementary Advertisement) had been notified (vide Advt. No.: RO/JU/23/05, dated 21.06.2023) and the last date of receiving application was 21.07.2023. The applications received till the closing date of receiving application are currently in process.



9 Academic Contributions

Academic Contributions

Highlights of the Key Academic Contribution of Faculty Members

9.1	9.2	9.3	9.4	9.5
516 Journal Publication	**213** Conference Publication	**37** Patent	**79** PhD Supervised	**10** Books Authored

9.6	9.7	9.8	9.9
64 Book Chapters Authored	**37** Awards / Recognitions	**118** Invited Talk / Key-Note Address Given / Chaired a Session	**45** Workshops / Conference / Seminar/ Symposium Attended

9.1 Journal Publication

Department of Aerospace Engineering and Applied Mechanics (AE&AM)

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3. Pal S, Kalita K, Haldar S. Grey wolf optimizer based-natural frequency optimization of laminated composite shells carrying distributed mass. Mechanics Based Design of Structures and Machines. 2024 Feb 24:1-35.
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16. Rao AN, Kushari A. Nature of unsteady and acoustic behavior in an elliptic sonic jet with aft-deck. Physics of Fluids. 2023 Aug 1;35(8).
17. Acharjya A, Santra A, Roy R. Response of structures to bidirectional seismic excitations using spectrum compatible records: Evolution of a pair of spectra from Newmark's sliding block. Journal of structural engineering, 2024 April 04; 150(7), 04024061:1-18.
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Department of Humanities and Social Sciences

1. Attended 48th AISC at VIT, Tamil Nadu, December 27-29, 2023 as National Convener of RC-24, Sociology of Childhood and Youth, ISS and organized four sessions comprised of 13 papers from across the country.
2. Khan R., and Ghosh Sarbadhikary M. "Lalon: A Voice from the Margins"(International Conference on "In search of Creative Commons: Crisis, Catastrophe and Responsive Literature in India"; Gour Mahavidyalaya, 31st August- 2nd September, 2023).
3. Khan R., and Ghosh Sarbadhinary M., "From Personal to Collective Crisis: A Study of Lalon's Lyrics" (48th All India Sociological Conference Supported by ICSSR on "The Crisis of the 21st Century and the way forward", Vellore Institute of Technology, 28-30 December, 2023).
4. Jan P., and Ghosh Sarbadhikary M., "A Study to Boost Female Representation in Science : The Case of Purbasthali-1 Block, Purba Bardhaman, West Bengal" (48th All India Sociological Conference Supported by ICSSR, Vellore Institute of Technology, 28- 30 December, 2023).
5. Jan P., and Ghosh Sarbadhikary M., "Intersectional Narratives of Women in Science in Modern Bengal" (International Seminar on "Cultivation of Science by the Bengalis under the Raj", Department of History and IQAC, Rani Dhanya Kumari College, Jiaganj, Murshidabad, 21st March, 2024).
6. Bhattacharyya S., and Ghosh Sarbadhikary M., "The Absent Chorus: A Study of Metropolitan Madness and the Quiet Despair of Innocence in Jibanananda Das's Malloban" (International Conference on Multidisciplinary Research (3.0), Department of Pedagogical Sciences and Skill Development Centre, Tamil Nadu Teachers' Education and Internal Quality Assurance Cell, Shree Ramkrishna BT College, Darjeeling, 29-30 May, 2024).
7. Bhattacharyya S., and Ghosh Sarbadhikary M., "The Rhetorical Uneasiness: Critiquing Rebecca Whittington's Translation of Jibanananda Das's Malloban" (International Conference on "Literature as Discourse", Department of English, Pondicherry University, 5-6 October, 2023).
8. Saha A., and Ghosh Sarbadhikary M., "Memory and Trauma in Alice Zeniter's 'The Art of Losing'" (International Conference on Memory Studies "Mapping Memory: History, Texts and Cultures," Department of English and History, Loreto College, Kolkata, 22nd-23rd February, 2024).
9. Ghosh Sarbadhikary M. " The Little Prince", (48th All India Sociological Conference Supported by ICSSR, Vellore Institute of Technology, 28- 30 December, 2023).

Department of Information Technology

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4. Das D, Naskar R. High-Performance Image Splicing Detection utilizing Image Augmentation and Deep Learning. In 2023 IEEE 20th India Council International Conference (INDICON) 2023 Dec 14 (pp. 920-925). IEEE.
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Department of Mathematics

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Department of Mechanical Engineering

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3. Pradeep K, Pal B, Do the variations in the spinal ligament modelling approach influence the load transfer and ranges of motion in finite element analysis of the intact lumbar spine? 1st International Conference on Mechanical Design and Manufacturing (ICMDM 2023), Indian Institute of Engineering Science and Technology, Shibpur, Howrah, India, 27-28th April, 2023.
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5. Majumdar S, Datta P, Nag D, Das A. 6061 T6 Aluminium alloy for Rigid Overhead Catenary System: Design and Analysis, International Conference on Processing of Minerals, Metals and Materials (ICPMMM2024-2024), Paper ID TP-038,28th- 29th March, 2024KaziNazrul University.
6. Maity P, Karmakar A, Sinha A, Das A. Effect of Thermal Treatment on Hardness of 7075-T6 Aluminium alloy, International Conference on Processing of Minerals, Metals and Materials (ICPMMM2024-2024), Paper ID TP-041, 28th- 29th March, 2024 Kazi Nazrul University.
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8. Das A, Karmakar A, Das A. Checking And Monitoring Of Pantographs For Railway Transport Through 3d Laser, 2nd International Conference in Mechanical Engineering (INCOM 2024), Paper ID INCOM175, 5-6 January 2024, Jadavpur University, Kolkata.
9. Chandan Mandal and Aritra Ganguly, "Seasonal Analysis of a Biomass Heating Based Two- Stage Desiccant Cooling (TSDC) System Used for Sub-Tropical Greenhouse Cultivation". ICERTSD (2nd International Conference on Energy Resources and Technologies for Sustainable Development), 2023: Paper ID 151.
10. Ayona Biswas, Chandan Bit, Supratim Datta, Subhraneel Paul and Aritra Ganguly, "Optimization and Thermo-economic Feasibility Study of Solar-Biomass Based Microgrid System", ICERTSD (2nd International Conference on Energy Resources and Technologies for Sustainable Development), 2023: Paper ID 152.
11. P.K. Iyer, V.R. Abhisraj, A. Ganguly and M.P. Maiya, "Cycle time analysis of crossflow and counterflow desiccant coated M-cyclecoolers using waste heat from Diesel generators", ICP (International Conference on Polygeneration), 2023: Paper ID 7572.
12. P.K. Iyer, M.P. Maiya, V.R. Abhisraj and A. Ganguly, "Numerical Investigations of Channel Type Desiccant Coated Evaporative Coolers for Marine Conditions", ICP (International Conference on Refrigeration), 2023.
13. Kumar V, Anthikapalli B, Pal B, Kuriachen B. Modeling and Optimization of Laser Tube Bending Process. In Laser Applications in Manufacturing (pp. 185-200). CRC Press.
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15. V.P. Prajina, N.K. Manna, U. Rana, A. Guha, Performance Analysis Of Sudden Expansion And Dump Diffuser Geometries Across Three Reynolds Number, Proceedings of the 2nd International Conference on Mechanical Engineering Jadavpur University Kolkata India January 5 & 6, 2024 Paper No. INCOM24-0107
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18. Pijush Kanti Mondal, Bijan Kumar Mandal. Performance study of a ci engine using emulsified diesel as fuel. INCOM24: Proceedings of the 2nd International Conference on Mechanical Engineering Jadavpur University Kolkata India January 5& 6, 2024
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20. T Bag, A Kumari, G Dabi, M Singh and S Ghosh (2024). Thermal design and analysis of a hybrid parabolic trough and dish based concentrated solar steam power plant, 2nd International conference in Mechanical Engineering (INCOM 2024), Feb 2024.
21. S A Zaman, S Ghosh, Alexander Fedyukhin (2023). A Biomass-based Carbon Negative Brayton-Rankine Coupled Cycle Employing MCFC, Gasification and Combustion Boiler, Proceeding of 2nd ICERTSD, 26-27 Apr 2023.
22. S Doke, S A Zaman, S Ghosh (2023). Process Modeling and Simulation of Sugarcane Bagasse Gasification using different Oxidizing Medium: A Universal Gasification Model, Proceeding of 2nd ICERTSD, 26-27 Apr 2023

Department of Metallurgy and Materials Engineering

1. Organised an International workshop on Multiscale Materials Modelling as part of Intelligent Sensors and Systemsat Cardiff Metropolitan University, UK (May 2023).
2. Manna M, Pal S. Investigation of Primary Radiation Damage in Nanocrystalline Tantalum Using Machine-Learning Interatomic Potential: An Atomistic Simulation Study. In International Conference on Reliability, Safety, and Hazard 2024 Feb 21 (pp. 167-182). Singapore: Springer Nature Singapore.
3. Sneha Roy and Swarup Kumar Ghosh, Colour-coated steels: mechanical properties, wear resistance, and corrosion resistance, International Conference on Processing of Minerals, Metals and Materials: Beyond Tomorrow (ICPMMM2024), 28-29 March, 2024.

Department of Mining Engineering

1. Dey N C and Dey S C (Aug 2023) "Effect of machine heat in deeper underground mechanized working panel – an experimental study" Proceedings of 33rd National Convention of Mining Engineers on Amended mine regulations and impact on mining industry, organized by Institute of Engineers Karnataka Local centre, IEI, pp 53-62.
2. Babu Syam, Birru Anil Kr, Dey N C (Dec 2023), "Rapid Upper Limb Assessment (RULA) technique for posture corrections in worker reducing musculoskeletal Disorders and Enhancing work efficiency" Proceedings of 6th Industrial Engineering and Operations management Bangladesh, Dhaka, pp (219-237).
3. Dey N C and Shreedevi Moharana (Jan 2024), "Impact of mining in climate change on the ground water resources in India", International Seminar Proceedings on Impacting ground water by Climate change, Mining, Urban Mining in Chemical contamination – Successful mitigation solutions, 3-4 January, 2024, Kolkata.
4. Moharana S., and Kumar B., "Climate change impact on groundwater especially in semi-arid regions of West Bengal, India" AGU Fall Meeting 2023 (AGU 2023), 11-15 December, San Francisco, CA (Online).

Department of Physics

1. Das T, Adhikary S, Basu M. Generation of Broadband Supercontinuum by a So-designed Silicon on Insulator (SOI) Rectangular Buried Waveguide. In 2023 International Symposium on Devices, Circuits and Systems (ISDCS) 2023 May 29 (Vol. 1, pp. 1-5). IEEE.
2. Mishra A, Ghosh BK, Ghosh D, Basu M. Triangular Pulse Generation by a Normal Dispersion Silicon Core Single Mode Fiber. InFrontiers in Optics 2023 Oct 9 (pp. FD4-6). Optica Publishing Group.
3. Mishra A, Ghosh BK, Ghosh D, Basu M. Generation of Asymmetric Triangular Pulse by A Dispersion and Nonlinearity Engineered Silicon Core Optical Fiber. In 2024 37th International Conference on VLSI Design and 2024 23rd International Conference on Embedded Systems (VLSID) 2024 Jan 6 (pp. 632-636). IEEE.
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School of Management Sciences

1. Presented my paper titled "How the Occupational Diversifications Influence the Economic Status of the Slum Dwellers: An Analysis in the Districts of West Bengal?" at the & quot; International Conference on & quot; Sustainable and Inclusive Urban Development in Global South: International Experiences and Future Strategies & quot; organized by the Institute for Human Development (IHD) and Department of Urban and Regional Planning, University of Florida (UF) in partnership with the Jawaharlal Nehru University (JNU) and National Institute of Urban Affairs (NIUA), from 10th to 12th August 2023 at the India International Centre (IIC), New Delhi.
2. Presented my paper titled "An Analysis of Occupational Illness and Injuries of the Industrial Workers in Slums" at the International Conference on "Safety, Health and Analytics-Driven Governance for Sustainable Development" (SHADG 2024) from 29th to 30th January 2024 at the Indian Institute of Technology Kharagpur.

School of Mechatronics and Robotics

1. Islam SM, Vikram A, Pal T. Estimation of Respiratory Rate from Photoplethysmogram Signal Using Maximal Overlap Discrete Wavelet Transform. In 2023 3rd International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET) 2023 Dec 21 (pp. 1-6). IEEE

School of VLSI Technology

1. Rupam Sardar, Arkapravo Nandi, Avijit Bhowmik, Bimal Dutta, Sudip Ghosh, "Design of EX-OR Gate with ANN using Sigmoid and Relu Functions for Artificial Intelligence Applications in Python", in International Conference on Data Analytics and Insights (ICDAI 2023), organized by Techno International, Kolkata, India, during May 11–13, 2023.
2. Rounak Roy, Sudip Ghosh and Hafizur Rahaman, "Implementation of Area Efficient Adders for Inexact Computing", in 2023 International Symposium on Devices, Circuits and Systems (ISDCS), Higashihiroshima, Japan, 2023, pp. 01-04.
3. Anchit Arun, Ananya Chakraborty, Priyanka Dutta, Debajyoti Pal, Tridibesh Nag, Debasis De, Sudip Ghosh, Hafizur Rahaman: "Power and Delay Efficient Hardware Implementation with ATPG for Vedic Multiplier Using Urdhva Tiryagbhyam Sutra". IAIT 2023: 23:1-23:6 Thailand
4. Piyali Saha, Sudip Ghosh, Debajyoti Pal, Hafizur Rahaman: "Hardware Performance Analysis of N-bit CLA on FPGA and Programmable SoC". IAIT 2023: 1:1-1:7 Thailand
5. Rupam Sardar, Debashis De, Avijit Bhowmick, Sudip Ghosh, Bimal Dutta, "Weather Prediction using Multi-linear Regression Model in North Twenty-four Parganas", 8th International Conference on Emerging Applications of Information Technology (EAIT) 2024.
6. Debika Chaudhuri, Rashid Jamal, Hafizur Rahaman and Tamal Ghosh, "Thermo-Electro-Mechanical Effects of Copper TSV Interconnects on the MOS Characteristics in Stacked 3D Integration", COMSYS 2023
7. D Chaudhuri, H Rahaman, T Ghosh, A Novel Approach to Model and Analyze Wafer–Wafer Hybrid Bonding, Emerging Electronic Devices, Circuits and Systems, 2023
8. R Das, A Wary, A Dey, R Hazari, C Bandyopadhyay, H Rahaman, Design of Optimum n-bit ALU Using Crossbar Gate Check for updates, Proceedings of International Conference on Data, Electronics and Computing, 2023
9. SG Tunga, S Das, H Rahaman, Electro-Thermal NE Circuits, Nano-Interconnect Materials and Models for Next Generation Integrated Circuits, 2023
10. SG Tunga, S Das, H Rahaman, GNR Interconnect for Nano-Electronic Circuits, Nano-Interconnect Materials and Models for Next Generation Integrated Circuits, 2023

11. SG Tunga, H Rahaman, S Das, Temperature-Dependent RF Performance Analysis of GNR-Based Nano-Interconnect Systems, Nano-Interconnect Materials and Models for Next Generation Integrated Circuits, 2023
12. P Saha, S Ghosh, D Pal, H Rahaman, Hardware Performance Analysis of N-bit CLA on FPGA and Programmable SoC, Proceedings of the 13th International Conference on Advances in Information Technology, 2023
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22. SG Tunga, S Bhattacharya, S Das, H Rahaman, Modeling of Pristine and intercalation doped multilayer graphene nanoribbon conductors with energy-per-layer screening, Emerging Electronic Devices, Circuits and Systems: Select Proceedings, 2023
23. A Saha, S Chatterjee, S Srimani, T Samanta, H Rahaman, Multinet Global Routing Algorithm for On-Chip Optical Interconnects to Minimize Optical Signal Loss, Emerging Electronic Devices, Circuits and Systems: Select Proceedings of, 2023
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9.3 Patent

Department of Aerospace Engineering and Applied Mechanics

1. Joydeep Bhowmik, Debopam Das, A Foldable Wing Design Of An Improved Flapping Wing Aerial Vehicle, Patent No: IN Patent 457,785, Year of Granting: 2023
2. Joydeep Bhowmik, Gaurav Seth, Debopam Das, A Spring Induced Ornithopter Wing Design, Patent No: IN Patent 452,547, Year of Granting:2023

Department of Computer Science and Technology

1. Surajeet Ghosh and SanchitaSaha Ray, "Intelligent Associative Memory (IAM) System", December 2023, Patent No.: 488100

Department of Electrical Engineering

1. Dalapati S, Chatterjee D, A Current-sensor-less Technique for Dead Time Distortion Compensation in PWM Inverters. Ref. No. 202331011297, App. Number: TEMP/E-1/13034/2023-KOL, filed on 19.02.2023. Patent No. 521555, Application No. 202331011297; date of grant: 07/03/2024.
2. Dipu Sarkar, Sravan Kumar Gunturi and Abhinandan De, Patent No. 532436, "A Node MCU Based Overcurrent Protection System Using Internet of Things", Patent Granted in 2024
3. Anindita Sengupta, Subhasish Roy, Surajit Sengupta, "A yarn Characterisation Unit" Dec, 2023, 487726.

Department of Electronics and Telecommunication Engineering

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Department of Mining Engineering

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Department of Physics

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Centre for Healthcare Science and Technology

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School of Advanced Materials, Green Energy and Sensor Systems

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School of VLSI Technology

1. S Poddar, A Hazarika, PCRJ Naidu, H Rahaman, Hardware accelerator for efficient convolution processing, US Patent 11,797,345, 2023

9.4 PhD Supervision

Sl.	Supervisor(s)	Name of the Candidate	PhD Award Date
Department of Aerospace Engineering and Applied Mechanics			
1	Dr. Subhasis Bhaumik	Ganesh Roy	22-06-2023
2	Dr. Prithwish Kumar Das	Abhishek Hazra	08-11-2023
3	Dr. Pabitra Halder	Abanti Datta	11-01-2024
4	Dr. Amit Roy Chowdhury Dr. Santanu Majumder	Arindam Chakraborty	22-03-2024
Department of Architecture and Planning			
5	Dr. Keya Mitra	Manisha Bhor	22-11-2023
6	Dr. Aditya Bandyopadhyay (Retired)	Aditee Prabhakar	01-03-2024
7	Dr. Keya Mitra	Reshma Chakraborty	16-03-2024
Department of Chemistry			
8	Dr. Anup Mondal	Sk Taheruddin Ahamed	19-04-2023
9	Dr. Ajit Kumar Mahapatra Dr. Jayanta Nanda	Souvik Misra	07-06-2023
10	Dr. Mrinal Kanti Bera	Surya Kanta Samanta	27-06-2023
11	Dr. Ajit Kumar Mahapatra	Sandip Kumar Samanta	17-08-2023
12	Dr. Mrinal Kanti Bera	Rimpa De	26-09-2023
13	Dr. Sudip Kumar Chattopadhyay Dr. Debabani Ganguly	Anamika Ghosh	15-11-2023
14	Dr. Anup Mondal (Retired) Dr. Bibhutosh Adhikary (Retired)	Uday Kumar Ghorui	04-12-2023
15	Dr. Papu Biswas	Debojit Ghosh	01-03-2024
16	Dr. Chinmoy Bhattacharya	Swarnendu Baduri	08-03-2024
Department of Civil Engineering			
17	Dr. Sujata Biswas	Sneha Murmu	08-06-2023
18	Dr. Chanchal Majumder	Rajat Chatterjee	07-08-2023
19	Dr. Subrata Chakraborty	Mithu Dey	22-08-2023
20	Dr. Sujata Biswas	Swarnadeepa Chakraborty	11-09-2023
21	Dr. Aparna Dey Ghosh	Tanmoy Konar	25-09-2023
22	Dr. Pritam Saha	Sujata Basu	27-09-2023
23	Dr. Sujit Kumar Dalui	Prasenjit Sanyal	27-10-2023
24	Dr. Subrata Chakraborty	Partha Sengupta	23-11-2023
25	Dr. Soumya Bhattacharjya	Kishore Chandra Misra	29-11-2023
26	Dr. Chanchal Majumder Dr. Prasenjit Saha	Soumya Kanta Ray	04-12-2023
27	Dr. Tapash Kumar Roy	Sukanta Karati	15-01-2024
28	Dr. Sujata Biswas Dr. Susmita Bakshi	Subhadip Kangsabanik	19-02-2024
29	Dr. Chaitali Ray Dr. Sandipan Nath Thakur	Soumen Roy	22-02-2024

Sl.	Supervisor(s)	Name of the Candidate	PhD Award Date
Department of Computer Science and Technology			
30	Dr. Sulata Mitra	Ananya Paul	28-04-2023
31	Dr. Apurba Sarkar	Raina Paul	14-07-2023
32	Dr. Apurba Sarkar Dr. Arindam Biswas	Md. Abdul Aziz Al Aman	04-10-2023
33	Dr. Sipra Das Bit	Nabanita Das	16-10-2023
34	Dr. Samit Biswas	Arpita Dutta	20-10-2023
35	Dr. Biplab Kumar Sikdar	Avishek Choudhury	23-11-2023
36	Dr. Susanta Chakraborty	Susmita Das	29-12-2023
37	Dr. Jaya Sil	Amal Barman	10-01-2024
38	Dr. Susanta Chakraborty Dr. Samit Biswas	Chandan Das	14-03-2024
Department of Earth Science			
39	Dr. Bhabani Prasad Mukhopadhyay	Swarnali Barua	31-07-2023
40	Dr. Bhabani Prasad Mukhopadhyay Dr. Atin Kumar Mitra	Puja Chowdhury	12-02-2024
Department of Electrical Engineering			
41	Dr. Chandan Kumar Chanda Dr. Amalendu Bikash Choudhury	Himadri Sekhar Bhattacharyya	31-07-2023
42	Dr. Paramita Chattopadhyay	Dipanwita Mitra	10-01-2024
43	Dr. Anindita Sengupta	Rajeev Ranjan Pathak	11-01-2024
44	Dr. Chandan Kumar Chanda	Suman Ghosh	12-02-2024
45	Dr. Mainak Sengupta	Monojit Seal	23-02-2024
46	Dr. Mainak Sengupta	Abhishek Kar	26-03-2024
Department of Electronics and Telecommunication Engineering			
47	Dr. Monojit Mitra Dr. Nirmalendu Bikas Sinha	Sourav Chakraborty	25-01-2024
Department of Information Technology			
48	Dr. Prasun Ghosal	Pratima Chatterjee	12-06-2023
49	Dr. Arindam Biswas	Somrita Saha	14-09-2023
50	Dr. Indrajit Banerjee	Tanima Bhowmik	17-01-2024
51	Dr. Indrajit Banerjee Dr. Chandan Giri	Chandrakant Panjabrao Navdeti	18-03-2024
Department of Mathematics			
52	Dr. Shariful Alam	Dipesh Barman	23-06-2023
53	Dr. Pritha Das Dr. Tapan Kumar Roy	Prokash Mondal	07-08-2023
54	Dr. Sanat Kumar Mazumder Dr. Manoranjan Maiti	Md Samim Aktar	18-09-2023
55	Dr. Pritha Das Dr. Tapan Kumar Roy	Chaitali Kar	19-09-2023

Sl.	Supervisor(s)	Name of the Candidate	PhD Award Date
56	Dr. Tapan Kumar Kar Dr. Subhas Khajanchi	Sovan Bera	21-09-2023
57	Dr. Smita Pal (Sarkar)	Sandip Moi	15-01-2024
58	Dr. Sanat Kumar Mazumder Dr. Kajal De	Sriparna Chowdhury	19-01-2024
59	Dr. Smita Pal (Sarkar) Dr. Soumen Shaw	Aktar Seikh	16-02-2024
Department of Mechanical Engineering			
60	Dr. Debasis Datta	Animesh Talapatra	26-06-2023
61	Dr. Shyamal Chatterjee	Pradyumna Kumar Sahoo	08-12-2023
Department of Metallurgy & Materials Engineering			
62	Dr. Sukumar Kundu	Tapendu Mandal	13-07-2023
63	Dr. Debdulal Das	Md Abu Bakkar	04-08-2023
Department of Mining Engineering			
64	Dr. Pratik Dutta	Arpita Roy	19-07-2023
65	Dr. Sudipta Mukhopadhyay	Muthaimanoj. P	31-07-2023
Department of Physics			
66	Dr. Sampad Mukherjee	Chayan Kanchan Karmakar	25-08-2023
67	Dr. Syed Minhaz Hossain	Sudipta Chakrabarty	28-08-2023
68	Dr. Abhijit Bisoi	Yajnya Sapkota	01-09-2023
69	Dr. Mousumi Basu Dr. Dipankar Ghosh	Binoy Krishna Ghosh	19-09-2023
70	Dr. Manish Pal Chowdhury	Rahul Majumder	19-10-2023
71	Dr. Manish Pal Chowdhury Dr. Dipali Banerjee	Soumalya Kundu	20-10-2023
72	Dr. Abhijit Majumdar Dr. Tridibendra Narayan Chattopadhyay	Amaresh Bej	04-12-2023
73	Dr. Sukhendu Sekhar Sarkar (Retired)	Arkabrata Gupta	04-12-2023
74	Dr. Dipali Banerjee (Retired)	Pinaki Mandal	04-12-2023
Centre for Health Care Science and Technology			
75	Dr. Chitrangada Das Mukhopadhyay Dr. Shyamal Kumar Chattopadhyay	Koel Sinha	17-08-2023
76	Dr. Ananya Barui Dr. Amit Roy Chowdhury	Ankita Das	29-09-2023
77	Dr. Ananya Barui Dr. Santi Prasad Maity	Susmita Dey	18-10-2023
School of Advanced Materials, Green Energy and Sensor Systems			
78	Dr. Syed Minhaz Hossain Dr. Sumita Mukhopadhyay	Susmita Biswas	04-12-2023
School of Ecology, Infrastructure and Human Settlement Management			
79	Dr. Subrata Kumar Paul	Gopal Chandra Banik	25-01-2024

9.5 Book Authored

Department of Electrical Engineering

1. D. Sarkar, C. K. Chanda and A. De, "Computational Techniques for Power Systems Analysis", BS Publications (A unit of BSP Books Pvt. Ltd.), Hyderabad, India, ISBN: 9789390211548, January 2024

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9.6 Book Chapter Authored

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Department of Earth Sciences

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Department of Electrical Engineering

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Department of Electronics and Telecommunication Engineering

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Department of Information Technology

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Department of Mathematics

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7. Wazeer A, Das A, Sinha A, Karmakar A. Graphene-Based Wearable Sensors. In Handbook of Smart Energy Systems 2023 Aug 5 (pp. 473-487). Cham: Springer International Publishing.
8. Sai MB, Mondal SC, Kumar V. Optimization of Battery Tab Interconnects by Micro-TIG Welding Using Simulated Annealing Algorithm and Response Surface Method. In International Conference on Research into Design 2023 Jan 9 (pp. 283-293). Singapore: Springer Nature Singapore.
9. Gangwar S, Mondal SC, Ghadai RK. Comparative Analysis of Various MCDM Techniques for the Optimization of W-DLC Coatings for Tool Materials of High-Speed Steel and Cemented Carbide. In International Conference on Research into Design 2023 Jan 9 (pp. 271-281). Singapore: Springer Nature Singapore.
10. S Ghosh, Heat Recovery from fuel Cells, (under review) for inclusion in edited book Waste Heat Recovery, Its Utilization and Performance Assessment: Fundamentals and Application, Elsevier.
11. Kumar V, Anthikapalli B, Pal B, Kuriachen B. Modeling and Optimization of Laser Tube Bending Process. In Laser Applications in Manufacturing (pp. 185-200). CRC Press. Nov 2023

Department of Metallurgy and Materials Engineering

1. Samanta R, Bansal GK, Ghosh SK, Mandal G. Properties and Applications of Bainitic Railway Steel Prepared by Mechanical Alloying. In Advancements in Powder Metallurgy: Processing, Applications, and Properties 2024 (pp. 166-187). IGI Global.
2. Amit Chanda, Jaideep Adhikari, Manojit Ghosh, Prosenjit Saha, "PTT-Based Green Composites", 5, Materials Horizons: From Nature to Nanomaterials, Springer, Singapore, pp.(167–185), May 2023
3. Uttam Kumar Murmu, Varnit Jain, Prerona Saha, Abhishek Ghosh, Arkajit Ghosh, Kalyan Das, Manojit Ghosh," Recent Developments and Optimization in Additive Manufacturing of Aluminum Alloys", Optimization of Advanced Manufacturing Processes, Apple Academic Press; ISBN: 9781774916025, January 2024

Department of Mining Engineering

1. S. Moharana, "Artificial Intelligence for Analytical Evaluation of Landslide Vulnerability" in Data Analytics and Artificial Intelligence for Earth Resource Management, Elsevier by

Centre for Healthcare Science and Technology

1. Begam H, Sanyal S, Barui A, Nandi SK. Materials from Natural Resources for the Application of Bone Tissue Engineering. In Interaction of Nanomaterials With Living Cells 2023 Nov 11 (pp. 55-82). Singapore: Springer Nature Singapore.
2. Kabir A, Sarkar A, Barui A. Acute and Chronic Wound Management: Assessment, Therapy and Monitoring

Strategies. In Regenerative Medicine: Emerging Techniques to Translation Approaches 2023 Jan 31 (pp. 97-125). Singapore: Springer Nature Singapore.

3. Sharma S, Begam H, Barui A. Application of antiviral activity of polymer. In Advances in Biomedical Polymers and Composites 2023 Jan 1 (pp. 591-615). Elsevier.
4. Ravikanth C, Pradhan BK, Bharti D, Sarkar A, Barui A, Sarkar P, Mohanty S, Pal K. Development of a novel low-cost multimodal microscope for food and biological applications. In Advanced Methods in Biomedical Signal Processing and Analysis 2023 Jan 1 (pp. 375-405). Academic Press.
5. Mukhopadhyay M, Bhattacharya D, editors. Nanocellulose: A Biopolymer for Biomedical Applications. John Wiley & Sons; 2024 Mar 12.

School of Management Sciences

1. Basu, R., Das, M.C., Kumar, A., and Sarkar, B. (2023), "Identification and prioritization of quality 4.0 practices in sustainable manufacturing using rough number based AHP- MABAC", To be published in Handbook of Intelligent and Sustainable Manufacturing: Tools, Principles, and Strategies, CRC Press, Taylor and Francis

School of VLSI Technology

1. ArkaPravo Nandi, Sudip Ghosh, Suman Lata Tripathi, Piyali Saha, Aishi Pramanik, Raju Hazari, Hafizur Rahaman "Prediction Models for Detecting COVID-19 from Chest X-ray Images using Multi-Layer Convolutional Neural Network", IOP Science
2. Sudip Ghosh and Suman Lata Tripathi, "Hardware Prototype of RIW Algorithm on FPGA and P-SoC Platform: A Trade-off between Resource and Time Constraint", CRC Press

9.7 Awards, Recognitions, Membership

Department of Architecture and Planning

1. Keya Mitra: Nominated as Member-National Advisory Committee, National Information Centre for Earthquake Engineering (NICEE) at IIT Kanpur.

Department of Chemistry

1. Jhuma Ganguly: Professor Asima Chatterjee Memorial Lecture-2024 From One Day National Symposia On "Recent Trends In Chemistry & Its Application" On 28th March 2024 Organized By The Department Of Chemistry And IQAC, Dr. C.V. Raman University Kargi Road, Kota, Bilaspur, (C.G.) 495113 In Association With Govt. S.P.M. College, Sitapur Sarguja (C.G.) And keynote Address On Trends In Nature Inspired Organic Carriers
2. N. D. Paul: Thieme Chemistry Journals Award 2024, Sponsored By Thieme Group in Collaboration with the Editors of Synthesis, Synlett and Synfacts.
3. N. D. Paul: Prof. D. K. Banerjee Memorial Lecture Award for the Year 2023, By Department Of Organic Chemistry IISc Bangalore, India.

Department of Civil Engineering

1. Dipankana Bhattacherjee: Recipient of the Young Faculty Research Award (YFRA)-2021 bestowed by the IIEST Alumni Association –Washington Metropolitan Area (IIESTAA – WMA) and GAABESU SHIBPUR FOUNDATION USA, Year: 2023.
2. Aparna (Dey) Ghosh: Received the Best Paper Award at the International Conference on Vibration Engineering, Science and Technology (INVEST 23) held at Bengaluru, India, during 17-18 November, 2023.
3. Aparna (Dey) Ghosh: Elected as the Chairperson of the Kolkata Chapter of the Indian Society of Earthquake Technology (ISET).
4. Pritam Saha: The IATSS Best Paper Award: International Association of Traffic and Safety Sciences, Japan, Year: 2024.
5. Asok Adak: Best paper award for the paper Fabrication of Cellulose Acetate-based Electrospun Nanofiber Membranes and its Application for Ciprofloxacin Removal presented in International Conference on Sustainable Advanced Technologies for Environmental Management.

6. Asok Adak: Best paper award for the paper Water resource management of a micro watershed and catchment delineation in parts of Bankura and Purulia districts of West Bengal by GIS and remote sensing techniques presented in International Conference on Sustainable and Innovative Mining Practices (ICSIMP-2023).
7. A.K. Budhkar: The paper Pandit, A., and Budhkar, A.K., "Speed Characteristics of Heterogeneous Traffic in Foggy Weather Conditions," presented at the 7th Conference of Transportation Research Group of India (CTRG-2023) in Surat, Dec. 2023, received the Best Paper Award (Students category) in the conference.
8. Dipankana Bhattacherjee: Life Member: Kolkata Chapter of Indian Geotechnical Society, 2023.
9. Pritam Saha: Granted certificate of Fellow (FIE, F-1304670) by the Institution of Engineers (India) on March 06, 2024.
10. A.K Budhkar: Affiliate Member, American Society of Civil Engineers (ASCE) Reference Number: 1046556299
11. Anirban Gupta: Nominated as the Chairman of the State Level Expert Appraisal Committee, by the Ministry of Environment, Forest and Climate Change, Government of India since May, 2023

Department of Computer Science and Technology

1. Sipra Das Bit: Received Journal of Network and Computer Applications, Elsevier 2022 Best Survey Award in Dec, 2023.

Department of Electrical Engineering

1. Pritam Pal: July, 2023 – Was appointed as an Associate Editor of IEEE Transactions on Instrumentation and Measurement.
2. Abhinandan De: Member of the BoS of EE and EEE Departments of Institute of Engineering & Management (IEM), Kolkata.
3. Abhinandan De: Member of the BoS of EE Department, Swami Vivekananda University (SVU), Barrakpore, Kolkata.
4. Chandan Kumar Chanda has been awarded Best paper award in ESDA-2023, Kolkata, December-2023.
5. Abhinandan De acted as a Member of the BoS of EE and EEE Departments of Institute of Engineering &Management (IEM), Kolkata.
6. Abhinandan De acted as a Member of the BoS of EE Department, Swami Vivekananda University (SVU), Barrakpore, Kolkata.
7. Consultancy Work of Abhinandan De on "Technical Inspection and Certification of Darjeeling Rangeet Valley Ropeway" (Rs. 2.24 Lac), March 2024.

Department of Electronics and Telecommunication Engineering

1. Chirasree Roy Chaudhuri: Invited as committee member for onsite review of a research and consultancy project funded by Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India.
2. Ankita Pramanik: Recipient of IEEE Kolkata Section Outstanding Volunteer Award 2023.
3. Ankita Pramanik: Winner of 5 IEEE Region 10 Educational Activities Committee (EAC) Projects
4. Ankita Pramanik: Chairperson - IEEE Women in Engineering Kolkata Section, 2023
5. Bikramdeb Chakraborty and Partha Bhattacharyya: Outstanding Paper Award for the paper "Beyond Graphene 2D FET based Exhaled-Breath Sensor for Point-of-Care Diagnosis of Liver Fibrosis" at the 6th Regional Science and Technology Congress (Region -5), 3rd-4th January 2024 at Kalyani University, West Bengal, India.
6. Partha Bhattacharyya: Guest Editor of the special issue "Gas Sensors Microstructure, Fabrication, Performance and Applications" in the Journal Sensors (MDPI).
7. Bikramdeb Chakraborty and Partha Bhattacharyya: Best poster paper award (1st place) for the paper "Ppb-level NH3 Sensing Utilizing MoS2 Nanoflowers Towards Developing Exhaled-Breath based Point-of-Care Diagnosis of Chronic Kidney Diseases" authored by, at the 8th International Conference on Computers and Devices for Communication (CODEC 2023), 14th-16th Dec, 2023 at Kolkata, India.

Department of Mathematics

1. Santanusaha Roy: Elected as a Fellow of the Institute of Mathematics and Its Applications, United Kingdom, in 2018. Till continuing.
2. Santanusaha Roy: Life member of Calcutta Mathematical Society since 16th November 2021.

Department of Mechanical Engineering

1. Sudip Ghosh: Member of the Organizing Committee of 39th Indian Engineering Congress - Power & Energy Vertical.
2. Sudip Ghosh: Member of Working Groups WG 1 and WG 7 of ISO Technical Committee on Solid Biofuels (ISO-TC 238).
3. Sudip Ghosh: Member of BIS Sectional Sub-Committee on Solid Biofuels (PCD 7:6)

Department of Mining Engineering

1. S. Moharana received the Prestigious INSPIRE Faculty Award from DST, Govt. of India in April, 2023

School of Advanced Materials, Green Energy and Sensor Systems

1. Santanu Maity: Recipient of the Young Faculty Research Award (YFRA)-2021 bestowed by the IIEST Alumni Association –Washington Metropolitan Area (IIESTAA – WMA) and GAABESU Shibpur Foundation USA, Year: 2023.

9.8 Invited Talk, Key-Note Address Given, Chaired a Session

Department of Aerospace Engineering and Applied Mechanics

1. Subhasish Bhowmik: STC on "Internet of Underwater Things (IoUT) with AI & ML", CIT Kokrajhar, May 2023.
2. Subhasish Bhowmik: SERB Karyashala "Industry Based Robotics, IoT and Automation", NIT Jamshedpur, June 2023.
3. Subhasish Bhowmik: SERB Karyashala on "Robotics and Mechatronics", NIT Silchar, July 2023.
4. Subhasish Bhowmik: SERB FDP on "Robotics and Artificial Intelligence "RCC Institute of Information Technology, Kolkata, December 2023.
5. Subhasish Bhowmik: AICTE FDP on "Application Developments in the Lab on a Chip Technology for Fluid and Thermal Sciences" HIT Haldia, January 2024.
6. Subhasish Bhowmik: 31st West Bengal State Science and Technology Congress 2024, DST BT, Govt. of West Bengal, February 2024
7. Prince Raj: Chaired a session on Multi-phase flows in 14th Asian Computational Fluid Dynamics Conference (ACFD 2023) 30th Oct. - 2nd Nov. 2023, Bengaluru, India.

Department of Architecture and Planning

1. Keya Mitra: Invited lecture on EQ resistant structural systems and building configuration at the NationalWorkshop on Earthquake Resistant Practices in the Built Environment, at IIT Kanpur under the aegis of National Information Centre of Earthquake Engineering (NICEE), July 22, 2023.
2. Soumen Mitra: Invited lecture on Inclusive and Sustainable Transport System - Focus on Intermediate Public Transport (Paratransits) in 5- Day online Faculty Development Program (21-25.08.2023) on Sustainable Cities and Communities organized by COA-TRC Bhopal and Royal Global University, Guwahati
3. Soumen Mitra: Chairing a technical session on "Built Environment Context, Identity and Society" in the International Conference on RETHINKING BUILT ENVIRONMENT 2024 organized by School of Fine Arts, Architecture and Fashion Technology, Mizoram University on 08.03.2024
4. Soumen Mitra: Chairing a technical session on 'Tourism and Smart Infrastructure' in the 2nd Annual Conference on "Infrastructure and Built Environment: Towards Sustainable and Resilient Societies" (IBSR2024) organized by Ranbir and Chitra Gupta School of Infrastructure Design and Management (RCGSIDM) in collaboration with School of Water Resources, IIT Kharagpur on 09.03.2024

Department of Chemistry

1. Jhuma Ganguly: Keynotes speaker 28th March 2024, One Day National Symposia on "Recent Trends in Chemistry & its application" On 28th March 2024 Organized by The Department of Chemistry and IQAC, Dr. C.V. RAMAN UNIVERSITY Kargi Road, Kota, Bilaspur, (C.G.) 495113 in Association with Govt. S.P.M. College, Sitapur Sarguja (C.G.) Professor Asima Chatterjee memorial Lecture-2024 on Trends in Nature Inspired Organic Carriers.
2. Jhuma Ganguly: Invited Speaker at National symposium on "Emerging Trends in Chemical Science (ETCS2024)" held at our own RashbehariSikshaPrangan (Rajabazar Science College) on 9th Feb, 2024 on Challenges of Functional Sugar Hydrogels.

3. Jhuma Ganguly: Invited Lecture on Network-supported and Functionalized Sugar Hydrogels in 4th International Conference on Emerging Smart Materials in Applied Chemistry (ESMAC-2023) & Interdisciplinary Science for Sustainability as a part of the Diamond Jubilee Celebration of Indian Photobiology Society, Organized by Kalinga Institute of Industrial Technology (KIIT) Bhubaneswar, and CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneswar in association with the Indian Photobiology Society during 18-20 November, 2023.
4. Jhuma Ganguly: Invited Lecture on Sugar based Microgels at Narajole Raj College, Dept. of Chemistry in collaboration Indian Photobiology Society, Department of chemistry, Jadavpur University, kolkata-700032, is going to organize "Recent Trends in Chemistry for Lab to Land Application" on 25th April, 2023 at Narajole Raj College.
5. N. D Paul: International Conference on Organometallics and Catalysis. 30 th October-2nd November 2023, Goa, India.
6. N. D Paul: Advanced Biological Inorganic Chemistry (SABIC-2024). January 7-11, 2024 Kolkata, India.
7. N. D Paul: Invited talk at IISc by the Department of Organic Chemistry, 23 rd February 2024, Bangalore, India.
8. N. D Paul: Invited talk at Calcutta University by the Department of Chemistry, 9 th February 2024, Kolkata, India.
9. Shyamal Kumar Chattopadhyay: 31st Chemical Research Society of India (CRSI) National Symposium in Chemistry (CRSI NSC-31) along with ACS Symposium Series in Chemistry, NIT, Rourkela, July 6-8, 2023, Chairing a Technical session.
10. Ajit K. Mahapatra: delivered an invited talk at Department of Chemistry, Haldia Govt. College, Haldia, West Bengal, India in a national seminar on Research Methodology in Nanotechnology and Spectroscopy (RMNS-2023) on 21st June, 2023

Department of Civil Engineering

1. Dipankana Bhattacherjee: Delivered Invited Talk on Theme Lectures under "Geosynthetic Engineering (TS – 07)" in the Annual Indian Geotechnical Conference, "Geotechnical Advances in Sustainable Infrastructure Development and Risk Reduction", held during Dec 14-16, 2023, IIT Roorkee.
2. Dipankana Bhattacherjee: Chaired a Theme Lecture in the Annual Indian Geotechnical Conference, "Geotechnical Advances in Sustainable Infrastructure Development and Risk Reduction", held during Dec 14-16, 2023, IIT Roorkee.
3. Saptarshi Kundu: Chaired a Theme Lecture in the Annual Indian Geotechnical Conference, "Geotechnical Advances in Sustainable Infrastructure Development and Risk Reduction", held during Dec 14-16, 2023, IIT Roorkee.
4. Saptarshi Kundu: Chaired a Theme Lecture in the 1st International Conference on, "Sustainable Advanced Technologies for Environmental Management", held during December 20-22, 2023, IIEST Shibpur, Howrah.
5. Dipalok Majumder: Chaired a Theme Lecture at the 1st International Conference on, "Sustainable Advanced Technologies for Environmental Management", held on December 20-22, 2023, IIEST Shibpur, Howrah.
6. Dipalok Majumder: Given an Invited Talk at the 6-day Short-term course "Safe and Sustainable Road Construction and Current Trends (SSRCCT -2024) from 1-6 April 2024 at the National Institute of Technology, Durgapur, India.
7. Deep Roy: Participated as Co-Chair in a technical session of the 1st International Conference on Sustainable Advanced Technologies for Environmental Management, 20th - 22nd Sept, 2023 at IIEST Shibpur.
8. Deep Roy: Given an invited lecture in a Webinar on "River restoration structures" on February 11,2024 at Civil Engineering Department, Greater Kolkata College of Engineering and Management.
9. Subrata Chakraborty: Key note talk on Model reduction Techniques inFiniteElementModelUpdating, 3rd IntConf on "Advances in Concrete, Structural & Geotechnical Engg (ACSGE – 2024), Feb. 26-28, 2024, Department of Civil Engineering, BITS Pilani – Pilani campus
10. Subrata Chakraborty: Key note talkon Tuned Liquid Dampers in Wave Vibration Control of Offshore Structures, Recent Trend in Applied Sciences, Jan. 04-05, 2024, Physics and Applied Mathematics Unit, Indian Statistical Institute, Kolkata
11. Subrata Chakraborty: Invited talk on Seismic Hazards and Risk Analysis, ATAL-AICTE FDP program on 'Numerical Modelling & Analysis of Structures under Earthquake Loading', January 8th to 13th, 2024, at NITTTR Kolkata.

12. Subrata Chakraborty: Invited talk on Non Destructive Testing of Concrete Structures - An Overview, Short term training program on Futuristic trends & advances in civil engineering for sustainable development, 4 to 9th Dec. 2023, Dept of Civil Engg Yeshwantrao Chavan College of Engg, Nagpur.
13. Aparna (Dey) Ghosh: Delivered an Invited talk in SSTS 2023 - Steel Structures & Technology Summit on the theme 'Advances in Steel Structures and Technology' on 14th September, 2023 at Biswa Bangla Convention Centre, Kolkata.
14. Aparna (Dey) Ghosh: Delivered an invited motivational lecture to the 1st year students of the Dept. of Civil Engineering, Jadavpur University, on 13th October, 2023.
15. Aparna (Dey) Ghosh: Delivered an invited lecture in the ATAL-AICTE FDP program at NITTR, Kolkata, on 9th January, 2024.
16. Aparna (Dey) Ghosh: Delivered an invited lecture on "Geological, Geotechnical and Structural aspects ofthe recent disaster inJoshimathand other hilly areas", at The Institution of Engineers (India), West Bengal State Centre, on 26th April, 2023.
17. Anirban Gupta: Invited Lecture at the Institution of Engineers (India), West Bengal State Centre on the occasion of the World Water Day on 22nd March 2024.
18. Asok Adak: Invited talk on Carbon footprint and environmental impact assessment at executive development programs for the engineers of PWD, NH Division, Govt of West Bengal in the Department of Civil Engineering, IIEST, Shibpur.
19. Asok Adak: Invited talk on Water quality testing methods for the NirmanSahayak, Govt of West Bengal in the Department of Civil Engineering, RamkrishnaMahato Government Engineering College.

Department of Computer Science and Technology

1. Jaya Sil: Plenary talk in SERB sponsored Two Days National conference on "Machine Learning in Healthcare Applications (MLHA -2024)" was held on 18-19th April, 2024 at Guru Nanak Institute of Technology, Kolkata, India.
2. Jaya Sil: Invited speaker for Seminar on "Application of Artificial Intelligence & Machine Learning in Manufacturing Processes" was held on 16th May 2024, at Budge Budge Institute of Technology, Kolkata.
3. Nirnay Ghosh: Conducted technical sessions on Blockchain and Internet of Things security at the 5-day Training Programme on Applied Cyber Security for Airport Authority of India officers, School of Electrical Sciences, IIT Bhubaneswar, 29 January – 3 February, 2024.
4. Surajit Ghosh: Faculty Development Program on Navigating the Future with Cutting-Edge Technology, 21st March 2024, Institute of Engineering and Management, Kolkata (Newtown Campus), University of Engineering and Management Kolkata Newtown, Kolkata.
5. Asit Kumar Das: Invited talk in aFDP titled "Applications of Machine Learning in Various Research Fields", at UEM, Kolkata on February 2024.
6. Asit Kumar Das: Invited talk in an off-line workshop titled "Machine Learning for Interdisciplinary Engineering" (Sponsored by SERB, under the Department of Science and Technology, Government of India) at REVA University, Bengaluru on December 2023.
7. Asit Kumar Das: Invited talk in an off-line Workshop titled "An Integrated Approach for Computing Resources: Cloud with Internet of Things (CIoT-2023)" at Bennett University, Greater Noida, India on June 2023.
8. S. Das Bit: Delivered Invited Talk on "A Scalable Privacy-Preserving and Verifiable Collaborative Learning for Fog-based Industrial IoT" in the 8th International Conference on Computers and Devices for Communication (CODEC) held in Dec, 2023.

Department of Earth Science

1. Keynote Lecture given by Bhabani Prasad Mukhopadhyay: Keynote Speaker at International Conference in "9th Go-Green Summit" organised by BioLEAGUES on 29th & 30th December,2023 (Virtual Conference)

Department of Electrical Engineering

1. Abhinandan De: Invited lecture on the topic: "Application of Computational Intelligence in Electrical Power System" in the AICTE ATAL Faculty Development Program organized by BCREC, Durgapur on 15.01.2024.
2. Abhinandan De: Invited lecture on the topic: "Grid Integration of Renewable Sources Challenges and Solutions" in the One Week Faculty Development

Program on Global Energy Scenario: Transition from Conventional to Renewable Sources, organized by Abacus Institute of Engineering and Management, West Bengal on 29.02.2024

3. Abhinandan De: Key-note Speech on the topic "Applications of Artificial Intelligence in Electrical Engineering" in the International Conference on Integrative Science and Engineering (ICISE -2023) organized by Swami Vivekananda University, Barrackpore, Kolkata on 28.09.2023
4. Abhinandan De: Key-note Speech on the topic "Application of Computational Intelligence in Electrical Power System" in the 1st International Conference on Intelligent Computation and Analytics on Sustainable Energy and Environment (ICICASEE 2023) organized by GKCIET Malda, West Bengal on 22.09.2023
5. Abhinandan De: Expert Lecture on the topic "Power System Security Analysis by Machine Learning Approach" in the One-Week Short-Term Course on "Emerging Control Methodologies and Resilience: Industry 4.0 organized by the Department of Electrical Engineering, MNNIT Allahabad (Prayagraj) on 20.08.2023.
6. Abhinandan De: Invited lecture on the topic: "Leveraging the benefits of Soft-Computing in Textile Industry" in the Seminar on Precision and smart technologies in textiles, organised by: West Bengal State Centre, Institute of Engineers (India) and ICAR-NINFET at the ICAR-NINFET Auditorium, Kolkata on 24.07.2023.
7. Mousumi Mukherjee: Deliver a series of technical lectures on Quantum Integer Programming at the Indian Institute of Technology (IIT) Madras during February 17 - 20, 2024.
8. Chandan Kumar Chanda delivered a Key note speech in ICEPE-2023, NIT- Meghalaya during 15-17th, June-2023 as a Technical Program Chair.
9. Chandan Kumar Chanda Served as a panel member in ISSETA-2024, NIT Meghalaya during 23rd Feb- 24th, Feb, 2024.
10. Chandan Kumar Chanda delivered a Key note speaker in one day seminar on Sustainable Energy in UEM, Kolkata on 16th, March, 2024.
11. Atanu Banerjee acted as Session Chair for the 5th International Conference on Energy, Power, and Environment (ICEPE 2023) at NIT Meghalaya 15th -17th, June, 2023.
12. Anirudh Nath: Invited Talk on "Physics-Based Control-Oriented Modelling of Lithium-ion Cell and Design of Robust Observer-Based State of Charge Estimation" given on 21st Feb, 2024.
13. MousumiMukherje: Invited Talk on "Characterising initial data for systems of partial difference equations" given on 28th Feb, 2024.
14. Syed Abdullah Qasim: Invited Talk on "Functionally graded materials for efficient electric stress control in insulators" given on 7th March, 2024.
15. Kaushik Mukherjee: Invited Talk on "Interactive talk on PURULIA PUMPED STORAGE PROJECT (PPSP)" given on 13th March, 2024.
16. Roshni Maiti: Invited Talk on "Design and application of adaptive controllers on uncertain, disturbed, nonlinear hardware systems" given on 20th March, 2024.
17. Reetam Mondal: Invited Talk on "Compensation of Continuous-Time Plants with Fractional Order PIλDμ Controllers" given on 4th April, 2024.
18. Anindita Sengupta: Organised and attended as General Co-Chair and Session Chair in the International Conference 3rd International Conference on Control, Instrumentation, Energy and Communication, 2024

Department of Electronics and Telecommunication Engineering

1. Chirasree Roy Chaudhuri: Delivered invited lecture in International Conference on Women in Electrochemistry (ICWEC – 2023) at Indian Institute of Science, Bangalore, on 7th April 2023.
2. Chirasree Roy Chaudhuri: Delivered talk at Mid-Year Symposium of Indian National Young Academy of Science (INYAS-INSA) at IIT ISM Dhanbad in September 2023.
3. Chirasree Roy Chaudhuri: Invited lecture at CMTI (Central Manufacturing Technological Institute) Bangalore on 10th March 2024 on the occasion of International Women's Day.
4. D Mitra: Invited talk in "Workshop on ' Sensors for Healthcare Applications'" organized at NIT Mizoram on 13th February 2024.
5. D Mitra: Invited talk at Queen Mary University of London.
6. Chirasree Roy Chaudhuri delivered Invited talk on Popular Science Lectures for High School Girl Students on 8th December 2023

Department of Information Technology

1. Indrajit Banerjee: Invited Speaker at 13th ALL INDIA PEOPLES' TECHNOLOGY CONGRESSInstitution of Engineers (I) & NITTTR, Salt Lake, Kolkata 24th & 25th June, 2023 on ICT for Rural India.
2. Santi Prasad Maity: Invited talk at FDP on AI in Electronics- 10th July to 14th July 2023 organised by Institute of Engineering and Management, Kolkata, title of talk "AI/ML/DL: Some Applications in Signal Processing and Communications" on 13.07.2023.
3. Santi Prasad Maity: Invited talk in SERB sponsored workshop on " Engineering Optimization with Application in Automation and Computer Vision" under the Karyashala Scheme during 17-23rd July, 2023 organised by Department of ECE, Visvesvaraya National Institute of Technology, Nagpur, title of talks, "Introduction to computer vision and compressive imaging", "Image Enhancement: Automation and Optimization" and "Optimization in Image Restoration" on17th July, 2023 and title of talks "Image Segmentation", "Retinal Blood Vessel Extraction and Lesion Detection for Gradation on Diabetic Retinopathy" and "Automation and Optimization in Medical Imaging and Analysis" on 18.07.2023.
4. Santi Prasad Maity: Invited talk on 5 days FDP organised at School of Electronics Engineering (SENSE), VIT Vellore on "Thinking and Innovation-wireless communication and antenna technologies" from 19/10/23 to 23/10/23, title of talk " 5G and Beyond: Spectrum, Security and Energy Efficiency" on 19.10.2023 and title of talk "Machine Learning in Energy and Spectrum Efficient Communications" on 23.10.2023.
5. Santi Prasad Maity: Invited talk on 5 days FDP organised at Prabhu Jagabandhu College, Andul, Howrah on "AI and Digital Empowerment, title of talk " ML and DL: Theory and Applications" on 21.11.2023 and title of talk "Reinforcement learning and applications" on 24.11.2023.
6. Santi Prasad Maity: Invited talk on 5 days FDP organised by Computer Science and Engineering at Meghnad Saha Institute on "Cutting Edge: Horizons of Data & Analytics, title of talk "DL and RL In Diverse Applications: From Data Acquisition to Analysis" on 30.1.2024.
7. Santi Prasad Maity: Invited talk on 5 days FDP organised by Electronics and Communication Engineering at Institute of Engineering and Management, Saltlake Campus on "Recent Trends in High Frequency Communication and Next Generation Smart Systems, title of talk "RIS aided IoT Communications" on 31.1.2024.
8. Santi Prasad Maity: Invited talk at AICTE SPONSORED Online Five Days STTP on - Research Paper Writing & Publishing in High Impact Journals- 26th Feb to 01st March 2024 at National Institute of Technology Nagaland, title of talk "Research in Higher Education: A Journey from Problem Finding to Paper Publication" on 29.02.2024.
9. Santi Prasad Maity: Invited talk at AICTE Sponsored STTP on - Next Generation AI –Research Perspectives - 18th March to 22nd March 2024 at National Institute of Technology Nagaland, title of talk "Deep Reinforcement Learning and some Applications" on 20.03.2024.
10. Santi Prasad Maity: Invited Keynote talk at 9th International Conf. on Wireless Communications Signal Processing and Networking held at SSN College of Engineering, Chennai, India, 21-23 March, 2024 title of talk "Reconfigurable intelligent surface in 6G communications: Challenges and Opportunities" on 23.03.2024.

Department of Mathematics

1. Santanusaha Roy: Delivered a Keynote lecture at the International Conference on Differential Equations and Control Problems (ICDECP23) which was held through hybrid mode at Indian Institute of Technology Mandi, India, during June 15-17, 2023.
2. Santanusaha Roy: Recently, delivered lecture as an Invited Speaker at the 1st International Mathematics Conclave (IMC 2023)which was held at Sastra Deemed University, Tamilnadu, India, during 23 - 25 November, 2023.
3. Tapan Kumar Kar: Presented an invited lecture entitled "Asymptotic and short-term responses of perturbation: A Mathematical comparison of stability measures" in the lecture series in nonlinear dynamics organized by Department of Nonlinear Dynamics, Bharathidasan University on 24th April, 2023.
4. Tapan Kumar Kar: Chaired a session entitled "Some applications of topology in Life sciences" in the International Conference on Mathematical Analysis and Applications in Modeling (ICMAAM 2023) at the Department of mathematics, Jadavpur University during 9th-11th October, 2023.
5. Tapan Kumar Kar: Delivered invited lecture on the topic "Asymptotic and Short-Term Responses of

Perturbation: A Mathematical Comparison of Stability Measures" discipline of 6th Regional Science & Technology Congress, 2023-2024 at the University of Kalyani, Kalyani, Nadia, West Bengal, 741235 on 3rd January, 2024.

6. Tapan Kumar Kar: Presented an invited lecture entitled "A mathematical comparison of asymptotic and short-term responses of perturbation" at the National Seminar on Recent Trends in Applied Mathematics (RTAM-2024) organized by Department of Applied Mathematics, University of Calcutta on 14th March, 2024.
7. Pritha Das: 2nd International Conference on Mathematical Analysis and Application in Modelling, (ICMAAM, 2023), Venue: Jadavpur University, India, Day 1: 9th October, 2023, Parallel Session– III (Applied Mathematics, Modelling and Statistics), Chairperson: Pritha Das
8. Binayak Samadder Choudhury delivered lecture as an Invited Speaker at the International Conference on Analysis and its Applications, which was held at JAMIA MILIA ISLAMIA, New Delhi during Jan 19-21, 2024.
9. Binayak Samadder Choudhury delivered lecture as an Invited Speaker at the 3rd International Conference on Nonlinear Applied Analysis and Optimization, which was held at NIT Durgapur during Dec 8-10, 2023.

Department of Mechanical Engineering

1. Rajib Chakraborty: Invited on-line lecture on Metal Additive Manufacturing for BHEL executives of various units of BHEL across Pan India in the month of October 2023.
2. Mukhopadhyay, B.P, Keynote Speaker at International Conference in "9th Go-Green Summit" organised by BioLEAGUES on 29th & 20th December,2023 (Virtual Conference).
3. RajibChakraborty: Invited on-line lecture on Metal Additive Manufacturingfor BHEL executives of various units of BHEL across Pan India in the month of October 2023.
4. Debasish Das: Das, Debasish. Invited Speaker in Online Workshop on "Artificial Intelligence in Materials Engineering: Theory and Hands-on Practice" organized by the Department of Metallurgical and Materials Engineering, National Institute of Technology Rourkela from September 21-25, 2023.
5. Das, Debasish. Invited online guest lecture on "Input-Output Modelling for Design and Production" organized by Department of Mechanical Engineering, DY Patil College of Engineering, Akurdi, Pune November 05, 2023.
6. Sudip Ghosh: Chaired a Technical Session in 2nd International Conference on Mechanical Engineering (INCOM 2024), Jadavpur University, Kolkata, January 5-6, 2024.
7. Sudip Ghosh: Delivered Invited Talk in Faculty Development Program on "Application developments in the Lab on a Chip technology for Fluid and Thermal Sciences", 15-20 Jan 2024, HIT Haldia

Department of Metallurgy and Materials Engineering

1. Gautam Anand: Invited talk in "Artificial Intelligence in Materials Engineering: Theory and Hands-on Practice" 21-25 September 2023, NIT Rourkela, India.
2. Kaushik Das: 34th AGM of MRSI and 5th Indian Materials Conclave, IIT (BHU)

Department of Mining Engineering

1. N C Dey: On 9.12.2023 an Invited talk during full session of 3 hours for the Valuers in favour of RVO ESMA Foundation
2. N C Dey: On 3 January, 2024Impacting ground water by Climate change, Mining, Urban Mining in Chemical contamination – Successful mitigation solutions, Kolkata.
3. N C Dey chairing in 38th Indian Engineering Congress in Jabalpur Dec 27-29, 2023 on the theme Re-imaging tomorrow: Shaping the future through disruptive and interdisciplinary technologies.
4. N C Dey chaired in Indo-Russian (KuzBass Giproshakht Kemerovo) Co-operation in "Mining and Material Handling in India", By United Exploration India Limited, 26th May 2023.

Department of Physics

1. Mousumi Basu: Delivered an invited talk during the celebration of Women in Photonics by IEEE Photonics Society Kolkata chapter, on September 15, 2023 from 2.00 pm onwards at B. R. Nag Auditorium, 3rd floor, Institute of Radio Physics and Electronics, University of Calcutta.
2. Mousumi Basu: Tutorial session chair in 37th International Conference on VLSI Design and 23rd

International Conference on Embedded Systems (VLSID), 2024.

3. Syed Minhaz Hossain: At 37th IAPT Convention, Jaipur (8-12 October, 2023) onAt Homi Bhabha Center for Science Education, Mumbai (22-24 November, 2023).
4. Mousumi Basu chaired one tutorial session at "37th International Conference on VLSI Design and 2024 23rd International Conference on Embedded Systems (VLSID), 2024", held on January 6-10, 2024 in Kolkata.
5. Abhijit Bisoi delivered a plenary talk entitled "Structural evolution and K mixing in 49V" at the two-days Thematic Workshop entitled "Cutting-edge Research in Nuclear Physics: Symmetry, Structure and Applications" held on 17-18th January 2024 at the Department of Physics, Presidency University, Kolkata.

School of Advanced Materials, Green Energy and Sensor Systems

1. Invited Talk by Nillohit Mukherjee at Fourth International Conference on Material Science (ICMS2024), Department of Physics Tripura University, Suryamaninagar-799022, 31st Jan – 2nd Feb, 2024.Speech topic "Metal oxide semiconductors and functionalized carbon allotropes/compounds as good partners for clean energy generation and storage".

School of Community Science and Technology

1. Dipsikha Kalita, delivered a talk as a resource person of the expert talk on the topic of "Recent advances towards the application of non-thermal technologies in food processing" organized by the School of Agriculture (SoA), SR University, Warangal, Telangana on June 5, 2024.
2. Shantonu Roy, delivered a talk on "Sustainable strategy of algal biomass production using nano urea and subsequent rapid biomass harvesting using novel bioflocculant" at 16th Asian Conference on Biotechnology 2023, Asian Federation of Biotechnology, Ho Chi Minh City, Vietnam on 16th October, 2023.

School of Management Sciences

1. Shashwati Banerjee: A series of seven Invited talks on Managerial Economics at IISWBM Kolkata from 6 th May to 17 th June 2023 every Saturday.
2. Subir Kumar Sinha chaired a technical session in the International Seminar organized by University of Kalyani along with Indian Accounting Association on 9th February 2024.

School of VLSI Technology

1. Sudip Ghosh: delivered a talk in IEEE NTC chapter at IIT Patna on the topic "FPGA-Based VLSI System Design" on 27th May, 2023.
2. Sudip Ghosh delivered a talk at Saveetha Engineering College, Chennai on the topic "Current Perspective in Digital VLSI Testing" on 29th Feb 2024
3. Hafizur Rahaman: delivered a talk at UEM Kolkata on the topic "Advancement in Sensor Technology" on 13th May 2024.

9.9 Workshops/Conference/Seminar/Symposium Attended

Department of Aerospace Engineering and Applied Mechanics

1. Prince Raj: 14th Asian Computational Fluid Dynamics Conference (ACFD 2023) 30th Oct. - 2nd Nov. 2023, Bengaluru, India.
2. Prince Raj: 2nd national workshop on Electrical Aircraft and Allied Technologies @CSIR-NAL, 27-28, April 2023, Bengaluru, India.

Department of Architecture and Planning

1. Krishanu Santra: Program Title: Infrastructure and Built Environment Towards Sustainable and Resilient Societies IBSR 2024, Program Id: IIT/CEP/CON/CON/2023-2024/ID/126, Program Type: Conference, Program Venue: IIT Kharagpur Research Park New Town Kolkata, Program Tenure: 07-03-2024 to 09-03-2024
2. National Workshop on Earthquake Resistant Practices in the Built Environment, at IIT, Kanpur. July 22-29, 2023
3. Sutapa Das: 6th World Congress on Disaster Management, Dehradun, 28 Nov -1 Dec 2023.

Department of Chemistry

1. Chinmoy Bhattacharya: National Convention of Electrochemists (NCE-23), SRM Institute of Science and Technology (SRMIST), KTR, Chennai, India, 04-05th January, 2024.
2. Chinmoy Bhattacharya: International Conference on Electrochemistry for Industry, Health, and Environment (EIHE-2024), Vellore Institute of Technology (VIT), Vellore, India, 08-10th February, 2024.
3. Nanda Dulal Paul: International Conference on "Organometallics and Catalysis," Goa, India, 30th October-2nd November 2023
4. Nanda Dulal Paul: International Conference on "Modern Trends in Inorganic Chemistry."IISc Bangalore, India.14-17thDec 2023.
5. Nanda Dulal Paul:"Advanced Biological Inorganic Chemistry (SABIC-2024)." Kolkata, India, 7-11thJanuary, 2024.
6. Nanda Dulal Paul:"Emerging Trends in Catalysis & Synthesis" organized by The Departmentof Chemistry, IIT Kharagpur, Kharagpur, 7-9th March 2024.
7. Laksmikanta Adak: International Conference on ''Emerging Trends in Catalysis & Synthesis'' organized by The Department of Chemistry, IIT Kharagpur, Kharagpur, 7-9th March 2024.
8. Papu Biswas: "Modern trends in Inorganic chemistry (MTIC XX)" organized by IISc, Bangalore, 14-17th December, 2023.

Department of Civil Engineering

1. Dipankana Bhattacherjee: Attended the Annual Indian Geotechnical Conference, "Geotechnical Advances in Sustainable Infrastructure Development and Risk Reduction", held during Dec 14-16, 2023, IIT Roorkee.
2. Dipankana Bhattacherjee: Attended the Seminar organized by Kolkata Chapter of Indian Geotechnical Society, "National Seminar on Geotechnics-Recent Advancement in Research and Practices", held during August 04-05, 2023, Kolkata.
3. Dipankana Bhattacherjee: Attended the 1st International Conference on, "Sustainable Advanced Technologies for Environmental Management", held during December20-22, 2023, IIEST Shibpur, Howrah.
4. Saptarshi Kundu; Attended the Annual Indian Geotechnical Conference, "Geotechnical Advances in Sustainable Infrastructure Development and Risk Reduction", held during Dec 14-16, 2023, IIT Roorkee.
5. Aparna (Dey) Ghosh: Attended 5-days short term course titled "Structural Fire Engineering" during May 22-25, 2023, at IISc Bangalore.
6. Aparna (Dey) Ghosh: Was selected for and attended the 5 days training programme on "Steel Usage in Construction in India", under the aegis of the Ministry of Steel, Govt. of India, organized by the Association for Overseas Technical Cooperation and Sustainable Partnerships (AOTS) during 26th Feb – 1st March, 2024, at Tokyo, Japan.

Department of Computer Science and Technology

1. Nirnay Ghosh: Attended the 16th International Conference on Communication Systems & NETworkS (COMSNETS) to present our paper "ADRIN: An Adaptive and Distributed Routing Mechanism for Challenged IoT Networks," held in Bengaluru, 3-7 January, 2024.
2. Nirnay Ghosh: ASCAT 2024, National Institute of Technology, Durgapur, India.

Department of Electrical Engineering

1. 3rd International Conference on Control, Instrumentation, Energy and Communication, 2024 jointly organised by Dept. of Applied Physics, University of Calcutta, India and IEEE Joint CSS-IMS Kolkata Chapter, India with Anindita Sengupta as General Co-Chair.
2. Atanu Banerjee organized an International Conference on Energy, Power & Environment [ICEPE-2023] at NIT Meghalaya as Publicity and Publication Chair.

Department of Information Technology

1. Surajit Kumar Roy: 37th International Conference on VLSI Design and 2024 23rd International Conference on Embedded Systems 2024, Kolkata, 6 – 10th January 2024.

Department of Mechanical Engineering

1. Sudip Ghosh: Organized, as Conference Chair, IIEST Mech Centenary Conferences and Symposium (CCS) 2023, under which two conferences ran in parallel, namely: 2nd International Conference on Energy Resources and Technologies for Sustainable Development (ICERTSD 2023), 27-28 Apr 2023.

2. Sudip Ghosh: Organized, as Conference Chair, IIEST Mech Centenary Conferences and Symposium (CCS) 2023, under which two conferences ran in parallel, namely 1st International Conference on Mechanical Design and Manufacturing (ICMDM 2023), 27-28 Apr 2023.
3. Sudip Ghosh: Attended the one-day workshop on "Decarbonization in the Hard-to-abate Industry sectors", 19th February 2024, at IIT Bombay, on invitation.
4. Bidyut Pal: Workshop attended on Future of Work in Emerging Technologies, organized by Webel Fujisooft Vara, Kolkata, Centre of Excellence in Industry 4.0 on 16th February 2024.
5. Apurba Das attended 2nd International conference on Mechanical Engineering (INCOM 2024), January 5- 6, 2024, Jadavpur University Kolkata.
6. Apurba Das attended an International conference on Processing of Minerals, Metals and Materials (ICPMMM2024), 28 TO 29th March, 2024, Science City, Kolkata, India organized by Kazi Nazrul University, Asansol.

Department of Physics

1. Syed Minhaz Hossain attended "37th Annual Convention of IAPT" held during 8-10 October, 2023 at Jaipur, Rajasthan.
2. Syed Minhaz Hossain attended "Symposium on Physics Education"held during 22-24 November, 2023 at Homi Bhabha Centre for Science Education (HBCSE), Tata Institute of Fundamental Research, Mumbai.
3. Abhijit Majumder attended "The 8th International Conference on Computers and Devices for Communication (CODEC)" held on 14-16 December, 2023 at The Ramakrishna Mission Institute of Culture, Kolkata.
4. Mousumi Basu attended "37th International Conference on VLSI Design and 2024 23rd International Conference on Embedded Systems (VLSID), 2024", held during 6-10 January, 2024 in Kolkata and contributed two papers.
5. Abhijit Bisoi attended two-days thematic Workshop entitled "Cutting-edge Research in Nuclear Physics: Symmetry, Structure and Applications",held during 17–18th January 2024 at the Department of Physics, Presidency University, Kolkata.

School of Community Science and Technology

1. Shantonu Roy: Minakshi Chakraborty (Research Scholar), presented a poster inInternational conference on "Sustainable Innovation in Food Safety, Health and Nutrition" organized by Faculty of Dairy Technology. Date: 22nd and 23rd December 2023.
2. Shantonu Roy: Minakshi Chakraborty (Research Scholar), attended Skill development program on protein expression and structural characterization, organized by IICB Kolkata. Date 28th November to 11th December 2023.
3. Shantonu Roy: Sayan Roy presented a poster title: 'Sustainable Cultivation of Microalgae (Micractinium sp.,) and Use of aDual Purpose Vanadium Oxide Nanoparticles for Biomass Harvesting and Biodiesel Production,'16th Asian Congress on Biotechnology (ACB) 2023, Ho Chi Minh City, Vietnam, October 2023.
4. Dipsikha Kalita, presented Oral presentation entitled "Influence of Sono-Hydro Priming Technology On Malting Potential and Physico-Chemical Properties of Paddy" in International Conference on Sustainable Innovation in Food Safety, Health and Nutrition (SInFoCon-23) held on December 22-23, 2023, at Biswa Bangla Convention Centre, Kolkata.
5. Dipsikha Kalita, presented Poster presentation entitled "Non-Thermal Plasma Technology for Modulation of Germination Process in Kodo Millet" in the 9th International Food Convention (IFCoN) on 7th-10th December 2023" at Mysuru in association with CSIR-CFTRI DRDO-DFRL & CSIR-IITR as a co-organizer.
6. Shantonu Roy presented Oral presentation on 'Sustainable strategy of algal biomass production using nanourea and subsequent rapid biomass harvesting using novel bioflocculant;.16th Asian Congress on Biotechnology (ACB) 2023, Ho Chi Minh City, Vietnam, October 2023.

School of Management Sciences

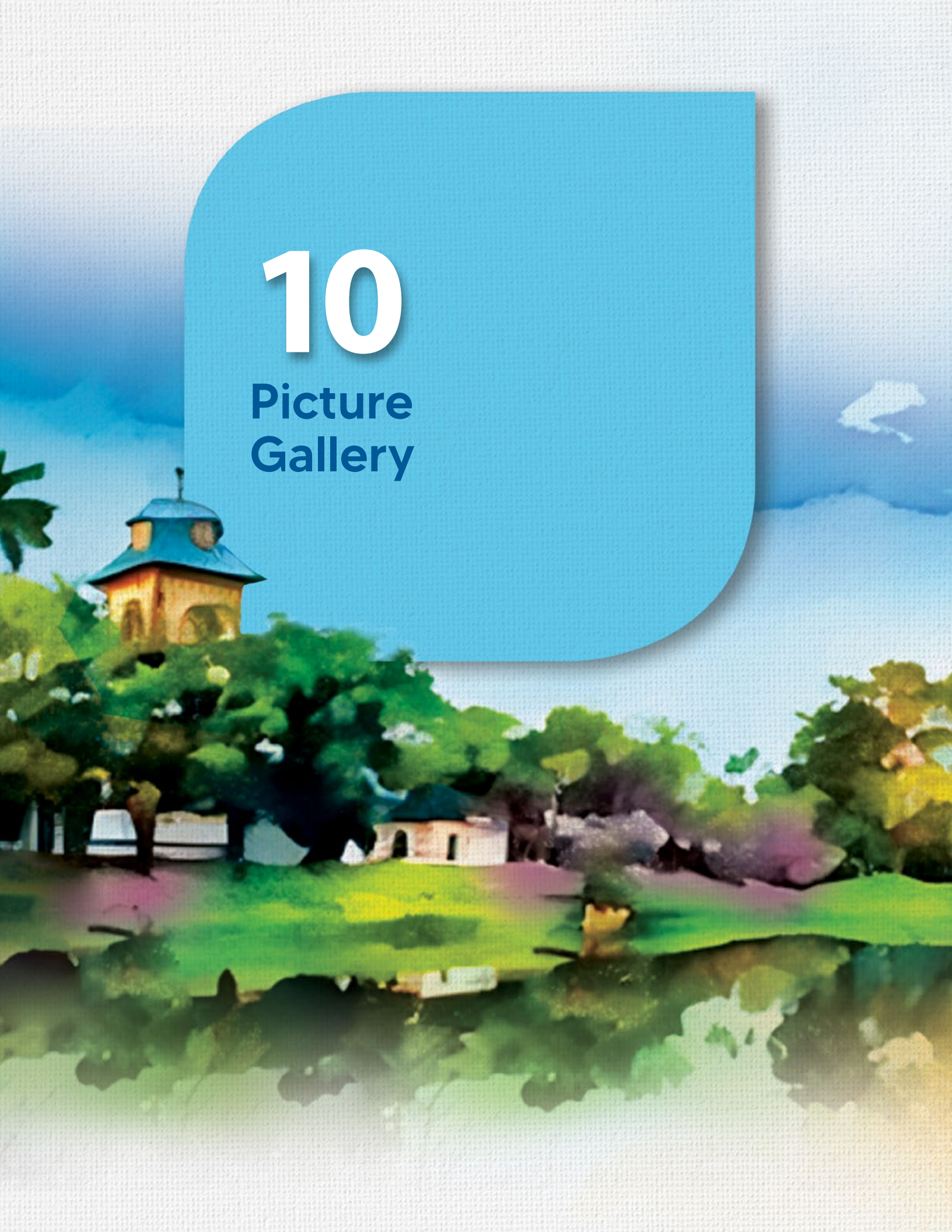
1. Rana Basu attended workshop on "Understanding Supply Chain: Concepts, Modelling, Optimization and Practices with Analytics" at Indian Statistical Institute, Kolkata during February 12 – 16, 2024.
2. Saswati Banerjee Presented paper titled "How the Occupational Diversifications Influence the Economic Status of the Slum Dwellers: An Analysis in the Districts of West Bengal?" at International Conference on Sustainable and Inclusive Urban Development in

Global South: International Experiences and Future Strategies"; organized by the Institute for Human Development (IHD) and Department of Urban and Regional Planning, University of Florida(UF) in partnership with the Jawaharlal Nehru University (JNU) and National Institute of Urban Affairs (NIUA), from 10th to 12th August 2023 at the India International Centre (IIC),New Delhi.

3. Saswati Banerjee Presented paper titled "An Analysis of Occupational Illness and Injuries of the Industrial Workers in Slums" at the International Conference on "Safety, Health and Analytics-Driven Governance for Sustainable Development" (SHADG 2024) from 29th to 30th January 2024 at the Indian Institute of Technology Kharagpur

School of VLSI Technology

1. Anirban Ganguly had attended the 5 days of Instruction Enhancement Program (IEP) workshop on 'ASIC Digital Design Using SCL 180nm PDK" from 12th to 16th February 2024 at C-DAC, Bangalore. This workshop was arranged by Chip IN Centre of C-DAC, Bangalore for all institutes under the C2S program of MeiTy GOI.



10 Picture Gallery

Picture Gallery

10.1 Glimpse of Institute Programs / Events

Ambedkar Jayanti

'Dr. B. R. Ambedkar's Birthday Celebration' was organized by IIEST, Shibpur in the institute premises on 14th of April (Friday), 2023. This occasion was inaugurated by the Honourable Director, Prof. Parthasarathi Chakrabarti, and was attended by the faculty, staff and students of the Institute with great enthusiasm. This was an auspicious occasion to honour the contribution of the father of the Indian Constitution by IIEST, Shibpur

World Intellectual Property Day

'World Intellectual Property Day' was celebrated by IIEST, Shibpur, on 26th April (Friday), 2023 to raise awareness among the students of how patents, copyright, trademarks and designs impact daily-life

Birth Anniversary of Gurudev Rabindranath Tagore

154th Birthday of Gurudev Rabindranath Tagore was celebrated by IIEST, Shibpur on 8th May (Wednesday), 2023 in the institute premises. This auspicious occasion was inaugurated by the Honourable Director, Prof. Parthasarathi Chakrabarti, of IIEST, Shibpur and was enthusiastically observed by the IIEST community.

World Bicycle Day

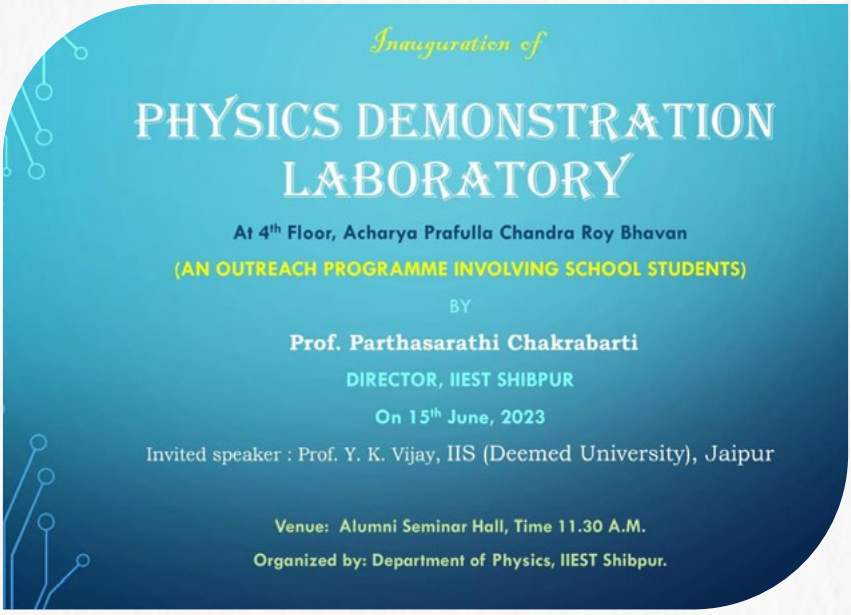
'World Bicycle Day' was celebrated by IIEST, Shibpur, on 3rd June (Saturday), 2023 at Netaji Bhawan from 9.00 a.m. onwards to raise awareness about the benefits of cycling and urging more people to take up this mode of transportation to enable a sustainable way of living.

World Environment Day

'World Environment Day' was celebrated by IIEST, Shibpur, on 5th of June (Wednesday), 2023 to encourage awareness and action for the protection of the environment among all.

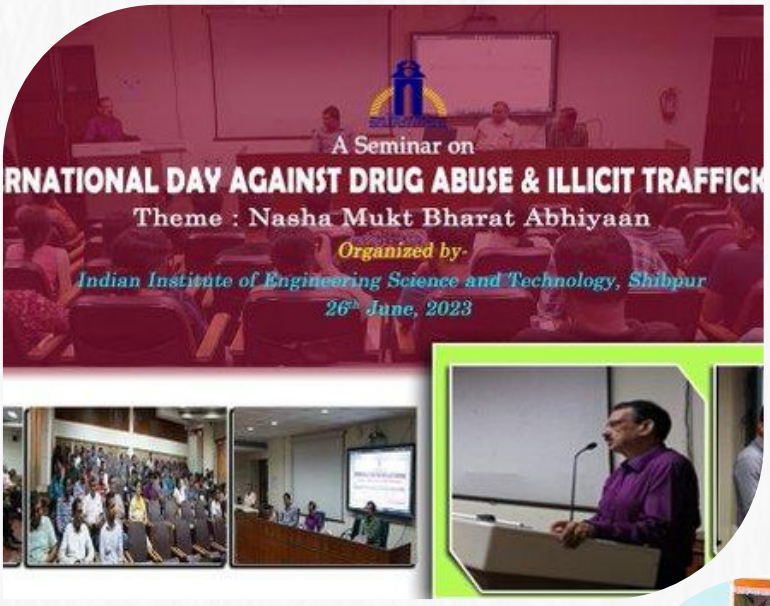
Inaugural Ceremony of Physics Demonstration Laboratory

Department of Physics, IIEST, Shibpur organized the inaugural ceremony of the "Physics Demonstration Laboratory" for the purpose of imparting physics education in an attractive and lucid manner to the young minds. The ceremony was held on June 15, 2023 from 11:30 am onwards.



International Day of Yoga

'International Day of Yoga' was celebrated by IIEST, Shibpur, at the Students' Amenities Centre, on 21st of June (Friday), 2023 from 6:30 a.m. onwards to raise awareness about the significant benefits of Yoga exercises for physical and mental well-being of every human being.



International Day against Drug Abuse and Illicit Trafficking

A seminar was held on "International Day against Drug Abuse and Illicit Trafficking" at IIEST. Shibpur on 26th June 2023 to raise awareness about how drug abuse and illicit trafficking negatively affects the society. This event was attended by the Honourable Director of IIEST, Prof. Parthasarathi Chakrabarti, faculty, staff and the students.

Independence Day

Independence Day was celebrated by IIEST, Shibpur on 15th August 2023 on its campus. Honourable director of IIEST, Shibpur, Prof. Parthasarathi Chakrabarti, hoisted Indian National flag and addressed the audience. This was followed by patriotic cultural programs by the students of IIEST, B.E. College Model School and children of Udayan Shob Peyechhir Ashar.

ITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, Sh.

DETAILS OF THE ORIENTATION PROGRAM 2023-24
the Venue is at the Basement of the 8-storied Science and Technology (S&T) ,

Session-II	Session-III
4:30 p.m. – *5:30 p.m.	*6:30 p.m. – 7:30 p.m.
re on Indian Knowledge System by Prof. Prasad Mishra, Director of NITTTR Kolkata	Lecture on 'श्रद्धा: An Essential of Personality Development' by Swami Mahaprajnananda, Prin Vidyamandira
12:00 Noon – 1:15 p.m.	2:30 p.m. – 3:45 p.m.
re on stones of Indian Science' of. Ayan Datta, Association for the Cultivation of Science, ta	Lecture on 'Astronomy & Space S New Frontiers' by Dr. Debiprasad Director, Research & Academic o Birla Institute of Fundamental Re Kolkata
12:00 Noon – 1:15 p.m.	2:30 p.m. – 5:00 p.m.
re on 'Role of Engineers in Nation Building Economic Development' By Dr. Pallab jee, IIT Kharagpur	Visit of UG Freshers to their Departments
12:00 Noon – 1:15 p.m.	2:30 p.m. – 5:00 p.m.
re on 'National Education Policy – 2020'	Valedictory Session & Panel discus interactive session on "Quality, Rel Safety for ATMANIRBHAR BHA (3:00 – 4:30 p.m.)
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Orientation Program Schedule for UG, PG & PhD Students

Orientation Programme of the newly admitted undergraduate and postgraduate students and PhD scholars was conducted by IIEST from 23rd to 27th August 2023. Several enlightening lectures were arranged for the benefit of students and this was followed by cultural programs performed by students and professional performers.

Swachhata Pakhwada

"Swachhata Pakhwada–Swacchata Hi Seva (SHS)" 2023 was observed by IIEST on 1st October 2023. A massive cleanliness drive was held as a tribute to Mahatma Gandhi on the eve of his birth anniversary at the site near the 3rd gate of IIEST, Ganga Ghat. This event was attended by faculty, staff and students of the Institute.

Vigilance Awareness Week

IIEST, Shibpur celebrated the Vigilance Awareness Week from 30th October to 5th November 2023. This event was attended by the Honourable Director, Prof. Parthasarathi Chakrabarti, the Deans, Associate Deans, HoDs, student representatives, faculty, staff and students. An essay competition on the topic "Say no to corruption: commit to the Nation" was organized to commemorate the occasion.

National Unity Day

National Unity Day (Rastriya Ekta Diwas) was celebrated by IIEST, Shibpur on 31st October 2023 to mark the birth anniversary of Sardar Vallavbhai Patel. This event was inaugurated by Honourable Director of IIEST, Shibpur, Prof. Parthasarathi Chakrabarti. This was followed by patriotic songs by the students, staffs and faculty members, taking Rashtriya Ekta Divas Pledge and singing the National anthem.

Tenth Annual Convocation

The 10th Annual Convocation of IIEST Shibpur was celebrated on December 22, 2023. Dr. Kota Harinarayana, delivered the Convocation Address as the Chief Guest. Smt. Tejaswini Ananth Kumar, Chairperson, Board of Governors, IIEST, Shibpur, presided over the function. Prof. Parthasarathi Chakrabarti, Director, IIEST, Shibpur deliver the welcome address of the convocation. Undergraduate, postgraduate and PhD students were awarded their degrees.

Republic Day

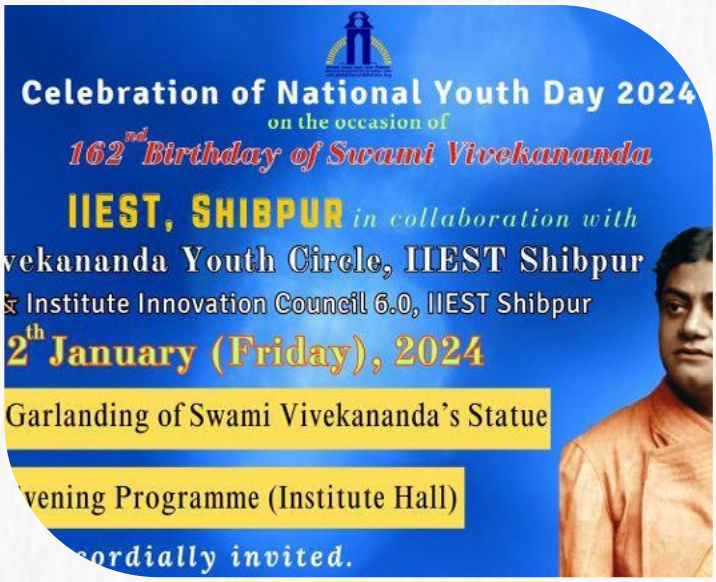
IIEST, Shibpur celebrated the "75th Republic Day" on 26th of January, 2024 (Friday) at 8:50 A.M at the Flag Stand Ground of the Institute Campus to commemorate the Republic Day of India. Honourable Director, Parthasarathi Chakrabarti, Deans, faculty members, staffs, and students of this institute and B. E Model School attended the event. Prof, Chakrabarti hoisted the National Flag of India and delivered his Republic Day address. Patriotic songs and cultural programmes were performed by the students of this institute, the students of B. E College Model School, B. E College Udayan Sab Peyechheir Asar, and campus inmates.

VIRASAT 2024

IIEST, Shibpur in collaboration with the Society for the Promotion of Indian Classical Music and Culture Amongst Youth (SPIC MACAY) organized the VIRASAT 2024 from 8th January 2024 to 16th January 2024 on Institute Campus. 'Virasat 24' was a cultural programme of classical music and performing art in Indian tradition, art and heritage. It was intended for the students of IIEST to experience music and art. The Honourable Director, Prof. Parthasarathi Chakrabarti inaugurated the programme. Kathak dance, Manipuri dance, Dhrupad, Patua painting, Yoga, and live concerts were performed by renowned artists and personalities.

National Youth Day

IIEST, Shibpur in collaboration with "Vivekananda Youth Circle" and Institute Innovation Council (IIC 6.0) celebrated the National Youth Day on 12th January, 2024 (Friday) to honour the birth anniversary of Swami Vivekananda. The programme was held in two sessions: the morning session was held near the statue of Swami Vivekananda on campus and the Evening session was held at the Institute Hall. Both the sessions were chaired by the Hon'ble Director, Prof. Parthasarathi Chakrabarti. Faculty members, officers, staffs, and students were present in the event.

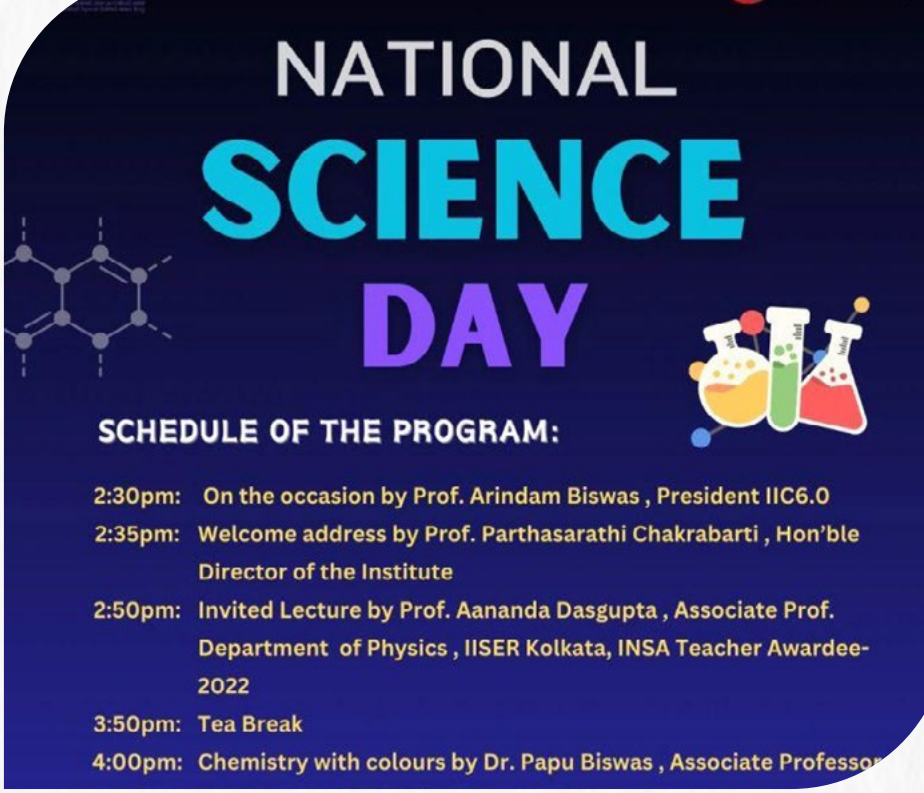


Nascent Quizzogen

The quiz club named 'Quizmaniac Beings' organized "Nascent Quizzogen" for the students on 31st January, 2024 (Wednesday) for enhancing students' critical thinking skills. IIEST. This quiz competition was an initiative towards "VIKSIT BHARAT @2047".

National Science Day

IIC6.0 of IIEST, Shibpur celebrated "National Science Day" on 28th February, 2024 at 2:30 P.M. at the Alumni Seminar Hall of the Institute on the occasion of Birth Anniversary of Sir C.V Raman to raise awareness about the importance of science and its role in improving the lives of people. Hon'ble Director, Prof. Parthasarathi Chakrabarti. delivered the welcome address. Prof. Ananda Dasgupta from IISER Kolkata was the invited speaker. Students of this institute along with the invited students of the nearby schools were present in the event.



International Mother Language Day at IIEST, Shibpur

IIEST, Shibpur observed "International Mother Language Day" on 21st of February, 2024 (Wednesday) to promote linguistic, and cultural diversity, and the preservation and protection of all languages. Honourable Director Prof. Parthasarathi Chakrabarti, officers, faculty members, students participated in the programme.

Jan Jatiya Gaurav Diwas

3rd Jan Jatiya Gaurav Diwas (JJGD) was observed by IIEST Shibpur on 24th November 2023. The event commenced with the inaugural speech by Honourable Director, Prof. Parthasarathi Chakrabarti. This was followed by a lecture by the invited speaker Mr. Thakur Prasad Murmu,and an essay competition on " Empowering Tribal Communities: Balancing Development, Welfare, and Environmental Protection".

Constitution Day

IIEST, Shibpur organized the "Constitution Day" on 26th of November, 2023 (Sunday) at 11:00 A.M at the Conference Room, Office of the Director to commemorate the adoption of the constitution of India. Honourable, Director- Parthasarathi Chakrabarti, Deans, faculty members, research scholars, students, officers, and staff members attended the programme. The institute organized quiz, essay and speech competitions, and also a mock parliament to spread awareness of the constitution of India.

National Voters' Day

IIEST, Shibpur celebrated the National Voters' Day (NVD-2024) on 25th of January, 2024 (Thursday) at 4:40 p.m. in the Conference room of the Honourable Director to encourage the youth to participate in the vote in the electoral process. The theme for this year was "Nothing like voting, I vote for sure".

Indian Institute of Engineering Science and Technology, Shibpur
भारतीय अभियान्त्रीकि विज्ञान और प्रौध्योगिकी संस्थान, शिवपुर
ভারতীয় অভিযান্ত্রীক বিজ্ঞান এবং প্রযুক্তিবিদ্যা সংস্থা, শিবপুর
(An Institute of National Importance)
CENTENARY GATE

11

Students' Amenities and Activities

Students' Amenities & Activities

11.1 General

On the recommendation of the Review Committee (1953), a proctorial department was established at the erstwhile Bengal Engineering College, Shibpur in the year 1956. The principal objective of the department was to look after their discipline, welfare, and extra-curricular activities of students. With the conversion of this Institute to a CFTI, the Institute switched over to a Dean based mode of functioning and, as such, since 2014, it functions under the direct supervision of the Dean (Student Welfare). In order to create an environment conducive to fostering growth of academic and cultural life in the Institute and to develop sound mental health of students the Institute considers it important to engage those students creatively in various activities to hone their soft skills. Such activities include, inter-alia, activities in the domain of sports, culture, soft skill, and hobbies. Various students' societies like Societies for Artistic Expression, Music and Dance, Debate and Quiz, Drama and Literature, Modelling and Robotics have been formed with befitting names. These societies function under the overall guidance of the Dean - Student Welfare.

11.2 Proctorial Board

A Proctorial Board has been constituted at the Institute to monitor and oversee the discipline related matters and to advise the Director on corrective and other necessary measures. For imposing disciplinary measures, the Board is guided by the 'Manual on Student discipline' framed by the Institute Senate.

The Proctorial Board of the Institute is reconstituted with the following members vide order No. RDO/2802/22 dt. 02.12.2022.

1)	Prof. Sudipta Mukhopadhyay, Dean (S/W) & Chief Warden	-	Chairman
2)	Dr. Nityananda Nandi, Associate Dean (S/W)	-	Member
3)	Prof. Pritha Das, Dept. of Mathematics	-	Member
4)	Dr. Chinmoy Bhattacharrjee, Dept. of Chemistry	-	Member
5)	Sri Alok Kumar Mitra, Assistant Registrar (HMC)	-	Member
6)	Sri Abani Oraon, Assistant Librarian	-	Member
7)	Dr. Santanu Maity, SAMGESS	-	Member
8)	Dr. Ananya Barui, CHST	-	Convener

11.3 Students' Hostels

There are 20 Hostels/Halls of Residence for students (including 3 extensions). Three women's hostels cater exclusively to girl students and research scholars. Day-to-day management of each of the halls/ hostels is looked after by a Warden/ Superintendent appointed from amongst the members of the faculty/ officer. At every hostel, a mess committee is constituted from amongst the borders to oversee the messing arrangements. At the Institute level, a Joint Mess Committee (JMC), comprising representatives from every mess committee, ensures coordination and takes policy decisions. While the overall hostel administration is looked after by the Chief Warden, responsibility for dispute resolution is vested with the Dean (Student Welfare).

Celebration of Saraswati Puja at Halls/Hostels

11.4 Sports and Games

The Athletic Club is the hub of the activities involving sports, games and physical exercises. Athletic Club plays a key role in the everyday lives of students cultivating and nurturing their talents in the sports and games arena. The students, under the auspices of the Institute's athletic club, participate in a variety of physical activities during their time beyond academic hours.

The campus has two playgrounds - The 'Lords' in the east and the 'Oval' towards the west. These playgrounds provide opportunities to the students for practising sports like cricket, football, etc. A newly constructed Basketball Ground and a Volleyball Ground are new attractions. A swimming pool is open to the students and campus inmates for nine months of the year. The gymnasium of the Institute has undergone significant modernisation in the recent past.

Sports facilities available at the Institute include Football Ground, Cricket Ground, Volleyball Ground, Badminton Court (Concrete), Basketball (hard court) and a well-equipped gymnasium. A Students' Amenity Centre and a Yogic practice arena have recently been added to the facilities. Activities relating to Sports and Games are overseen by the Games & Sports Club.

11.5 Sports Training

Apart from two regular physical instructors, a few part-timers are associated in the physical training and sport-related training/ coaching of the students. Stress is put on scientific training procedures for the development of sports performances in different sporting events.

11.6 National Service Scheme (NSS)

The Institute's NSS programme is oriented towards developing socially sensitised personalities in the students. NSS cadres offer complimentary assistance in the academic pursuits of local destitute children in the form of free tuition. NSS units also raise and distribute books and related learning materials. Exercise books, copies, pens, pencils, and erasers are distributed on "No charge basis". During the year under review, the NSS unit organized a garment distribution programme and also organized a Voluntary Blood Donation camp in the Institute campus.

On the auspices of "Azadi ka Amrit Mahotsav", the Government of India decided to Celebrate the International Day of Yoga, 2023, with great enthusiasm across the

country. This year, our Institute, IIEST Shibpur, as an associate of NSS took an initiative to present an occasion to spread awareness and message to the common people through regular practice of Yoga with the help of the NSS volunteers, students and staff members.

In the last session, the NSS unit of the Institute undertook a number of social activities with the volunteers of the Institute.

- Displayed hoarding, banner at prominent places in the slum areas regarding Health, Nutrition, Hygiene, Sanitation, ill effects of drugs & smoking, child labour, early marriage etc. for focusing public attention and awareness.
- Continuing self-defense activities for female students. A total of 20 girls were actively engaged in this programme.
- Organized one Women's Self Defense workshop in the campus.

11.7 National Cadet Corps (NCC)

The NCC unit at the Institute is affiliated with the Senior Division of 49 Bengal Battalion NCC. The Unit aims to serve the nation through appropriate activities. It also prepares the students for the NCC certification examination.

Celebration of Republic Day at IIEST, Shibpur

As of now, the Institute has registered 60 student cadets in the 41 Bengal Bn NCC. We have supported the unit to conduct Firing activities twice in the Institute Firing Range. However, due to unavoidable circumstances, no cadets of this institute took part in the said small-arm firing activities. In the coming year, we are planning to register more than 40 students as NCC cadets in the unit. Also, this year, we are going to organize an additional programme on the advantages of NCC in the future endeavour of Engineers and technocrats, having engineering degrees. They could get ample scope to crack SSB examination in the Defence Services as Engineers.

11.8 Students' Senate

In order to create an environment conducive to fostering the growth of academic and cultural life in the Institute and to develop the sound mental health of the students by engaging themselves creatively within the Institute campus, an idea of constituting a Students' body named Students' Senate was conceived. The principal objective for forming the Students' Senate has been to empower the students so that they can express themselves and act creatively in diverse areas of academics, culture, sports, and games with a sense of fraternity.

With all bonafide students as its members, the General Council of the Students' Senate is elected by its members. The General Council comprises Secretaries, Treasurers from various Students' Academic Societies, Students' Societies of Creative Expressions and Captains of Students' Clubs of Games and Sports.

The executive committee of the Senate is constituted mostly from amongst the members of the general council through a process of election. The Director nominates the President and the Vice-President of the executive committee from among the members of the faculty.

11.9 Students' Societies

Various students' clubs/societies are active; the societies provide platforms to students to pursue extra-curricular activities and hobbies. The Students' Societies active in 2023-24 include:

1)	Camera Buff	The Cine Club
2)	Catharsis	The Photographic Society
3)	Code IIEST	The Coding Club
4)	Debsoc	The Debating Society
5)	Euphony	The Music Club
6)	Les Thespiens	The Drama Club
7)	Lit Soc	The Literary Society
8)	Quiz Maniac Being	The Quiz club
9)	Reflex-o Beta	The Dance Club
10)	Robodarshan	The Robotic Society
11)	SCAGE	The Society for Creative Arts and Green Environment
12)	Entrepreneurship Development Cell	The Society for Entrepreneurship Development and Innovation
13)	Society of Games and Sports	The Society for Games and Sports activities
14)	Club on Engineering Safety (ENSAFE)	The Club for addressing Engineering Safety & Environment
15)	Vivekananda Youth Circle	The Club for promoting eternal ideals preached by Swami Vivekananda
16)	Animal Welfare Club	The Club for taking care of stray animals staying and moving inside the institute campus
17)	Indian Knowledge System Club	For promoting and exploring Indian Knowledge System

At the 'Students' Centre for Creative Expression', the students practise dramatics, music, photography, quizzes and debates, etc. Students interested in scientific modelling and Robotics, find ample scope to develop innovative models, including robots. The Students' Robotics Club has developed a number of different types of Robots, including Robots with vision. A Coding Club nurtures the students to hone their software development acumen. Instruo, the inter-collegiate techno-management festival and the REBECA, the Annual Students' Social are the inter-collegiate events that cause reverberations in the campus through hundreds of foot-falls.

LitSoc

LitSOC, the Literary Society of IIEST Shibpur was established as a sanctuary, a safe haven for all its students, where everyone is free to express themselves. LitSoc aims to provide a platform, not to just creative writers and avid readers, but to all the like-minded individuals to come together and learn the art of expression. The very root of the Society is in creating an atmosphere of creativity and out-of-the-box thinking through countless successful events.

Reflexo-Beta

The dance club is a hub for all the dancers in the campus to dance out their motivations. The club has members starting from freshers to research scholars - who practise a wide range of dance forms from Indian classicals like Kathak, Bharatnatyam, Kathakali to western forms like hip hop, dubsteps, contemporary, Bollywood and several other dance forms. The club is focused on the art and is interested in promoting messages through concept expression forms and its compositions.

Camera Buff

Camerabuff is the official film club of IIEST, Shibpur. In this club, the knowledge and ideas of different aspects of cinema are reviewed. Apart from that the knowledge about the technicalities of a cinema is also imparted to the students of this college. As a whole, students enjoy every bit of what they do and what they watch for creating a good bond and togetherness with today's society.

Les Thespians

Les Thespians, the official dramatics society of IIEST Shibpur was founded back in 2009. It has produced many successful and tremendously praised theatrical productions. The society helps the theatre enthusiasts of the Institute to build a common platform. Les Thespians produces many home production dramas throughout the year and invites professional drama groups as well to perform on various occasions.

Euphony

Music: the word that brings to our memory the reverberations of our favourite songs and artists. It is much more than a few vocal melodies or instrumental rhythms.

It is an art, it is an emotional expression. And at Euphony, we respect, love, practice, and spread the joy of this art form. It isn't just a place for guitarists, drummers, or singers; it consists of an assortment of people who love music, who find passion in music and enjoy it. From folk songs to electronic compositions, we house a multitude of music styles. So, while our namesake may be synonymous to pleasing sounds, the music society, at the end of the day, also becomes a music learning school, a family, a home that nurtures the talents of young musicians and helps them flourish.

Quizmanic BEings

Quizmaniac Beings started in 2008 with regular sessions being conducted in N-235 Classroom and since then it has grown in size. We aim to change the way people think about quizzing and shed their redundant ideas about it as its questions have come to privilege not just memory but also breadth, deduction and lateral thinking. This new shape was a response to the rise of the internet. By conducting regular open quiz sessions in college create a conducive atmosphere for quizzing. The biggest trick to succeed in a quiz isn't just knowledge or memorizing facts but the inherent curiosity to find out The Why.

DebSoc

The aim of the society is to serve as a platform for avid orators and help build a debating culture on campus. The activities hone speaking skills, instil confidence and help develop public speaking abilities.

Robodarshan

Robodarshan is a club founded in 2009 to invoke interest in students about robotics. Robodarshan's motto is 'there is nothing a bot can't do. The primary activities of Robodarshan include conducting lecture sessions on robotics, the lecture sessions are followed by hands-on sessions, where Robodarshan mentors in making a robot for specific tasks. Robodarshan conducts DIY, exclusively for the first-year students of IIEST and a plethora of fun robotics competitions, which goes by the name Automaton, a part of Instruo – the techno-management fest of IIEST. Robodarshan also collaborates with other departments of IIEST Shibpur to organise Robotics events.

Entrepreneurship Development Cell

Entrepreneurship Development Cell, IIEST Shibpur (EDC IIESTS) was set up in the year 2009 under the AICTE initiative and is working under the guidance of the Department of Human Resources Management, IIEST Shibpur in coordination with NRDC-IIEST IFC, TCGTBI and now with IIC IIESTS. With the sole aim of enhancing the standard of innovations around the region of IIEST Shibpur, the Entrepreneurship Development Cell focuses on fostering the corporate culture onto the pool of IIEST students through several external activities like raising the awareness on the field of Medium, Small and Medium Enterprises with the involvement of the students from IIEST & Non-IIEST and faculty under a single pool of working community.

Code IIEST

In this age of increasing automation, programming is not limited to only computer science and related fields. Every competent engineer needs to know how to program. This makes Code IIEST one of the most important clubs in the institute. As of now it has four different chapters - Competitive Programming, Machine Learning, Security, and Open Source. A platform is created, which allows students to gain assistance and mentorship to come together to learn and solve algorithmic challenges, participate in various contests all over the globe, develop web and system applications and solve intriguing problems enhancing their coding ability. The aim of the club is to propagate the enthusiasm for coding in the Institute and especially amongst freshmen. The secret of getting ahead is getting started and this club provides every student with the right start.

Catharsis

It is a family of engineers, who found their solace in photography, their passion, their expression, their catharsis. They say, there are things that nobody would see, had a photographer not captured them, and at Catharsis, the young shutterbugs try to freeze those moments with their shutters and bring out the greater truths of life. While Catharsis is now decade-old club, this student's society began its journey as BECPhos – B E College Photographic Society back in 1971. The club welcomes all photography enthusiasts among college students, beginners and old-timers alike, to explore this field of art and bring out their creative gifts.

Society of Games and Sports

Since the inception of this glorious Institute, the two major wonders of the campus are the Oval and Lords Ground and the Gymnasium formed in the later years. Fostering the sporting culture, this society has been serving the Institute right from its very establishment. Firstly, known as the Athletic Club of IIEST, Shibpur had a unique structure which got renamed as the Sports Board of IIEST, Shibpur. It boasts of its age-old traditions and never ceases to stop excelling.

SCAGE (Society for Creative Arts and Green Environment)

SCAGE is a platform where students get to express themselves in all forms of Art domains. The club intends to nurture Creativity within oneself, while keeping in mind one's responsibility towards conserving Green Environment.

Club on Engineering Safety (ENSAFE)

The ENSAFE is said to be dedicated to address the burning issues of safety across various engineering domains and spread awareness of the same in society.

Vivekananda Youth Circle

The Vivekananda Youth Circle is said to provide excellent opportunity to those students of the institute, who are striving to work, think and build their characters on the eternal ideals preached by Swami Vivekananda by reading and organizing appropriate literature.

Animal Welfare Club

The Animal Welfare Club is said to take care of stray animals, staying and moving inside the institute campus systematically and efficiently as a self-less job.

Indian Knowledge System

The purpose of this club is to promote and explore the Indian Knowledge System (IKS).

11.10 Infrastructural Development in Sports

In spite of adversities, the institute authority helped a lot to develop the Students' Sports infrastructure in this crisis. For the Sports Facility development programme, a few steps were taken:

a) Installation of Electronic LED Cricket scoreboard at OVAL is completed.

b) Renovation of the existing wooden heritage cricket scoreboard at OVAL is in progress.

c) Installation of 1000 L PVC water tank at OVAL is completed.

d) Installation of Glow-sign board at the entrance of OVAL is done.

e) Renovation of the galleries of the OVAL ground is completed.

f) Renovation work of the gymnasium is completed.

g) Pure Drinking Water facility is completed in the OVAL Ground and Gymnasium.

Moreover, the Alumni Association of the Institute also developed an international standard synthetic polygrass-coated volleyball court. It is to be handed over to the Sports Board shortly.

11.11 Different Sports Activities Organized / Participated

- Participated in PMCM Memorial Tournament ISI Kolkata (14.10.23 to 16.10.23) Volleyball, Semi-finalist Basketball Quarter final.
- IIEST Football League (4th to 10th April 2023)
- Students of IIEST participated in a sports fest of IIT Khargapur held on 14th to 16th October, 2023.
- Chess Tournament was held from 28th to 29th October, 2023 at Gymnasium of IIEST, Shibpur
- Inter Dept. 1st year Football Tournament was held from 6th to 9th November, 2023.
- IIEST Table Tennis Tournament was held in Netaji Bhawan from 28th to 30th October, 2023.
- Inter Year Football Tournament was held from 10th to 17th November, 2023 at Oval Ground.
- Freshers Cricket League was held from 14th to 15th January, 2024 at Oval Ground.
- IIEST Premier Cricket League was held from 26th to 28 January, 2024 at Oval Ground.

Inauguration of IIEST, Premier League (IPL) of 2024

Inauguration of IIEST, Premier League (IPL) of 2024

- "PARAKRAM", a Sports Fest was held from 8th to 10th March, 2024 at ISM, Dhanbad. 108 nos. of students participated in different games, i.e., Football, Volleyball, Cricket, Badminton, Table Tennis, Power Lifting, Basketball etc.
- Student Premier League (SPL) was held from 15th to 17th March, 2024 at Lords Ground.
- Annual Athletic Meet – 7th – 8th February, 2024.

Inauguration of Annual Athletic Meet – 2024

- Inter year Basketball Tournament was held from 22nd to 24th March, 2024.
- Induction for different sports like Cricket, Volleyball, and Badminton was organized in the month of January for freshers.
- "Dangal", which comprises "Kabadi, Table-Tennis and Tug of war, was organized from 01.03.2024 to 03.03.2024 by Macdonald Hall.

11.12 Different Cultural Activities Organized / Participated

- Celebration of Dr. B. R. Ambedkar Jayanti was held on 14th April, 2023.
- Celebration of Creative Arts and Green Environment (SCAGE) was held on 21st April, 2023.
- Celebration of Rabindra Jayanti was held on 9th May, 2023.
- Institute organized World Bicycle Day held on 3rd June, 2023
- Celebration of World Environment Day held on 5th June, 2023.
- International Yoga Day was held on 21st June, 2023.
- International Day against Drug Abuse & Illicit Trafficking was held on 26.06.2023.

Celebration of Constitution Day - 2023

- Celebration of Raksha Bandhan was held on 30.08.2023.
- Celebration of Birth Anniversary of Sardar Vallabhbhai Patel – UNITY RUN was held on 31.10.2023.

Celebration of Parakram Diwas, 23rd January, 2024

- REFLEXOBETA of IIEST, SHIBPUR participated in Kashiyatra at IIT, BHU.
- Celebration of Independence Day held on 15th August 2023
- Celebration of ONAM was held on 26th August, 2023.
- Celebration of Jan Jatiya Gaurav Diwas (JJGD) was held on 24th November, 2023.
- Celebration of Constitution Day was held on 26th November, 2023.
- Grand celebration of Krishna-Janmastami and Ganesh Chaturthi was organized by the students.
- "Virasat" – a 10 days long cultural programme was organized by the students of IIEST, Shibpur. in association with "SPICMACAY". It comprised workshops of "Kathak, Manipuri Dance, Dhrupad singing, Patau Paucity and Meditation and 4-day long concerts. Different Padmashri Grand and SNA awardee artists graced the occasion.

Celebration of Republic Day, 26th January, 2024

- Celebration of Makar Sankranti was organized, followed by "Bhog on the 13th and 14th of January 2024.

Celebration of Makar Sankranti, 15th January, 2024

- The students participated in the prestigious Association for Computing Machinery International Collegiate Programming Contest (ACM ICPE Regionals) in ICPE Amritapuri Regional Contest was held on 27 – 28 January, 2024 and ICPC Chennai Regional Contest was held on 11 – 12 January, 2024.
- Celebration of "Pran-Pratistha of Ramlala" was organized by the students on 22nd January, 2024

Celebration of Ramlala Pran Pratistha, 22nd January, 2024

- Induction programmes of different Societies like Euphony, REFLEXOBETA, Quiz Maniac Beings etc. have been organized for BTech 1st year students in January & February, 2024.
- "National Youth Day" was celebrated on 12th January 2024. "Swami Tegomayanad Saraswati" participated as Chief Guest in the Programme.
- Technical Festival of Club "Robodarshan" named "Robocom" was held during 27th – 28th January 2024.
- Technical Festival of Mechanical Department "Impetus" was organized (9th to 11th February 2024).

Inauguration of Technical Fest of Mechanical Engg. Departmental "IMPETUS", 2024

Inauguration of Technical Fest of Mechanical Engg. Departmental "IMPETUS", 2024

- Annual Athletic Meet of the Institute was held during 7th – 8th February, 2024.

Inauguration of Technical Fest of Mechanical Engg. Departmental "IMPETUS", 2024

Closing Ceremony of Annual Athletic Meet - 2024

- Celebration of Saraswati Puja was held on 14th February, 2024

Visit of Director and Dean (S/W) at different Hostels during Basant Panchami – 2024

Celebration of Basant Panchami, 2024 at PG Hostel

- Woman's Day was organized on 8th March, 2024. A Speech/Elocution competition on Topic "Role of education in Women Empowerment" among the students and faculty members of the Institute in the Alumni Seminar Hall.
- 4 nos. of students participated a national Level HACKATHON event on 2-3 March, 2024 at NIT, Rourkela.
- 2 nos. of student contested in prestigious HACK NITR, at NIT Rourkela, on 2-3 March, 2024.
- SCAGE SOCIETY organized Mural Painting programme in Netaji Bhawan on 05.03.2024.
- Reflexobeta, a Dance Club of IIEST, Shibpur participated in a cultural fest in IIT, Guwahati from 7th to 10th March, 2024.
- "VAIDYUTAK", a fest was organized by ETCE Dept. from 15th to 17th March, 2024.
- LitSoc Society of IIEST, Shibpur organized a poetry event, Shaam-e-Sukhan at the Institute Hall on 18th March, 2024.
- REFLEXOBETA SOCIETY organized MUSE programme on 19.03.2024.
- QUIZMANIAC BEINGS SOCIETY organized "Gyandhara" (Inter - College Quiz Competition on 30-31 March, 2024
- Technical festivals of various departments are organised during February-March, 2024.

12
Alumni Activities

Alumni Activities

1. Alumni Cell Meeting on 13th April 2024

- Re-constitution of Alumni Cell, IIEST, Shibpur.
- Passed a proposal for conducting three-week long lecture series on Multi-Body Dynamics by Prof. Arun Kanti Banerjee, an Alumnus of 1962 ME.
- Enhancement of the prize money of BEC 84 change maker students award.
- Proposal for repairing of volleyball court donated by BEC'89 batch.

2. Conducted Alumni Meet during Rebeca 2023 in April.

3. Distribution of Awards instituted by the Alumni

- Tarun Kanti Ghosh Memorial (the deceased alumnus of 1984 batch, EE) Award Instituted by Ms. Mili Ghosh
- BEC84 Change Maker Student Award
- YFRA-2021 Award, Instituted by Dr. T.K. Som, an alumnus of 1971 ME

4. Selection of Technical Personnel on a temporary basis for the Digital Education Hub.

5. Visit of Deputy Director & team of United States-India Educational Foundation to IIEST, Shibpur in April, 2023 for

- Interactive secession with faculty members & research scholars, senior UG & PG students.
- Opening of annual competition for various Full-Bright fellowships.

6. An awareness seminar about higher studies in USA, "Education USA Kolkata Roadshow 2023" was organized jointly by USIEF & IIEST, Shibpur in July, 2023. Representatives of fifteen (15) USA universities took part in the program together with students of IIEST, Shibpur.

7. Signed MoU with the 1998 batch of alumni in December 2023 and created state of the art facility in the Training and Placement room used for the pre-placement talk.

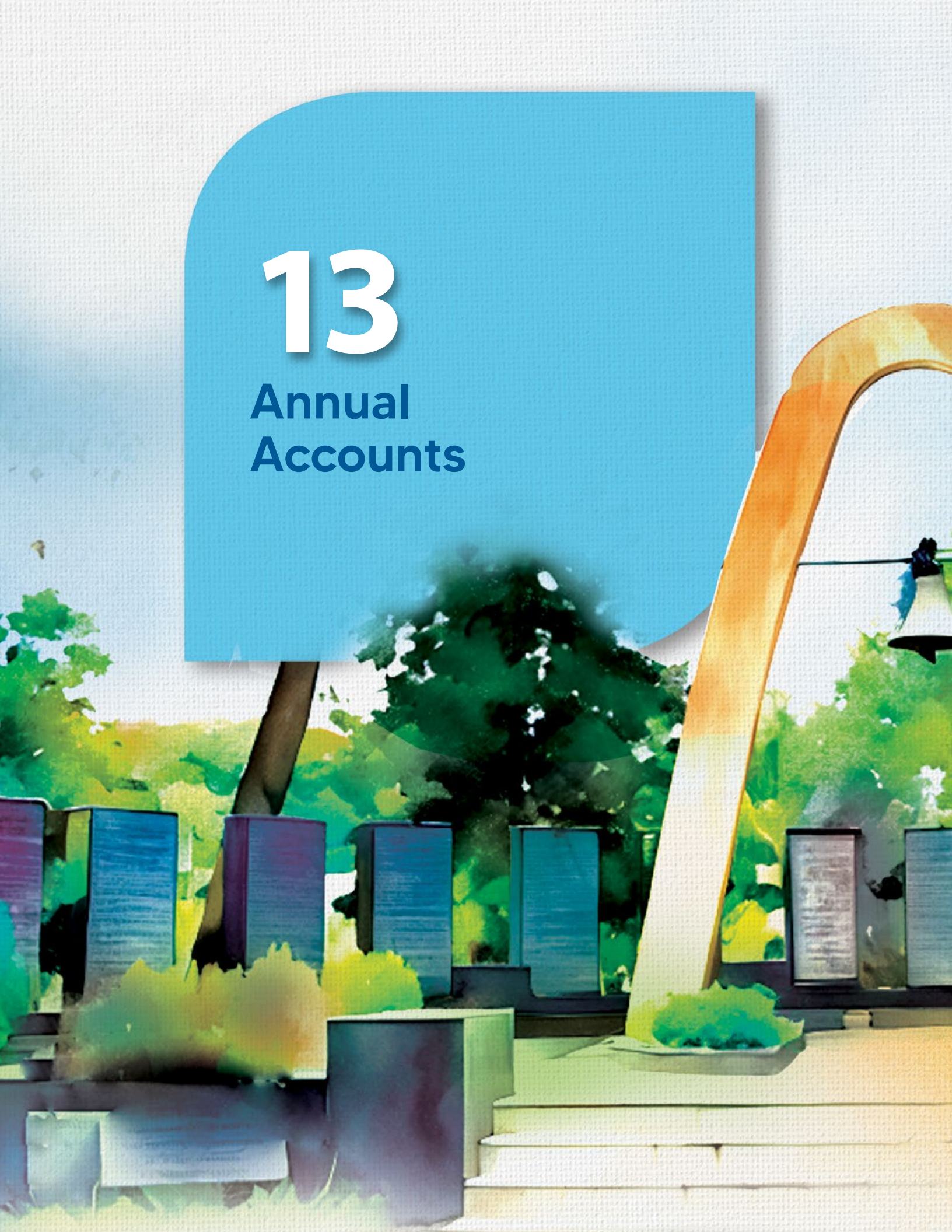
8. Organized month-long Institute Lecture by Dr. Arun Kanti Banerjee, an illustrious alumnus of this Institute on Flexible Multi-Body Dynamics in December, 2023 - January, 2024.

9. Organized an Institute lecture on Battery Technology by Prof. Pradip Majumdar, founder and CEO of DS Innovtech., Illinois, USA, also an alumnus of this Institute (1971, ME) in March, 2024. Prof. Majumdar also donated two books, (i) Computational Fluid Dynamics and Heat Transfer, and (ii) Design of Thermal Energy Systems to the Ramanujan Library of the Institute.

10. Issued notification and processed applications for YFRA 2022, (instituted by Dr. T.K. Som, an alumnus of 1971 ME). There was no recipient of the award.

MOU Title	Purpose/Scope	MOU with Alumni	Year	Amount Donated
Interactive Smart Class System	Smart Conferencing facility in Training and Placement	BEC 1998, Kolkata Reunited Ninetyeighters	2023	Created the facility without any monitory grant
Improvement of Acoustic in Two IIEST Gallery rooms	Improve the acoustic system in Training and Placement (Gallery 2) and Gallery Classroom (N235)	BEC 1997, BEC Ninety-seveners	2023	Created the facility without any monitory grant
BEC 84 Change Maker Student Award	Awarded INR 80,000/- to best performing student of 6th semester from weak economic background	BEC 84 Alumni	06-01-2023, amendment on March 2024	INR 15,00,000/-

13
Annual Accounts



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Indian Institute of Engineering Science and Technology

Balance Sheet as on 31st March, 2024

Amount in ₹

SOURCES OF FUNDS	Schedule		Current Year	Previous Year
CORPUS / CAPITAL FUND	1		-31,55,48,299	2,69,99,70,394
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	2		1,10,60,82,590	99,80,23,563
CURRENT LIABILITIES & PROVISIONS	3		3,63,02,11,302	40,08,65,281
TOTAL			**4,42,07,45,593**	**4,09,88,59,238**

APPLICATION OF FUNDS	Schedule		Current Year	Previous Year
FIXED ASSETS	4		1,40,70,79,477	1,35,07,86,812
- Tangible Assets		1,36,77,44,731		-
- Capital Work in Progress		-		
- Intangible Assets		3,93,34,746		-
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5		1,23,53,46,368	81,05,37,356
- Long Term		69,32,95,867		
- Short Term		54,20,50,501		
INVESTMENTS - OTHERS	6		99,00,000	1,25,00,000
CURRENT ASSETS	7		1,26,18,49,594	1,46,22,93,101
LOANS, ADVANCES & DEPOSITS	8		50,65,70,155	46,27,41,969
TOTAL			**4,42,07,45,593**	**4,09,88,59,238**

The negative balance in Corpus / Capital Fund is due to provisioning of Employees' Retirement and Terminal Benefits (Pension, Gratuity and Leave Encashment) of Rs.3,31,74,13,303/-.

SIGNIFICANT ACCOUNTING POLICIES 23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS 24

Joint Registrar (Finance) **Registrar (Actg.)** **Director**

For **DEBASIS BANDYOPADHYAY & CO.**

Chartered Accountants
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

Indian Institute of Engineering Science and Technology

Income and Expenditure Account for the Year Ended 31st March, 2024

Amount in `

Particulars	Schedule	Current Year	Previous Year
INCOME			
Academic Receipts	9	22,36,56,272	22,00,72,308
Grants / Subsidies	10	1,63,77,89,538	1,48,36,20,353
Income from Investments	11	72,36,492	47,73,163
Interest Earned	12	4,30,18,829	2,83,05,776
Other Income	13	1,44,23,341	2,49,64,060
Prior Period Income	14	2,40,877	80,50,302
TOTAL (A)		**1,92,63,65,349**	**1,76,97,85,962**
EXPENDITURE			
Staff Payments & Benefits (Establishment expenses)	15	4,60,96,07,335	1,18,84,39,111
Academic Expenses	16	24,08,27,855	22,25,09,589
Administrative Expenses	17	12,04,96,271	10,94,53,150
Transportation Expenses	18	8,24,443	5,38,646
Repairing & Maintenance	19	3,36,47,035	3,07,58,872
Depreciation	4	19,04,94,630	17,50,34,967
Finance Costs	20	54,196	94,903
Other Expenses	21	27,058	38,800
Prior Period Expenses	22	43,292	28,828
TOTAL (B)		**5,19,60,22,115**	**1,72,68,96,866**
Balance being excess of Income over Expenditure (A-B)		-3,26,96,56,766	4,28,89,096
Transfer to / from Designated Fund			
Building fund			
Others (specify)			
Balance being Surplus / (Deficit) carried to Capital Fund		-3,26,96,56,766	4,28,89,096

The negative balance in Corpus / Capital Fund is due to provisioning of Employees' Retirement and Terminal Benefits (Pension, Gratuity and Leave Encashment) of Rs.3,31,74,13,303/-.

SIGNIFICANT ACCOUNTING POLICIES	23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24

Joint Registrar (Finance) **Registrar (Actg.)** **Director**

For **DEBASIS BANDYOPADHYAY & CO.**

Chartered Accountants
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

Indian Institute of Engineering Science and Technology

Receipts and Payments Accounts for the Year Ended 31st March 2024

Amount in ₹

RECEIPTS		CURRENT YEAR	PREVIOUS YEAR	PAYMENTS		CURRENT YEAR	PREVIOUS YEAR
I	Opening Balances			I	Expenses		
	a) Cash Balances	-	-		a) Establishment Expenses	1,30,15,84,364	1,17,99,75,455
	b) Bank Balances				b) Academic Expenses	24,11,09,810	21,38,02,786
	i. in Current Accounts	20,94,62,239	18,63,50,539		c) Administrative Expenses	11,19,40,625	10,58,33,158
	ii. Savings Accounts	1,22,02,59,460	1,12,74,76,655		d) Transporatation Expenses	8,24,443	5,38,646
					e) Repairs & Maintenance	3,36,47,035	2,90,31,156
	c) Cheques in hand	-	-		f) Prior Period Expenses	-	-
					g) Other Expenses	65,848	-
II	Grants Received			II	Payments against Earmarked/ Endowment Funds	5,63,009	92,76,892
	a) From Govt. of India	1,80,17,89,443	1,78,52,20,353				
	b) From State Govt.	-	-	III	Payments againsts Sponsored Schemes	28,15,08,941	20,24,42,171
	c) From UGC-Non Plan	-	-				
	d) Form Other Sources (Details)	-	-	IV	Payments against Sporsored Fellowship/Scholarship	1,23,27,262	2,03,12,507
III	Academic Receipts	22,33,63,276	22,80,42,501	V	Investments and Deposits made		
					a) Out of Earmarked/Endowments Funds	39,66,06,057	89,84,421
IV	Receipts against Earmarked/ Endowment Funds	-	1,60,33,318		b) Out of Own Funds (Investments-Others)	-	-
V	Receipts againsts Sponsored Schemes	18,52,05,891	11,75,46,749	VI	Term Deposits with Schedule Banks	-	-
VI	Receipts against Sporsored Fellowship/Scholarship	1,87,74,642	2,30,67,939	VII	Expenditure on Fixed Assets and Capital Works-in-progress		
					a) Fixed Assets	13,66,43,862	12,69,82,189
VII	Income on Investments from				b) Capital Works-in-Progress		
	a) Earmarked/Endowment Funds	3,45,32,697	3,02,58,414				
	b) Other Investments	33,84,255	6,19,038	VIII	Other Payments including Statutory Payments	57,56,38,254	37,56,95,635

Indian Institute of Engineering Science and Technology

Receipts and Payments Accounts for the Year Ended 31st March 2024 *(Contd...)*

Amount in ₹

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
VIII Interest Received on			IX Refunds of Grants	46,851	-
a) Bank Deposits	-	-			
b) Loans & Advances	-	-	X Deposit and Advances	3,83,91,351	24,75,08,941
c) Savings Bank Accounts	4,30,18,829	2,83,05,776			
d) Providend Fund	-	-	XI Other Payments (including Finance Cost)	-	1,29,834
IX Investments Encashed	1,37,56,034	-	XII Other Payments (including prior period /write off)	-	-
X Other Income (Including Prior Period Income)	1,64,03,188	1,35,37,260			
			XIII Closing Balances		
XI Deposit and Advances	1,46,30,564	1,94,64,761	a) Cash Balances	-	-
			b) Bank Balances		
XII Miscellaneous Receipts including Statutory Receipts	57,83,59,288	36,89,03,352	i. in Current Accounts	6,24,71,004	20,94,62,239
			ii. Savings Accounts	1,17,97,99,078	1,22,02,59,460
XIII Any Other Receipts	1,02,27,988	54,08,835			
			c) Cheques in hand	-	-
	4,37,31,67,794	**3,95,02,35,490**		**4,37,31,67,794**	**3,95,02,35,490**

Joint Registrar (Finance) **Registrar (Actg.)** **Director**

For **DEBASIS BANDYOPADHYAY & CO.**

Chartered Accountants
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

Indian Institute of Engineering Science and Technology

SCHEDULE - 1 - Corpus Fund / Capital Fund

Amount in ₹

Particulars		Current Year	Previous Year
	Balance at the beginning of the year	2,69,99,70,394	2,52,30,69,220
Add :	Contributions towards Corpus / Capital Fund	-	-
Add :	Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure (including deposit with CPWD)	16,39,99,905	33,10,00,000
Add :	Assets Purchased out of Earmarked Funds\Assets Purchased out of Sponsored Projects, where ownership vests in the institutions	9,01,38,168	5,25,16,335
Add :	Assets Donated / Gifts received	-	-
Add :	Other Additions / (Deletions)	-	18,03,086
Add :	Excess of Income over Expenditure transferred from the Income & Expenditure Account	-	4,28,89,096
	TOTAL	**2,95,41,08,467**	**2,95,12,77,737**
Deduct :	Over Expenditure of grant, no longer receivable from MoE now being adjusted	-	25,09,51,812
Deduct :	Adjustment of Excess Grant reflected in previous IE a/c	-	3,55,531
Deduct :	Deficit transferred from the Income & Expenditure Account	3,26,96,56,766	-
	Balance at the end of the year	-31,55,48,299	2,69,99,70,394

* The deficit arrises due to provisioning of Employees' Retirement and Terminal Benefits (Pension, Gratuity and Leave Encashmment) of Rs. 3,31,74,13,303/-

Indian Institute of Engineering Science and Technology

SCHEDULE - 2 - Designated / Earmarked / Endowment Funds

Amount in ₹

Fund wise breakup		A. Particulars							B. Utilization / Expenditure towards objective funds				Closing balance at the year end (A-B)
		a) Opening balance	b) Additions during the year	c) Income from investments made of the funds	d) Accrued interest on investments/ advances	e) Interest on Savings Bank a/c	f) Other additions (specify nature)	Total (A)	i) Capital Expenditure	ii) Revenue Expenditure	iii) Transferred to Schedule 3(a)	Total (B)	
1	Fund - NSS	3,45,077	-	-	-	11,073	-	3,56,150	-	-	-	-	3,56,150
2	Corpus Fund - Future Development	53,85,04,259	-	-	6,58,32,818	-	-	60,43,37,077	-	-	-	-	60,43,37,077
3	Institutional Development Fund	29,48,03,742	-	-	1,80,15,166	-	1,54,42,505	32,82,61,413	-	24	-	24	32,82,61,389
4	Students' Welfare Fund	4,24,529	-	-	-	45,142	-	4,69,671	-	-	-	-	4,69,671
5	Corpus Fund - a/c Teqip	1,77,96,933	-	-	9,97,795	1,00,022	-	1,88,94,750	-	-	-	-	1,88,94,750
6	Faculty Development Fund - a/c Teqip	8,58,459	-	-	12,227	1,017	-	8,71,703	-	-	-	-	8,71,703
7	Equipment Replacement Fund - a/c Teqip	8,06,849	-	-	50,603	2,087	-	8,59,539	-	-	-	-	8,59,539
8	Maintenance Fund - a/c Teqip	2,28,72,121	-	-	16,99,189	104	-	2,45,71,414	-	-	-	-	2,45,71,414
9	Depreciation Fund - a/c Teqip	93,68,212	-	-	6,91,788	2,669	-	1,00,62,669	-	-	-	-	1,00,62,669
10	Staff Development Fund - a/c Teqip	1,07,23,327	-	-	7,93,050	100	-	1,15,16,477	-	-	-	-	1,15,16,477
11	Digital Education Hub	97,33,180	-	-	4,12,853	-	-	1,01,46,033	-	-	-	-	1,01,46,033
12	L&T Deep Donation	1,50,000	-	-	-	-	-	1,50,000	-	-	-	-	1,50,000
13	Endowment Funds	9,16,36,875	-	15,59,719	19,88,083	8,69,760	-	9,60,54,437	-	4,68,719	-	4,68,719	9,55,85,718
Current Year		**93,24,03,176**	**-**	**15,59,719**	**9,04,93,572**	**10,31,974**	**1,54,42,505**	**1,10,65,51,333**	**-**	**4,68,743**	**-**	**4,68,743**	**1,10,60,82,590**
Previous Year		**93,24,03,176**	**1,75,08,916**	**2,72,52,046**	**2,91,93,850**	**10,18,067**	**24,401**	**1,00,74,00,456**	**-**	**93,76,893**	**-**	**93,76,893**	**99,80,23,563**

Indian Institute of Engineering Science and Technology

SCHEDULE - 2A - Endowment Funds

Sub-schedule to support the figures in the column "Endowment Funds" in the schedule "Earmarked / Endowment Funds" forming part of the Balance Sheet

Amount in ₹

Sr. No.	Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year	Closing Balance		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	Total (10+11)
1	2	3	4	5	6	7	8	9	10	11	12
1	Von Newman Scholarship Fund	53,747	32,854		1,467	53,747	34,321		53,747	34,321	88,068
2	Dr. S. P. Brambha Memorial Merit Scholarship Fund	1,06,895	63,812		2,916	1,06,895	66,728		1,06,895	66,728	1,73,623
3	Prabir Sengupta Memorial Prize Fund	7,599	7,461		1,505	7,599	8,966		7,599	8,966	16,565
4	Renu Chakraborty V. L. Fund	55,737	35,007		4,028	55,737	39,035		55,737	39,035	94,772
5	Dr. Fazlue Kader Memorial Scholarship Fund	1,15,629	77,478		5,665	1,15,629	83,143		1,15,629	83,143	1,98,772
6	J. N. Neogi Students' Benefit Fund	72,248	74,133		3,541	72,248	77,674		72,248	77,674	1,49,922
7	Sunita Memorial Prize Fund	15,407	15,809		755	15,407	16,564		15,407	16,564	31,971
8	Dr. B. N. Dey Scholarship Fund	37,519	38,496		1,838	37,519	40,334		37,519	40,334	77,854
9	Kunja Kusum Scholarship Fund	77,444	46,233		2,115	77,444	48,348		77,444	48,348	1,25,792
10	Sanat Kanta Nirmalya Basini Biswas Golden Jubilee Scholarship Fund	20,087	12,613		1,157	20,087	13,770		20,087	13,770	33,857
11	Prof. N. N. Sen Memorial Scholarship Fund	39,432	24,105		1,077	39,432	25,182		39,432	25,182	64,614
12	Acharya P. C. Roy Scholarship	91,587	54,714		2,499	91,587	57,213		91,587	57,213	1,48,800
13	Ramlal Nandy & Ganoda Sundari Nandy Memorial Scholarship Fund	46,928	28,014		1,280	46,928	29,294		46,928	29,294	76,222
14	Liluah Iron Works Ltd. Scholarship	46,928	28,688		1,280	46,928	29,968		46,928	29,968	76,896
15	R & K Ahmed Merit Scholarship	56,769	34,700		1,550	56,769	36,250		56,769	36,250	93,019
16	The President of India Gold Medal	56,769	112		1,549	56,769	1,661	-	56,769	1,661	58,430
17	Alumni Donation Seminar Series	3,52,521	3,31,994		38,945	3,52,521	3,70,939		3,52,521	3,70,939	7,23,460
18	Jogesh Chandra Banerjee Memorial Scholarship Fund	4,78,376	2,92,386		13,056	4,78,376	3,05,442		4,78,376	3,05,442	7,83,818
19	Anir Burnwal Memorial Merit cum Means Scholarship Fund	1,07,110	63,243		8,630	1,07,110	71,873		1,07,110	71,873	1,78,983
20	Jaya Smriti Puroskar (BESUS)	24,189	10,613	-	-	24,189	10,613	1,000	24,189	9,613	33,801
21	Jaya Smriti Puroskar	21,374	18,892	-	-	21,374	18,892		21,374	18,892	40,266

Indian Institute of Engineering Science and Technology

SCHEDULE - 2A - Endowment Funds *(Contd...)*

Amount in ₹

Sr. No.	Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year	Closing Balance		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	Total (10+11)
1	2	3	4	5	6	7	8	9	10	11	12
22	BEC (55) Scholarship Fund	2,81,033	2,96,946	-	44,298	2,81,033	3,41,244		2,81,033	3,41,244	6,22,277
23	BEC Sholarship	1,00,592	57,112	-	34,328	1,00,592	91,440		1,00,592	91,440	1,92,032
24	BECA - 1964	2,30,040	2,39,867	-	12,656	2,30,040	2,52,523		2,30,040	2,52,523	4,82,563
25	Prof. S. C. Dasgupta Gold Medal	1,43,098	1,10,175	-	-	1,43,098	1,10,175	8,523	1,43,098	1,01,652	2,44,750
26	Siddhananada Memorial Lecture	53,875	74,321	-	10,080	53,875	84,401		53,875	84,401	1,38,276
27	BESU Endowment Fund	50,00,000	39,87,746	-	6,88,709	50,00,000	46,76,455		50,00,000	46,76,455	96,76,455
28	Prabodh Chandra Mitra Scholarship Fund	1,53,625	32,771	-	8,714	1,53,625	41,485		1,53,625	41,485	1,95,110
29	Dhaibat Ghosh Memorial Scholarship	4,33,732	4,17,286	-	36,895	4,33,732	4,54,181		4,33,732	4,54,181	8,87,913
30	Prof. P. C. Mitra Memorial Award	51,458	10,518	-	6,609	51,458	17,127	4,319	51,458	12,808	64,267
31	Bijoy Ashu Chair Professor Fund	1,00,48,394	72,69,585	-	10,52,746	1,00,48,394	83,22,331	5,990	1,00,48,394	83,16,341	1,83,64,735
32	Prabodh Kumar Chatterjee Fund	1,94,000	69,690	-	13,214	1,94,000	82,904		1,94,000	82,904	2,76,904
33	Rai Sahib Amulya Chandra Mitra Endowment Fund	3,00,000	1,39,626	-	23,327	3,00,000	1,62,953		3,00,000	1,62,953	4,62,953
34	Rai Sahib Amulya Chandra Mitra Endowment Fund	2,00,000	2,05,978	-	15,590	2,00,000	2,21,568		2,00,000	2,21,568	4,21,568
35	S. C. Dasgupta Memorial Fund	11,00,000	12,80,062	-	2,02,400	11,00,000	14,82,462		11,00,000	14,82,462	25,82,462
36	Prabodh Kumar Chatterjee Fund	50,000	99,015	-	1,950	50,000	1,00,965		50,000	1,00,965	1,50,965
37	Madhusudan Bhattacharjee Memorial Fund	2,15,000	37,146	-	10,200	2,15,000	47,346	10,200	2,15,000	37,146	2,52,146
38	B. K. Bose Lecture Fund	2,25,000	71,008	-	219	2,25,000	71,227		2,25,000	71,227	2,96,227
39	Students Reward Programme Fund	16,50,000	1,63,069	-	68,539	16,50,000	2,31,608	21,000	16,50,000	2,10,608	18,60,608
40	Sougata Mukherjee Memo. Award for Excellence Fund	5,09,507	1,70,656	-	17,913	5,09,507	1,88,569	23,495	5,09,507	1,65,074	6,74,581
41	Suhas Choudry Swimming Excellence Prize Fund	1,22,132	26,025	-	8,520	1,22,132	34,545		1,22,132	34,545	1,56,677
42	Ujjal Dasgupta Scholarship Corpus Fund	13,61,590	2,49,510	-	76,020	13,61,590	3,25,530	57,012	13,61,590	2,68,518	16,30,108
43	GAABESU Admission Grant - 2	5,82,400	3,14,185	-	30,725	5,82,400	3,44,910	24,293	5,82,400	3,20,617	9,03,017
44	Prof A K Seal Gold Medal	1,00,000	41,114	-	10,191	1,00,000	51,305	8,523	1,00,000	42,782	1,42,782
45	BEC Prize	2,07,870	35,087		55,020	2,07,870	90,107		2,07,870	90,107	2,97,977

Indian Institute of Engineering Science and Technology

SCHEDULE - 2A - Endowment Funds *(Contd...)*

Amount in ₹

Sr. No.	Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year	Closing Balance		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	Total (10+11)
1	2	3	4	5	6	7	8	9	10	11	12
46	TATA Steel Chair Professor	7,19,080	-			7,19,080	-		7,19,080	-	7,19,080
47	Besus Foundation (GAABESU)	81,66,380	77,72,601	(5,00,000)	5,77,650	76,66,380	83,50,251	28,966	76,66,380	83,21,285	1,59,87,665
48	K K Pal Chaudhuri Arch	50,000	50,968		9,520	50,000	60,488		50,000	60,488	1,10,488
49	Prof. P. C. Mitra Memorial Award - 2	1,00,000	82,693		24,416	1,00,000	1,07,109		1,00,000	1,07,109	2,07,109
50	Amiya Basu Endowment Fund	64,44,262	13,48,357		2,40,885	64,44,262	15,89,242	1,19,334	64,44,262	14,69,908	79,14,170
51	Arun Ch Mitra, Ganesh Mitra, Sindhubala Mitra Memorial Fund	2,00,000	(6,952)		20,084	2,00,000	13,132	13,132	2,00,000	-	2,00,000
52	Alpona Banerjee	99,02,719	27,91,636		5,14,851	99,02,719	33,06,487	14,840	99,02,719	32,91,647	1,31,94,366
53	Aveek Guha Memorial Gold	1,15,000	-		8,523	1,15,000	8,523	8,523	1,15,000	-	1,15,000
54	Provat Chandra Neogi	27,00,000	5,36,228		1,29,600	27,00,000	6,65,828	24,000	27,00,000	6,41,828	33,41,828
55	Tarun Kanti Ghosh Memorial	3,47,532	35,542		15,637	3,47,532	51,179	20,000	3,47,532	31,179	3,78,711
56	Sayantan Biswas Memorial	1,60,000	-		8,523	1,60,000	8,523	8,523	1,60,000	-	1,60,000
57	Ganesh Ch. Mukherjee Memorial Fund	50,00,000	3,33,333			50,00,000	3,33,333		50,00,000	3,33,333	53,33,333
58	Ria Ghosh Memorial	14,00,000	-		17,046	14,00,000	17,046	17,046	14,00,000	-	14,00,000
59	BEC (1984) Changemaker Student Award	15,00,000	-		87,111	15,00,000	87,111	50,000	15,00,000	37,111	15,37,111
60	P C Ganguly Memorial Fund	-	-	5,00,000	2,40,000	5,00,000	2,40,000	-	5,00,000	2,40,000	7,40,000
		-	-	-		-	-	-	-	-	-
Total		**6,20,02,614**	**2,96,34,261**	**-**	**44,17,562**	**6,20,02,614**	**3,40,51,823**	**4,68,719**	**6,20,02,614**	**3,35,83,104**	**9,55,85,718**

Indian Institute of Engineering Science and Technology

SCHEDULE - 3 - Current Liabilities & Provisions

Amount in ₹

Particulars	Current Year	Previous Year
A CURRENT LIABILITIES		
1. Deposits from staff	-	-
2. Deposit from students	2,12,20,233	2,05,02,900
3. Sundry Creditors		
a) For Goods and Services		
b) Others		
4. Deposit - Others (including EMD, Security Deposit)	54,06,928	53,99,087
5. Statutory Liabilities (TDS, WC Tax, CPF, GIS, NPS)		
a) Overdue		
b) Others	19,64,594	40,58,652
6. Other Current Liabilities		
a) Salaries	-	-
b) Receipts against sponsored projects	22,91,23,695	32,02,96,339
c) Receipts against sponsored fellowships and scholarships	1,10,84,563	1,23,43,692
d) Unutilized Grants	0	46,851
e) Grants in advance	-	-
f) Other funds	-	-
g) Audit Fees	8,00,000	14,00,000
h) Other liabilities [Miscellaneous Recoveries]	-	35,50,283
i) Other liabilities [Professional Charges]	2,30,100	2,83,200
j) Other liabilities [Electricity Charges]	24,57,936	25,14,871
k) Other liabilities [Guest House Maintenance]	9,46,357	-
l) Other liabilities [Manpower Hiring]	84,13,569	36,31,116
m) Other liabilities [Security Service]	73,26,533	43,10,753
n) Other liabilities [Tuition Fees refundable]	2,22,34,541	2,25,27,537
o) Other liabilities [Payable to CPWD]	15,88,950	-
Total (A)	**31,27,97,999**	**40,08,65,281**
B PROVISIONS		
1. For taxation	-	-
2. Gratuity	43,28,62,548	-
3. Pension	2,55,80,90,957	-
4. Accumulated Leave Encashment	32,64,59,798	-
5. Trade Warranties / Claims	-	-
6. Others (Specify)	-	-
Total (A)	**3,31,74,13,303**	**-**
Total (A + B)	**3,63,02,11,302**	**40,08,65,281**

Indian Institute of Engineering Science and Technology

SCHEDULE - 3(a) - Sponsored Projects

Amount in ₹

Sr. No.	Name of the Project	Opening Balance		Receipts / Recoveries during the year	Total	Expenditure during the year	Closing Balance	
		Credit	Debit				Credit	Debit
1	2	3	4	5	6	7	8	9
1	Research Project Accounts	25,59,90,631	-	13,83,91,257	39,43,81,888	21,31,12,902	18,12,68,986	-
2	Consultancy Fund	5,75,85,231	-	5,26,52,703	11,02,37,934	6,93,57,944	4,08,79,990	-
3	Testing Fees Fund	67,20,476	-	2,54,537	69,75,013	295	69,74,718	-
Total		**32,02,96,339**	**-**	**19,12,98,497**	**51,15,94,836**	**28,24,71,141**	**22,91,23,695**	**-**

Indian Institute of Engineering Science and Technology

SCHEDULE - 3(b) - Sponsored Fellowships and Scholarships

Amount in ₹

Sr. No.	Name of Sponsor	Opening Balance		Transactions during the year		Closing Balance	
		Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8
1	CSIR - Fellowship and Contingency	8,23,141	-	-	2,81,979	5,41,162	-
2	Inspire Faculty -DST	6,12,717	-	29,27,150	29,27,150	6,12,717	-
3	Inspire Fellowship -DST	30,76,857	-	25,06,191	33,14,194	22,68,854	-
4	QIP Contingency	2,36,222	-		2,36,222	-	-
5	UGC Fellowship Post Doctoral	7,60,058	-			7,60,058	-
6	UGC Raman Fellowship Post Doctoral	43,02,068	-			43,02,068	-
7	Other Miscelleneous Grant - DST	1,99,714	-			1,99,714	-
8	Other Misc. Receipts	-	-			-	-
9	Faculty Recharge Program / BSR Research Fellowship (UGC)	-	-83,57,474	1,29,66,175	64,07,834	-	-17,99,133
10	INSA Scientist (Others)	29,918	-			29,918	-
11	Visvesvaraya Phd Fellowship	1,35,249	-	1,93,929	1,31,250	1,97,928	-
12	UGC D S Kothari Fellowship	7,77,846	-			7,77,846	-
13	GIAN Course	1,54,977	-	4,396		1,59,373	-
14	Stipend - Means cum Merit Scholarship	30,790	-			30,790	-
15	NREF/MNRE	12,04,136	-			12,04,136	-
16	Ministry of Science and Tech	-	-	1,76,801	1,76,801	-	-
Total		**1,23,43,692**	**-83,57,474**	**1,87,74,642**	**1,34,75,430**	**1,10,84,563**	**-17,99,133**

Indian Institute of Engineering Science and Technology

SCHEDULE - 3(c) - Unutilized Grants From UGC, Government of India and State Governments

Amount in ₹

		Current Year	Previous Year
A	Grants : Government of India		
	Balance b/f	0	-22,15,51,812
	Add : Grants during the year		
	Non-Recurring (for creation of capital assets)	16,39,99,905	30,16,00,000
	Recurring	1,63,77,89,538	1,48,36,20,353
	Add : Interest earned on grant	-	-
	Total (a)	**1,80,17,89,443**	**1,56,36,68,541**
	Less : Refunds	-	-
	Less : Utilized for Capital Expenditure	16,39,99,905	33,10,00,000
	Less : Utilized for Revenue Expenditure	1,63,77,89,538	1,48,36,20,353
		1,80,17,89,443	1,81,46,20,353
	Less : Excess Expenditure transferred to Corpus Fund	-	25,09,51,812
	Total (b)	**1,80,17,89,443**	**1,56,36,68,541**
	Unutilized balance carried forward (a-b)	**0**	**0**
B	UGC Grants - Plan		
	Balance b/f		
	Add : Receipts during the year		
	Total (c)	**-**	**-**
	Less : Refunds		
	Less : Utilized for Revenue Expenditure		
	Less : Utilized for Capital Expenditure		
	Total (d)	**-**	**-**

Indian Institute of Engineering Science and Technology

SCHEDULE - 3(c) - Unutilized Grants From UGC, Government of India and State Governments *(Contd...)*

Amount in ₹

		Current Year	Previous Year
	Unutilized carried forward (c-d)	-	-
C	UGC Grants - Non Plan		
	Balance b/f	-	-
	Add : Receipts during the year	-	-
	Total (e)	-	-
	Less : Refunds		-
	Less : Utilized for Revenue Expenditure	-	-
	Less : Utilized for Capital Expenditure	-	-
	Total (f)	-	-
	Unutilized carried forward (e-f)	-	-
D	Grants from State Government		
	Total (g)	**46,851**	**46,851**
	Add : Receipts during the year	-	-
		46,851	**46,851**
	Less : Refunds	**46,851**	
	Less : Utilized for Revenue Expenditure	-	-
	Less : Utilized for Capital Expenditure		
	Total (h)	**46,851**	-
	Unutilized carried forward (g-h)	-	**46,851**
	Grand Total (A+B+C+D)	**0**	**46,851**

Indian Institute of Engineering Science and Technology

SCHEDULE - 4 - Fixed Assets

Amount in ₹

S. No.	Assets Heads	Gross Block			Closing Balance	Depreciation					Net Block	
		Opening Balance	Additions	Deduction / Adjustments		Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2023	31-03-2024
1	Land [leasehold]	3,85,170	-	-	3,85,170		-	-	-	-	3,85,170	3,85,170
2	Site Development	3,10,181	-	-	3,10,181		-	-	-	-	3,10,181	3,10,181
3	Buildings	60,93,28,917	3,28,44,241	1,20,43,843	63,01,29,315	2%	9,32,28,290	1,26,12,074	(2,40,877)	10,55,99,487	51,61,00,626	52,45,29,827
4	Roads and Bridges	9,02,405	21,74,450	-	30,76,855	2%	1,21,282	61,537	-	1,82,819	7,81,123	28,94,036
5	Tubewells & Water Supply	1,77,96,490	19,30,922	-	1,97,27,412	2%	16,38,215	3,94,548	-	20,32,763	1,61,58,275	1,76,94,649
6	Sewerage & Drainage				-					-	-	-
7	Electrical Installation and Equipments	18,18,15,440	-	-	18,18,15,440	5%	6,26,70,162	90,90,772	-	7,17,60,934	11,91,45,278	11,00,54,506
8	Plant & Machinery	15,90,11,606	-	-	15,90,11,606	5%	7,15,55,223	79,50,580	-	7,95,05,803	8,74,56,384	7,95,05,804
9	Scientific & Laboratory Equipments	71,89,03,812	10,45,31,473	-	82,34,35,285	8%	29,07,69,348	6,58,74,823	-	35,66,44,171	42,81,34,464	46,67,91,114
10	Office Equipments	5,76,66,235	1,59,15,316	-	7,35,81,551	7.5%	2,12,74,423	55,18,616	-	2,67,93,040	3,63,91,812	4,67,88,511
11	Audio Visual Equipments	15,96,921	6,67,486	-	22,64,407	7.5%	4,85,933	1,69,831	-	6,55,764	11,10,988	16,08,643
12	Computers & Peripherals	17,78,36,088	4,43,83,010	-	22,22,19,098	20%	15,70,60,347	1,93,02,609	-	17,63,62,956	2,07,75,741	4,58,56,142
13	Furniture, Fixtures & Fittings	11,86,87,887	1,07,06,196	-	12,93,94,083	7.5%	6,03,33,691	97,04,556	-	7,00,38,247	5,83,54,197	5,93,55,837
14	Vehicles	3,75,838	-	-	3,75,838	10%	3,38,255	37,584	-	3,75,839	37,584	(0)
15	Library Books & Scientific Journals	10,78,21,288	11,445	-	10,78,32,733	10%	8,50,79,152	1,07,83,273	-	9,58,62,425	2,27,42,136	1,19,70,308
16	Small Value Assets	4,08,815	-	-	4,08,815		4,08,812	-	-	4,08,812	3	3
	Total (A)	**2,15,28,47,094**	**21,31,64,539**	**1,20,43,843**	**2,35,39,67,790**		**84,49,63,132**	**14,15,00,805**	**(2,40,877)**	**98,62,23,060**	**1,30,78,83,962**	**1,36,77,44,731**
17	Capital Work in Progress (B)	-	-	-	-			-		-	-	-

S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Amortization Opening Balance	Amortization for the year	Deduction / Adjustments	Total Amortization	Net Value	
											31-03-2023	31-03-2024
18	Computer Software	5,49,79,815	63,04,925	-	6,12,84,740	40%	4,17,93,787	1,13,98,777	-	5,31,92,564	1,31,86,028	80,92,176
19	E-Journals	21,04,50,501	3,91,20,797	-	24,95,71,298	40%	18,07,33,679	3,75,95,048	-	21,83,28,728	2,97,16,821	3,12,42,570
20	Patents	-			-					-	-	-
	Total (C)	**26,54,30,316**	**4,54,25,722**	**-**	**31,08,56,038**		**22,25,27,466**	**4,89,93,826**	**-**	**27,15,21,291**	**4,29,02,850**	**3,93,34,746**
	Grand Total (A + B +C)	**2,41,82,77,410**	**25,85,90,261**	**1,20,43,843**	**2,66,48,23,828**		**1,06,74,90,598**	**19,04,94,630**	**(2,40,877)**	**1,25,77,44,351**	**1,35,07,86,812**	**1,40,70,79,477**

Indian Institute of Engineering Science and Technology

SCHEDULE - 4A - Non-Recurring (Creation of Capital Assets out of Non-Recurring Grant)

Amount in ₹

S. No.	Assets Heads	Gross Block			Closing Balance	Depreciation					Net Block	
		Opening Balance	Additions	Deduction / Adjustments		Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2023	31-03-2024
1	Land [leasehold]	3,85,170	-	-	3,85,170		-	-	-	-	3,85,170	3,85,170
2	Site Development	-	-	-	-		-	-	-	-	-	-
3	Buildings	57,67,56,775	3,28,44,241	1,20,43,843	59,75,57,173	2%	8,88,12,330	1,19,60,631	(2,40,877)	10,05,32,084	48,79,44,445	49,70,25,089
4	Roads and Bridges	9,02,405	21,74,450	-	30,76,855	2%	1,21,282	61,537	-	1,82,819	7,81,123	28,94,036
5	Tubewells & Water Supply	1,69,96,490	19,30,922	-	1,89,27,412	2%	15,26,214	3,78,548	-	19,04,763	1,54,70,276	1,70,22,649
6	Sewerage & Drainage	-	-	-	-	2%	-	-	-	-	-	-
7	Electrical Installation and Equipments	15,86,86,434	-	-	15,86,86,434	5%	5,41,66,297	79,34,322	-	6,21,00,619	10,45,20,137	9,65,85,815
8	Plant & Machinery	15,84,06,181	-	-	15,84,06,181	5%	7,12,82,782	79,20,309	-	7,92,03,091	8,71,23,400	7,92,03,091
9	Scientific & Laboratory Equipments	26,45,66,483	1,78,63,932	-	28,24,30,415	8%	10,38,50,317	2,25,94,433	-	12,64,44,750	16,07,16,166	15,59,85,665
10	Office Equipments	5,67,50,635	1,59,15,316	-	7,26,65,951	7.5%	2,08,06,273	54,49,946	-	2,62,56,220	3,59,44,362	4,64,09,731
11	Audio Visual Equipments	15,96,921	6,67,486	-	22,64,407	7.5%	4,85,933	1,69,831	-	6,55,764	11,10,988	16,08,643
12	Computers & Peripherals	15,62,02,854	4,08,02,127	-	19,70,04,981	20%	13,77,70,195	1,78,35,248	-	15,56,05,444	1,84,32,659	4,13,99,538
13	Furniture, Fixtures & Fittings	10,78,88,801	1,07,06,196	-	11,85,94,997	7.5%	5,38,42,667	88,94,625	-	6,27,37,292	5,40,46,134	5,58,57,706
14	Vehicles	3,75,838	-	-	3,75,838	10%	3,38,255	37,584	-	3,75,839	37,584	(0)
15	Library Books & Scientific Journals	10,62,90,882	-	-	10,62,90,882	10%	8,40,68,508	1,06,29,088	-	9,46,97,596	2,22,22,374	1,15,93,286
16	Small Value Assets	4,08,815	-	-	4,08,815	100%	4,08,812	-	-	4,08,812	3	3
	Total (A)	**1,60,62,14,685**	**12,29,04,670**	**1,20,43,843**	**1,71,70,75,512**		**61,74,79,866**	**9,38,66,102**	**(2,40,877)**	**71,11,05,091**	**98,87,34,819**	**1,00,59,70,421**
17	Capital Work in Progress (B)	-	-		-					-	-	-

S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Amortization Opening Balance	Amortization for the year	Deduction / Adjustments	Total Amortization	Net Value	
											31-03-2023	31-03-2024
18	Computer Software	5,48,16,090	63,04,925	-	6,11,21,015	40%	4,16,30,063	1,13,98,777		5,30,28,840	1,31,86,027	80,92,175
19	E-Journals	21,04,50,501	3,91,20,797	-	24,95,71,298	40%	18,07,33,679	3,75,95,048		21,83,28,728	2,97,16,821	3,12,42,570
20	Patents	-			-		-	-		-	-	-
	Total (C)	**26,52,66,591**	**4,54,25,722**	**-**	**31,06,92,313**		**22,23,63,742**	**4,89,93,826**	**-**	**27,13,57,567**	**4,29,02,849**	**3,93,34,745**
	Grand Total (A + B +C)	**1,87,14,81,276**	**16,83,30,392**	**1,20,43,843**	**2,02,77,67,825**		**83,98,43,608**	**14,28,59,928**	**(2,40,877)**	**98,24,62,659**	**1,03,16,37,668**	**1,04,53,05,166**

Indian Institute of Engineering Science and Technology

SCHEDULE - 4B - Non-Plan

Amount in ₹

S. No.	Assets Heads	Gross Block			Closing Balance	Depreciation					Net Block	
		Opening Balance	Additions	Deduction / Adjustments		Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2023	31-03-2024
1	Land	-	-	-	-		-	-		-	-	-
2	Site Development	-	-	-	-		-	-		-	-	-
3	Buildings	3,25,72,142	-	-	3,25,72,142	2%	44,15,961	6,51,443	-	50,67,404	2,81,56,181	2,75,04,738
4	Roads and Bridges	-	-	-	-		-	-		-	-	-
5	Tubewells & Water Supply	8,00,000	-	-	8,00,000	2%	1,12,000	16,000	-	1,28,000	6,88,000	6,72,000
6	Sewerage & Drainage	-	-	-	-		-	-		-	-	-
7	Electrical Installation and Equipments	1,88,69,238	-	-	1,88,69,238	5%	66,04,233	9,43,462	-	75,47,695	1,22,65,005	1,13,21,543
8	Plant & Machinery	-	-	-	-		-	-		-	-	-
9	Scientific & Laboratory Equipments	-	-	-	-		-	-		-	-	-
10	Poffice Equipments	-	-	-	-		-	-		-	-	-
11	Audio Visual Equipments	-	-	-	-		-	-		-	-	-
12	Computers & Peripherals	-	-	-	-		-	-		-	-	-
13	Furniture, Fixtures & Fittings	-	-	-	-		-	-		-	-	-
14	Vehicles	-	-	-	-		-	-		-	-	-
15	Library Books & Scientific Journals	-	-	-	-		-	-		-	-	-
16	Small Value Assets	-	-	-	-		-	-		-	-	-
	Total (A)	**5,22,41,380**	**-**	**-**	**5,22,41,380**		**1,11,32,194**	**16,10,905**	**-**	**1,27,43,099**	**4,11,09,186**	**3,94,98,281**
17	Capital Work in Progress (B)				-					-	-	-

S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Amortization Opening Balance	Amortization for the year	Deduction / Adjustments	Total Amortization	Net Value	
											31-03-2023	31-03-2024
18	Computer Software				-					-	-	-
19	E-Journals				-					-	-	-
20	Patents				-					-	-	-
	Total (C)	**-**	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**
	Grand Total (A + B +C)	**5,22,41,380**	**-**	**-**	**5,22,41,380**		**1,11,32,194**	**16,10,905**	**-**	**1,27,43,099**	**4,11,09,186**	**3,94,98,281**

Indian Institute of Engineering Science and Technology

SCHEDULE - 4C - Intangible Assets

Amount in ₹

S. No.	Assets Heads	Gross Block			Closing Balance	Rate of Depreciation	Depreciation / Amortization Block				Net Block	
		Opening Balance	Additions	Deductions			Opening Balance	Depreciation / Amortization or the year	Deduction / Adjustments	Total Depreciation / Amortization	31-03-2023	31-03-2024
1	Patents & Copyrights											
2	Computer Software											
3	E-Journals											
		-	-	-	-		-	-	-	-	-	-

SCHEDULE - 4C(i) - Patents and Copyrights

Amount in ₹

	Particulars	Opening Balance	Additions	Gross	Amortization	Net Block 31/03/2019	Net Block 31/03/2021
A	Patent Granted						
	1. Balance as on 31/03/2014 of Patents obtained in 2010-11			-		-	
	(Original Value - Rs.)						
	2. Balance as on 31/03/2014 of Patents obtained in 2011-12			-		-	
	(Original Value - Rs.)						
	3. Balance as on 31/03/2014 of Patents obtained in 2012-13			-		-	
	(Original Value - Rs.)						
	4. Patents granted during the current year			-		-	
	Total	-	-	-	-	-	-

	Particulars	Opening Balance	Additions	Gross	Patents Granted / Rejected	31-03-2023	31-03-2024
B	Patents Pending in respect of Patents applied for						
	1. Expenditure incurred during the year 2009-10 to 2011-12			-		-	
	2. Expenditure incurred during the year 2012-13			-		-	
	3. Expenditure incurred during the year 2013-14			-		-	
	Total	**-**	**-**	**-**	**-**	**-**	**-**

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SCHEDULE - 4D - Others

Amount in ₹

S. No.	Assets Heads	Gross Block			Closing Balance	Rate of Depreciation	Depreciation				Net Block	
		Opening Balance	Additions	Deductions			Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2023	31-03-2024
1	Land	-			-		-	-		-	-	-
2	Site Development	3,10,181	-	-	3,10,181		-			-	3,10,181	3,10,181
3	Buildings	-	-	-	-		-			-	-	-
4	Roads and Bridges	-	-	-	-		-			-	-	-
5	Tubewells & Water Supply	-	-	-	-		-			-	-	-
6	Sewerage & Drainage	-	-	-	-		-			-	-	-
7	Electrical Installation and Equipments	42,59,768	-	-	42,59,768	5%	18,99,632	2,12,988		21,12,620	23,60,136	21,47,148
8	Plant & Machinery	6,05,425	-	-	6,05,425	5%	2,72,441	30,271		3,02,712	3,32,984	3,02,713
9	Scientific & Laboratory Equipments	45,43,37,329	8,66,67,541	-	54,10,04,870	8%	18,69,19,031	4,32,80,390		23,01,99,421	26,74,18,298	31,08,05,449
10	Office Equipments	9,15,600	-	-	9,15,600	7.5%	4,68,150	68,670		5,36,820	4,47,450	3,78,780
11	Audio Visual Equipments	-	-	-	-		-	-		-	-	-
12	Computers & Peripherals	2,16,33,234	35,80,883	-	2,52,14,117	20%	1,92,90,152	14,67,361		2,07,57,513	23,43,082	44,56,604
13	Furniture, Fixtures & Fittings	1,07,99,086	-	-	1,07,99,086	7.5%	64,91,024	8,09,931		73,00,955	43,08,062	34,98,131
14	Vehicles	-	-	-	-		-	-		-	-	-
15	Library Books & Scientific Journals	15,30,406	11,445	-	15,41,851	10%	10,10,644	1,54,185		11,64,829	5,19,762	3,77,022
16	Computer Software	1,63,725	-	-	1,63,725	40%	1,63,724	-	-	1,63,724	1	1
17	E Journals	-	-		-	40%	-	-		-	-	-
	Total (A)	**49,45,54,754**	**9,02,59,869**	**-**	**58,48,14,623**		**21,65,14,797**	**4,60,23,797**	**-**	**26,25,38,594**	**27,80,39,957**	**32,22,76,029**
18	Capital Work in Progress				-					-	-	-
	Grand Total	**49,45,54,754**	**9,02,59,869**	**-**	**58,48,14,623**		**21,65,14,797**	**4,60,23,797**	**-**	**26,25,38,594**	**27,80,39,957**	**32,22,76,029**

Note :	The additions during the year include additions from :	
	Gifted	-
	Earmarked Funds	-
	Sponsored Projects / Consultancy Funds	9,01,38,168
	Own Funds	1,21,701
		9,02,59,869

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SCHEDULE - 5 - Investments from Earmarked / Endowment Funds

Amount in ₹

Particulars		Current Year	Previous Year
1	In Central Government Securities		
2	In State Government Securities		
3	Other Approved Securities		
4	Shares		
5	Debentures and Bonds		
6	Term Deposits with Banks	1,23,53,46,368	81,05,37,356
7	Others (to be specified)		
	Total	**1,23,53,46,368**	**81,05,37,356**

SCHEDULE - 5A - Investments from Earmarked / Endowment Funds (Fund Wise)

Amount in ₹

Particulars		Current Year	Previous Year
1	Endowment Funds (vide Annexure I)	**6,89,17,000**	**5,58,32,873**
2	Earmarked Funds / Sponsored Projects (vide Annexure II)	1,16,64,29,368	75,47,04,483
	Total	**1,23,53,46,368**	**81,05,37,356**

SCHEDULE - 6 - Investment - Others

Amount in ₹

Particulars		Current Year	Previous Year
1	In Central Government Securities	**-**	**-**
2	In State Government Securities	-	-
3	Other Approved Securities	-	-
4	Shares	-	-
5	Debentures and Bonds	-	-
6	Term Deposits with Banks (vide Annexure - III)	99,00,000	1,25,00,000
7	Others (to be specified)	-	-
	Total	**99,00,000**	**1,25,00,000**

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SCHEDULE - 7 - Current Assets

Amount in ₹

Particulars	Current Year	Previous Year
1. Stock :		
a) Stores and Spares		
b) Loose Tools		
c) Publications		
d) Laboratory chemicals, consumables and glass ware		
e) Building Materials		
f) Electrical Materials		
g) Stationery		
2. Sundry Debtors :		
a) Debts outstanding for a period exceeding six months		
b) Others		
MOE Grant receivables [over and above sanctioned for the year]	-	-
c) MOE Grant receivables [sanctioned for the year]	-	-
d) Any Other Receivables [from Mess Section]	-	25,10,955
3. Cash and Bank balances :		
a) With Scheduled Banks		
- in Current Account (vide Annexure - V)	6,24,71,004	20,94,62,239
- in Term Deposit Accounts (vide Annexure IV)	1,95,79,511	3,00,60,447
- in Savings Accounts (vide Annexure VI)	1,17,97,99,078	1,22,02,59,460
b) With Non-Scheduled Banks		
c) Cash in hand	-	-
d) Cheques in hand	-	-
4. Post Office - Savings Accounts		
Total	**1,26,18,49,593**	**1,46,22,93,101**

Note : A separate Annexure is being enclosed showing the bank details, nomenclature of accounts showing the fund for which the bank accounts are being dedicated and the balance as on 31/03/2024

a) Balance in Savings Bank a/c for Earmarked Fund - Rs. 14,44,94,445
b) Balance in Savings Bank a/c for Endowment Fund - Rs. 1,48,69,758
c) Balance in Savings & Current Bank a/c for General Fund - Rs. 108,29,05,878

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SCHEDULE - 8 - Loans and Advances

Amount in ₹

Particulars	Current Year	Previous Year
1. Advance to employee : (Non interest bearing)		
a) Salary	-	-
b) Festival	-	-
c) Medical Advance	40,99,099	43,12,277
d) Other (to be specified)		
- Advance to employees (vide Annexure - VII)	50,000	9,15,691
2. Long Term Advance to employees : (Interest bearing)	-	-
a) Vehicle Loan	-	-
b) Home Loan	-	-
c) Other (to be specified)	-	-
3. Advances and other amounts recoverable in cash or in kind or value to be received		
a) On Capital Account	41,09,22,843	40,31,54,151
b) To Suppliers (vide Annexure VIII)	1,00,000	1,00,000
c) Other (to be specified) - Advance Student Research Scholars	-	-
d) Other (to be specified) - Advance for Research Projects	-	3,95,719
e) Other (to be specified) - Advance for Consultancy	-	-
f) Other (to be specified) - Institute Development Fund	-	-
g) Other-Miscellaneous	-	-
h) Other-E Journals	5,85,087	5,47,027
4. Prepaid Expenses	-	-
a) Insurance	-	-
b) Other Expenses	-	-
5. Deposits	-	-
a) Telephone	-	-
b) Lease Rent	-	-
c) Electricity	83,16,258	84,26,856
d) AICTE, if applicable	-	-
e) Other (to be specified) - against research projects	-	-
f) Other (to be specified) - against consultancy	78,359	-
6. Income Accrued		
a) On investments from Earmarked / Endowment Funds	5,96,98,915	1,50,44,228
b) On investments - Others	6,65,230	20,13,216
c) On Loans and Advances	-	-
7. Other - Current assets receivable from UGC / sponsored projects		
a) Debit balances in Sponsored projects		
b) Debit balances in Sponsored Fellowships & Scholarships	-	-
c) Grants Receivables	17,99,133	83,57,474
d) Other Receivables from UGC	-	-
8. Claim Receivable	-	-
Advance Tax / Income Tax Deducted at Source receivable	2,02,55,231	1,94,75,330
Total	**50,65,70,155**	**46,27,41,969**

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SCHEDULE - 9 - Academic Receipts

Amount in ₹

Particulars	Current Year	Previous Year
FEES FROM STUDENTS		
A. Academic		
1. Tuition Fees	17,35,87,165	17,64,24,432
2. Admission Fees	31,42,000	35,37,482
3. Enrolment Fees		
4. Library Admission Fees		
5. Laboratory Fees		
6. Art & Craft Fees		
7. Registration Fees		
8. Course Fees	27,37,500	21,86,834
Total (A)	**17,94,66,665**	**18,21,48,748**
B. Examinations		
1. Admission Test Fees	-	-
2. Annual Examination Fees	70,95,000	72,37,000
3. Mark sheet, Certificate Fees	-	-
4. Entrance Examination Fees	-	-
Total (B)	**70,95,000**	**72,37,000**
C. Other Fees		
1. Identity Card Fees		
2. Fine / Miscellaneous Fees	11,81,172	31,90,879
3. Medical Fees	-	-
4. Transportation Fees	-	-
5. Hostel Development Fees	1,06,65,200	76,49,700
Total (C)	**1,18,46,372**	**1,08,40,579**
D. Sale of Publications		
1. Sale of Admission Forms	-	-
2. Sale of Syllabus, Question Papers etc		
3. Sale of prospectus including admission forms		
Total (D)	**-**	**-**
E. Other Academic Receipts		
1. Registration fee for workshops, programmes, Student Activities Fees	72,04,482	64,17,225
2. Registration fees (Academic Staff College)	-	-
3. External Examination Fees Receipts	-	-
4. Convocation fees	20,63,000	29,84,750
5. Tuition Fees - Self Financing Course	-	-
6. Infrastructure Maintenance Fees	1,59,80,753	1,04,44,006
Total (E)	**2,52,48,235**	**1,98,45,981**
GRAND TOTAL (A+B+C+D+E)	**22,36,56,272**	**22,00,72,308**

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SCHEDULE - 10 - Grants / Subsidies (Irrevocable Grants Received)

Amount in ₹

Particulars	Grant-in-aid			Total Grant-in-aid	Current Year Total	Previous Year Total
	Govt of India	UGC Plan	State Govt Grant			
Balance B/F	(28,03,51,812)	-	46,851	(28,03,04,961)	(28,03,04,961)	(25,09,04,961)
Add : Receipts during the year plus reversal	1,80,17,89,443		-	1,80,17,89,443	1,80,17,89,443	1,78,52,20,353
Total	**1,52,14,37,631**	**-**	**46,851**	**1,52,14,84,482**	**1,52,14,84,482**	**1,53,43,15,392**
Add : Excess Expenditure transferred to Corpus Fund and adjustment of deficit shown in earlier accounts	28,03,51,812		-	28,03,51,812	28,03,51,812	-
Balance	1,80,17,89,443	-	46,851	1,80,18,36,294	1,80,18,36,294	1,53,43,15,392
Less : Utilized for Capital expenditure (A)	16,39,99,905			16,39,99,905	16,39,99,905	33,10,00,000
Balance	1,63,77,89,538	-	46,851	1,63,78,36,389	1,63,78,36,389	1,20,33,15,392
Less : Utilized for Revenue expenditure (B)	1,63,77,89,538		-	1,63,77,89,538	1,63,77,89,538	1,48,36,20,353
Less : Refund of the untilized grant	-		46,851	46,851	46,851	
Balance C/F (C)	0	-	-	0	0	(28,03,04,961)

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SCHEDULE - 11 - Income From Investments

Amount in ₹

Particulars	Earmarked / Endowment Funds		Other Investments	
	Current Year	Previous Year	Current Year	Previous Year
1. Interest				
a. On Government Securities				
b. Other Bonds / Debentures				
2. Interest on Term Deposits	15,59,719	2,72,52,046	16,56,531	40,22,559
3. Income accrued but not due on Term Deposits / Interest bearing advances to employees	9,04,93,572	2,91,93,850	50,93,426	1,52,303
4. Interest on Savings Bank Accounts	10,31,974	8,69,760	-	-
5. Interest on Security Depsoits with CESC	-	-	4,79,919	5,90,517
6. Others (Specify) - Dividend	-	-	6,616	7,784
Total	**9,30,85,265**	**5,73,15,656**	**72,36,492**	**47,73,163**
Transferred to Earmarked / Endowment Funds	9,30,85,265	5,73,15,656	-	-
Balance	**Nil**	**Nil**		

SCHEDULE - 12 - Interest Earned

Amount in ₹

Particulars	Current Year	Previous Year
1. On Savings Accounts with scheduled banks	4,30,18,829	2,83,05,776
2. On Loans		
a. Employees / Staff	-	-
b. Others	-	-
3. On Debtors and Other Receivables	-	-
Total	**4,30,18,829**	**2,83,05,776**

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SCHEDULE - 13 - Other Income

Amount in ₹

Particulars	Current Year	Previous Year
A. Income from Land and Buildings		
1. Hostel Room Rent	42,31,800	40,78,350
2. Licence Fees	22,40,369	11,25,335
3. Hire Charges of Auditorium / Play ground / Convention Centre / Guest House etc.	30,60,532	14,29,351
4. Electricity Charges recovered	25,97,716	40,62,953
5. Water Charges recovered	-	-
Total (A)	**1,21,30,417**	**1,06,95,989**
B. Sale Institute's Publications	**-**	**-**
C. Income from holding events		
1. Gross Receipts from annual function / sports carnival		
Less : Direct expenditure incurred on the annual function / sports carnival		
2. Gross Receipts from fetes		
Less : Direct expenditure incurred on the fetes		
3. Gross Receipts for Educational Tours		
Less : Direct expenditure incurred on the tours		
4. Others (to be specified and separately disclosed)		
- Course Fees	-	-
- Centre Fees for External Exams	-	-
- Seminar Programme Fees receipts	2,50,000	6,32,398
- Refund of Processing Fees paid to UGC	-	-
Total (C)	**2,50,000**	**6,32,398**
D. Others		
1. Income from Consultancy and Instituional Development Fund	24	87,06,803
2. RTI Fees		
3. Income from Royalty		
4. Miscellaneous Receipts (Sale of tender forms, application form, waste paper etc.)	20,42,900	20,04,455
5. Sale / Disposal of Assets / Scraps		
a. Owned Assets		
b. Assets received free of costs		
6. Grants / Donations from Institutions, Welfare Bodies and International Organizations		
7. Others (specify) - liabilities written back/adjustment of Input GST/TDS	-	29,24,415
Total (D)	**20,42,924**	**1,36,35,673**
GRAND TOTAL (A+B+C+D)	**1,44,23,341**	**2,49,64,060**

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SCHEDULE - 14 - Prior Period Income

Amount in ₹

Particulars	Current Year	Previous Year
1. Academic Receipts (Hostel Development Fees)	-	63,51,700
2. Other Income (Hostel Seat Rent)	-	7,56,600
3. Other Income (Hostel Electricity Charges)	-	3,77,700
4. Academic Receipts (Fine/Miscellaneous Receipts)	-	3,88,084
5. Income from Investments	-	1,76,218
6. Interest earned	-	-
7. Income from MOE Grant	-	-
8. Depreciation	2,40,877	-
9. Other Income	-	-
Total	**2,40,877**	**80,50,302**

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SCHEDULE - 15 - Staff Payments & Benefits (Establishment Expenses)

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
a)	Salaries and Wages			-			-
	- Central	98,69,16,230	-	98,69,16,230	93,36,33,733	-	93,36,33,733
	- UGC	-	-	-	-		-
	- Own sources and out of State Government Grant	-	-	-	-		-
b)	Allowances and Bonus	-	-	-	-	-	-
c)	Contribution to Provident Fund (EPF and CPF)	15,01,737	50,61,560	65,63,297	20,42,772	-	20,42,772
d)	Contribution to Other Fund (specify) - NPS	1,24,74,680	-	1,24,74,680	83,59,496		83,59,496
e)	Staff Welfare Expenses - Medical Expenses [Recovery of CMS Fund Rs. 48,07,100 and Medical Expenditure reimbursed Rs. 1,84,37,830]	87,32,497	48,98,233	1,36,30,730	-	1,46,95,193	1,46,95,193
f)	Retirement and Terminal Benefits	46,44,99,088	-	46,44,99,088	2,51,49,330	-	2,51,49,330
g)	LTC Facility	53,19,143	-	53,19,143	34,33,857	-	34,33,857
h)	Leave Salary	36,09,63,316	-	36,09,63,316	3,30,60,334	-	3,30,60,334
i)	Children Education Allowance	64,51,382	-	64,51,382	62,85,680	-	62,85,680
j)	Honorarium	47,500	13,04,327	13,51,827	2,44,000	3,38,399	5,82,399
k)	Others (Specify) - Salary (Teaching - Temporary/Contractual)	3,48,99,327	-	3,48,99,327	3,37,32,980	-	3,37,32,980
l)	Others (Specify) - Salary (Non-Teaching - Contractual)	3,13,27,816	75,52,945	3,88,80,761	2,84,79,571	-	2,84,79,571
m)	Others (Specify) - CVP Payment	2,98,08,748	-	2,98,08,748	3,20,06,117	-	3,20,06,117
l)	Others (Specify) - Pension Payment	2,64,78,48,806	-	2,64,78,48,806	6,69,77,649	-	6,69,77,649
Total		**4,59,07,90,270**	**1,88,17,065**	**4,60,96,07,335**	**1,17,34,05,519**	**1,50,33,592**	**1,18,84,39,111**

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SCHEDULE - 15A - Employees Retirement and Terminal Benefits

Amount in ₹

Particulars	Pension	Gratuity	Leave Encashment	Total
Opening Balance as on 01/04/2023	-	-	-	-
Addition : Capitalized value of Contributions received from other organizations				-
Total (a)	**-**	**-**	**-**	**-**
Less : Actual Payment during the year (b)	-	-	-	-
Balance available as on 31/03/2024 c = (a-b)	-	-	-	-
Provision required on 31/03/2024 as per Acturial Valuation (d)	2,55,80,90,957	43,28,62,548	32,64,59,798	3,31,74,13,303
A. Provision to be made in the current year (d-c)	2,55,80,90,957	43,28,62,548	32,64,59,798	3,31,74,13,303
B. Contribution to New Pension Scheme		-	-	-
C. Medical reimbursement to retired Employees		-	-	-
D. Travel to Hometown on Retirement		-	-	-
E. Deposit Linked Insurance Payment		-	-	-
Total (A+B+C+D+E)	**2,55,80,90,957**	**43,28,62,548**	**32,64,59,798**	**3,31,74,13,303**

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SCHEDULE - 16 - Academic Expenses

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
a)	Laboratory expenses	33,36,792	1,99,403	35,36,195	51,57,121	-	51,57,121
b)	Field work / Participation in Conferences	11,43,792	78,935	12,22,727	1,95,625	-	1,95,625
c)	Expenses on Seminars / Workshops	7,40,860	2,52,464	9,93,324	5,55,550	3,69,463	9,25,013
d)	Remuneration to Experts	10,75,500	97,200	11,72,700	15,59,250	-	15,59,250
e)	Examination	23,59,256	-	23,59,256	13,65,418	-	13,65,418
f)	Student Welfare expenses	-	43,92,434	43,92,434		49,93,886	49,93,886
g)	Admission expenses	81,902	-	81,902			-
h)	Convocation expenses	27,19,370	19,45,633	46,65,003	46,21,395	-	46,21,395
i)	Publications	-	-	-			-
j)	Stipend / means cum merit scholarship	-	-	-			-
k)	Subscription expenses	3,61,800	3,99,948	7,61,748	9,21,165	3,76,410	12,97,575
l)	Others (sports/cultural/medal etc)	7,61,857	5,58,733	13,20,590	-	5,62,718	5,62,718
m)	Departmental Contingencies	1,10,06,300	9,95,998	1,20,02,298	89,74,285	8,10,303	97,84,588
n)	Inaugural/Special Pograme	39,13,653	82,746	39,96,399	20,63,519	24,900	20,88,419
o)	PHD and Other Fellowships (Institute)	19,88,44,284	46,82,321	20,35,26,605	17,59,25,288	22,42,338	17,81,67,626
p)	Research Expenditure	-	-	-	-	-	-
q)	Institute Development Expenditure - Research Support	-	24	24	-	87,06,803	87,06,803
r)	Travelling And Conveyance	3,03,813	4,92,837	7,96,650	28,59,259	2,24,893	30,84,152
Total		**22,66,49,179**	**1,41,78,676**	**24,08,27,855**	**20,41,97,875**	**1,83,11,714**	**22,25,09,589**

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SCHEDULE - 17 - Administrative and General Expenses

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
A.	**Infrastructure**						**-**
	a) Electricity and power	2,79,77,327	31,05,388	3,10,82,715	2,46,09,084	52,86,298	2,98,95,382
	b) Water Charges			-			-
	c) Insurance			-			-
	d) Rent, Rates and Taxes (including property tax)			-	15,650	-	15,650
B.	**Communication**			**-**			**-**
	e) Postage and Stationery	2,17,592		2,17,592	3,74,618		3,74,618
	f) Telephone, Fax and Internet Charges	17,03,035	46,745	17,49,780	18,05,782	-	18,05,782
C.	**Others**						**-**
	g) Printing and Stationery (consumption)	8,10,283	25,181	8,35,464	5,84,374	-	5,84,374
	h) Travelling and Conveyance Expenses	7,07,339	15,251	7,22,590	20,83,809	-	20,83,809
	i) Hospitality			-	-		-
	j) Auditors Remuneration	8,00,000		8,00,000	7,00,000	32,587	7,32,587
	k) Professional Charges	19,47,100		19,47,100	10,99,660	-	10,99,660
	l) Advertisement and Publicity	7,03,414		7,03,414	83,623	-	83,623
	m) Magazines and Journals			-	-		-
	n) Others (specify) - Hiring of Manpower	4,22,50,621	36,66,655	4,59,17,276	2,10,04,676	1,84,54,597	3,94,59,273
	o) Guest House Expenses	30,96,560		30,96,560	23,84,200	-	23,84,200
	p) Remuneration to Experts			-	-	-	-
	q) Security Services	2,88,68,748		2,88,68,748	1,74,39,191	94,45,379	2,68,84,570
	r) Others (specify) - Contingencies	24,65,087	10,05,346	34,70,433	24,41,859	-	24,41,859
	s) Others (specify)			-	-	-	-
	t) Meeting Expenses	10,68,534	16,065	10,84,599	15,89,877	17,886	16,07,763
Total		**11,26,15,640**	**78,80,631**	**12,04,96,271**	**7,62,16,403**	**3,32,36,747**	**10,94,53,150**

Indian Institute of Engineering Science and Technology

SCHEDULE - 18 - Transportation Expenses

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
1	Vehicles (owned by institution)			-			-
	a) Running expenses	7,77,712	40,000	8,17,712	5,17,746	11,552	5,29,298
	b) Repair & Maintenance	6,731	-	6,731	9,348	-	9,348
	c) Insurance expenses			-			-
2	Vehicles taken on rent / lease						-
	Rent / lease and Running expenses			-			-
3	Vehicle (Taxi) hiring expenses	-		-	-		-
4	Others			-			-
Total		**7,84,443**	**40,000**	**8,24,443**	**5,27,094**	**11,552**	**5,38,646**

SCHEDULE - 19 - Repairs & Maintenance

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
a)	Buildings (including Electrical maintenance)	2,21,89,111	11,48,601	2,33,37,712	1,95,31,087	11,19,610	2,06,50,697
b)	Furniture & Fixtures	-	-	-	-	-	-
c)	Plant & Machinery	-	-	-	-	-	-
d)	Office Equipment	48,852	-	48,852	-	-	-
e)	Computers & Softwares	3,21,897	24,000	3,45,897	14,31,513	-	14,31,513
f)	Laboratory & Scientific Equipments	4,38,851	-	4,38,851	12,28,795	-	12,28,795
g)	Audio Visual Equipments	-	-	-	-	-	-
h)	Cleaning Material & Services	-	-	-	-	-	-
i)	Book Binding Charges	-	-	-	-	-	-
j)	Gardening	-	-	-	-	-	-
k)	Estate Maintenance	51,32,801	76,570	52,09,371	69,77,944	3,65,800	73,43,744
l)	Others (specify) - PHE maintenance	18,56,981	-	18,56,981	1,04,123	-	1,04,123
m)	Others (specify) - Annual Maintenance Contract	24,09,371	-	24,09,371	-	-	-
Total		**3,23,97,864**	**12,49,171**	**3,36,47,035**	**2,92,73,462**	**14,85,410**	**3,07,58,872**

Indian Institute of Engineering Science and Technology

SCHEDULE - 20 - Finance Costs

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
a)	Bank Charges	-	54,196	54,196	-	94,903	94,903
b)	Interest on Term Loan		-	-		-	-
c)	Others (specify)			-			-
Total		**-**	**54,196**	**54,196**	**-**	**94,903**	**94,903**

SCHEDULE - 21 - Other Expenses

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
a)	Provision for Bad and Doubtful Debts / Advances			-			-
b)	Irrecoverable Balance written off		-	-		38,800	38,800
c)	Grants / Subsidies to other institutions / organizations			-			-
d)	Others (specify) - Interest on Salary Grant refunded to GoWB & Others	-	27,058	27,058	-	-	-
		-	-	-			-
Total		**-**	**27,058**	**27,058**	**-**	**38,800**	**38,800**

SCHEDULE - 22 - Prior Period Expenses

Amount in ₹

Particulars		Current Year			Previous Year		
		Recurring Grant	Others	Total	Recurring Grant	Others	Total
1	Establishment expenses	-	-	-	-	-	-
2	Academic expenses	-	-	-	-	-	-
3	Administrative expenses	-	43,292	43,292	-	-	-
4	Transportation expenses	-	-	-	-	-	-
5	Repairs & Maintenance - Civil	-	-	-	-	-	-
6	Finance Cost - Bank Charge	-	-	-	-	-	-
7	Depreciation	-	-	-	-	28,828	28,828
Total		**-**	**43,292**	**43,292**	**-**	**28,828**	**28,828**

Indian Institute of Engineering Science and Technology

Corresponding to Annual Accounts 2023-2024)

SCHEDULE - 23

Significant Accounting Policies:

Indian Institute of Engineering Science and Technology is an Autonomous body. The Institute is financed by the Ministry of Education, Government of India through Revenue Grant (Creation of Capital Assets, Recurring and Non-Recurring purpose). The Institute is also undertaken various research projects and consultancy works through its esteemed teachers and the assets created out of it is duly stated in these financial statements.

Financial Statements-

The Institute prepared the following Financial Statements i.e. Balance Sheet and Income & Expenditure Account for the year ended as on 31st March 2024. The Common Accounting format as prescribed by the Ministry has been followed in drawing up those financial statements; however, in its first year the institute had its best endeavor to follow every line item of the said prescribed form, however, the same in some cases could not be strictly followed and will be incorporated in the ensuing financial year's statement;

Accounting Concept-

The financial statement has been prepared under Historical Cost Convention unless otherwise stated and on the principal of going concern method.

Accounting Basis-

The account is prepared under accrual basis of accounting, excepting the cases specifically stated in these significant accounting policies. Government grants & Subsidies are accounted for on accrual basis if reasonable assurance obtained for its definite future receipts.

Investment Accounting-

The Institute has invested its fund available to its credit in fixed deposits with scheduled commercial banks and the same is stated at the face value plus accrued interest thereon.

Governments Grants & Subsidies-

Government Grants / Subsidies receivable during the year under Non recurring head are being treated as Capital Receipts and accounting for under Corpus Fund to the extent utilized for capital expenditure.

Government Grants / Subsidies earmarked for certain purpose receivable during the year under any head and to be utilized by way of payment for that specific purpose are being treated as Capital Receipts & accounting for under Earmarked Fund.

Government Grants /Subsidies receivable during the year under Recurring head are being treated as Revenue receipts and accounted for as income under the head Grant/Subsidy to the extent the same has been utilized for the purpose for which the grant has been sanctioned.

Revenue Recognition -

Tuition Fees

Tuition fees, Sale of Admission Forms have been accounted for as and when actually received from the students. Fees actually paid to the mess authority, but not received by the Institute as on year end has been considered as receivable from mess authority.

Interest Income -

Interest on savings bank account have been considered as income as and when the same is credited in bank account and interest accrued on fixed deposits have been accounted for at the end of the year.

Fixed Assets and Depreciation Accounting -

Fixed Assets are valued at a cost of acquisition inclusive of inward expenses and incidental expenses. Condemned & unserviceable assets are written off in accounts as and when required.

Indian Institute of Engineering Science and Technology

Gifted / donated assets, if any, are valued at declared value where available; if not available, the value is estimated based on the present market value adjusted with reference to the physical condition of the assets. They are set up by credit to Capital fund and merged with fixed assets of the institute. Depreciation is charged at the rates applicable to the respective assets.

Books received as gifts, if any, are valued at selling prices printed on the books. Where they are not printed, the value is based on assessment.

Fixed assets are valued at cost less accumulated depreciation. Depreciation on fixed assets is provided on Straight line method at the following rates:

Sl. No	Particulars	Rate of Depreciation (p.a)
I	Building	2%
II	Roads & Bridges	2%
III	Tubewells and Water Supply	2%
IV	Electrical Installations & Equipments	5%
V	Plant & Machinery	5%
VI	Scientific and Laboratory Equipment	8%
VII	Office Equipment	7.5%
X	Audio Visual Equipment	7.5%
XI	Computers & Peripherals	20%
XII	Furniture & Fixture	7.5%
XIII	Vehicles	10%
XIV	Library Books and Scientific Journals	10%
XV	Computer Software	40%
XVI	e-Journals	40%

Depreciation is provided for the whole year on additions during the year, irrespective the dates of addition.

Where an asset is fully depreciated, it will be carried at a residual value Re 1 in the balance sheet and will not be further depreciated. Thereafter, depreciation is calculated on the additions of each year separately at the rate of depreciation applicable for that asset head.

Fixed Asset procured for sponsored projects – Fixed Assets created out of Earmarked Funds and funds of sponsored projects, where the ownership of such asset vests in the Institute, are set up by credit to Capital Fund and merged with the Fixed Assets of the Institute and depreciation is being charged on the said fixed assets at prescribed rates. Assets created out of Sponsored Project funds, where the ownership is retained by the sponsors but held and used by the institute are separately disclosed in the Notes on Accounts.

Inventories –

The inventories of chemicals, stationery etc are not separately maintained and the whole quantity have been accounted for as consumed as and when purchased.

Retirement Benefits-

Provident fund of the employees has been deducted from salary and the same is being transferred to State Bank of India, Howrah Branch, which is being maintained by Howrah Treasury – I, Govt of West Bengal.

Indian Institute of Engineering Science and Technology

Retirement benefits i.e. pension, gratuity and leave encashment are provided on the basis on the basis of actuarial valuation. The actual payments of pension, gratuity and leave salary are debited in the accounts to the respective provisions.

Other retirement benefits, if any, are being accounted for as and when actually being paid during the year 2023-2024; however, the retirement benefit consists of Gratuity, Leave Encashment and Pension for the live employees as on 31/03/2024 has been valued under actuarial basis as per the provisions of AS 15, issued by the ICAI and provided in the accounts accordingly.

Earmarked / Endowment Funds -

Earmarked funds created by the institute and Endowment funds received by the institute has been separately accounted for and also its corresponding investments and assets. Most of such funds have either separate bank accounts or investments by way of fixed deposits. The income from such investments is accounted for on an accrual basis; such income and income from interest on savings accounts are credited to the respective funds. The expenditures out of the funds are debited to the respective funds. The balance in the respective funds is carried forward and is represented on the assets side by bank balance, investments and accrued interests.

Endowments are funds received from various individual donors, trusts and other organizations for establishing chairs and for medals and prizes, as specified by the donors. Most of the endowment funds have its own investment and some has separate bank accounts. The uninvested balances against them are negligible.

The income from investments of each Endowment Fund is added to the fund. The expenditures on medals and prizes are made from the interest earned on investment of the respective endowment funds and the balance is carried forward.

Sponsored Projects -

In respect of the ongoing sponsored projects, the amounts received from sponsors are credited to the head `Current Liabilities and Provisions – Current Liabilities – Other Liabilities – Receipts against ongoing projects". As and when expenditure is incurred / advances are paid against such projects, or the concerned project account is debited with allocated overhead charges, the liability account is debited.

In addition to the earmarked fund for the junior research fellowships funded by the University Grants Commission, Fellowships and Scholarships are also sponsored by various organizations. These are accounted in the same way as sponsored projects except that the expenditure generally is on disbursement of fellowships and scholarships, which may include allowances for contingent expenditure by the fellows and scholars.

The institute itself also awards fellowships and scholarships, which are accounted as Academic Expenses.

Income Tax –

The income of the Institute is exempt from Income Tax under section 10(23c)(iiiab) of the Income Tax Act, 1961. No provision for income tax is therefore made in the accounts.

Indian Institute of Engineering Science and Technology

SCHEDULE - 24

Contingent Liabilities & Notes on Accounts:

1. Claims against the Institute suits Rs. Nil (Previous year Rs. Nil)

2. Previous year's figures have been regrouped / rearranged whenever deems fit.

3. Addition in the year to fixed assets purchased out of sponsored projects and earmarked fund for which the effective ownership lies with the institute and the institute is using the same for the purpose of the activities of the institute only :-

Plan Expenditure	Rs.	15,62,86,549
Own Fund	Rs.	1,21,701
Sponsored Projects	Rs.	9,01,38,168

The assets have been set up by credit to Capital Fund.

In the balance sheet as on 31st March 2014 and the balance sheet of earlier years, fixed assets created out of plan funds and fixed assets created out of non plan funds or other funds from sources were not exhibited distinctly.

Disclosure on Library Books :-

4041 books worth Rs. 1,92,208 missing as per report submitted by a CA firm on physical verification of the library books as on 31/03/2017; the same could not be reduced from the written down value of the library books as per schedule 4 as the date of addition and consequent depreciation charged on the same could not be accurately ascertained;

4. The Institute is set up on land measuring 114 acres at Shibpur. The institute is an erstwhile state university and the title of the land rests with the Government of West Bengal. The title of the land is not yet transferred to the Institute's name and the state government has been approached to make the necessary transfer process. The value of land is taken as Nil in the balance sheet.

5. In the opinion of the management, the current assets, loans and advances and deposits have been valued on realization in the ordinary course, equal at least to the aggregate amount shown in the balance sheet.

6. In the endeavor of the institute conform to the prescribed common format to the best extent possible, the provident fund assets and liabilities have been taken out from the accounts and are being presented separately.

7. Corpus Fund for Future Development- A new earmarked fund has been created during the year 2019-20, out of the fixed deposits made out of general funds over the year and the balance as on 31/03/2024 stood at Rs. 60.43 crore.

8. **Actuarial Valuation of Gratuity, Leave Encashment and Pension** -

In compliance with the guidelines of the MOE, Govt of India, the Institute appointed an actuary valuer to evaluate the provision of Gratuity, Leave Encashment and Pension of the staffs of the Institute, as on 31/03/2024. As the Institute carried out the actuarial valuation for the first time, the entire provisions of the Gratuity, Leave Encashment and Pension as on 31/03/2024, as valued by the actuary valuer, requires to be accounted for and thereby the expenditure and the provisions have been increased by the following amount –

a) On a/c of Gratuity	Rs. 43.28 crore
b) On a/c of Leave Encashment	Rs. 32.65 crore
c) On a/c of Pension	Rs. 255.81 crore
Total provision to be made	**Rs. 331.74 crore**

With the incorporation of the provision of actuarial valuation of Gratuity, Leave Encashment and Pension in the accounts, the Corpus Fund as on 31/03/2024 got reduced by Rs. 331.74 crore; **without the effect of the provision of the actuarial valuation of Gratuity, Leave Encashment and Pension, the Corpus Fund as on 31/03/2024 would be Rs. 299.69 crore.**

The salient particulars of the valuation is enclosed herewith as annexure to this Notes.

Indian Institute of Engineering Science and Technology

9. Capital Expenditure Commitment –

The major capital expenditure commitment for the Institute are as follows –

Sl	Project	Details	
a.	1000 capacity hostel for boys	Estimated cost	Rs. 129.43 crore
		Implementing Agency	CPWD
		Present Status	Work under progress
		Advance made as on 31/03/2024	Rs. 30.55 crore

Sl	Project	Details	
b.	G+5 Academic Building	Estimated cost	Rs. 29.40 crore
		Implementing Agency	CPWD
		Present Status	Pending local municipality (HMC) approval
		Advance made as on 31/03/2024	Rs. 5.88 crore

Sl	Project	Details	
c.	Repair/Renovation works and various Civil and electrical works at Civil Engineering Department	Estimated cost	Rs. 1.68 crore
		Implementing Agency	CPWD
		Present Status	Work under progress
		Advance made as on 31/03/2024	Rs. 0.17 crore

Sl	Project	Details	
d.	Repair/Renovation works and various Civil and electrical works at CST Department	Estimated cost	Rs. 2.21 crore
		Implementing Agency	CPWD
		Present Status	Work under progress
		Advance made as on 31/03/2024	Rs. 0.22 crore

Sl	Project	Details	
e.	Water proofing at Slater Hall, Main Building (CST and Mining Block)	Estimated cost	Rs. 4.28 crore
		Implementing Agency	CPWD
		Present Status	Tender called
		Advance made as on 31/03/2024	Rs. 0.43 crore

10. Schedules 1 to 24 are annexed to and form an integral part of the balance sheet as on 31st March 2024 and the Income and Expenditure account for the year ended as on that date.

Joint Registrar (Finance) **Registrar (Actg.)** **Director**

For **DEBASIS BANDYOPADHYAY & CO.**

Chartered Accountants
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

Indian Institute of Engineering Science and Technology

Disclosures in terms of Accounting Standard-15
Gratuity

Total expense recognised in the Statement of Profit & Loss

Amount in ₹

Sr. No.	Particulars	For the year ended on 31.03.2024	For the year ended on 31.03.2023
(i)	Current service cost	2,01,13,558	-
(ii)	Past Service Cost	-	
(iii)	Interest cost	-	-
(iv)	Expected return on plan assets	-	-
(v)	Curtailment cost/(credit)	-	-
(vi)	Settlement cost/(credit)	-	-
(vii)	Actuarial losses/(gains) recognized in the year	41,27,48,990	-
(viii)	Expense Recognized in Statement of Profit/Loss	**43,28,62,548**	**-**
	Amount to be recognized in the Balance Sheet		
(i)	Present value of the obligation at the beginning of the period	-	
(ii)	Acquisition Adjustment	-	
(iii)	Interest cost	-	
(iv)	Past Service Cost	-	
(v)	Current service cost	2,01,13,558	
(vi)	Curtailment Cost	-	
(vii)	Settlement Cost		
(viii)	Benefits paid (if any)	-	
(ix)	Actuarial (gain)/loss on obligation	41,27,48,990	
(x)	Present value of the obligation at the end of the period	**43,28,62,548**	
	Actuarial Assumptions		
(i)	Mortality Rate	IIAM 2012-2015 (Ultimate)	
(ii)	Superannuation Age	60 for Staff,65 for faculty	
(iii)	Early Retirement & Disablement	10 per thousand p.a. 6 above age 45 3 between 29 and 45 1 below age 29	
(iv)	Discount Rate	6.97 %	
(v)	Inflation Rate	6.00%	
(vi)	Return on Asset	Not Applicable	
(vii)	Remaining Working Life	9 for Staff, 15 for Faculty	
(viii)	Formula Used	Projected Unit Credit Method	

Indian Institute of Engineering Science and Technology

Disclosures in terms of Accounting Standard-15
Leave Entitlement

Total expense recognised in the Statement of Profit & Loss

Amount in ₹

Sr. No.	Particulars	For the year ended on 31.03.2024	For the year ended on 31.03.2023
(i)	Current service cost	3,67,24,970	-
(ii)	Past Service Cost	-	
(iii)	Interest cost	-	-
(iv)	Expected return on plan assets	-	-
(v)	Curtailment cost	-	-
(vi)	Settlement cost	-	-
(vii)	Actuarial losses/(gains) recognized in the year	28,97,34,828	-
(viii)	Expense Recognized in Statement of Profit/Loss	**32,64,59,798**	**-**
	Amount to be recognized in the Balance Sheet		
(i)	Present value of the obligation at the beginning of the period	-	-
(ii)	Acquisition Adjustment	-	
(iii)	Interest cost	-	-
(iv)	Past Service Cost	-	-
(v)	Current service cost	3,67,24,970	-
(vi)	Curtailment Cost	-	
(vii)	Settlement Cost		
(viii)	Benefits paid (if any)	-	-
(ix)	Actuarial (gain)/loss on obligation	28,97,34,828	-
(x)	Present value of the obligation at the end of the period	**32,64,59,798**	**-**
	Actuarial Assumptions		
(i)	Mortality Rate	IIAM 2012-2015 (Ultimate)	
(ii)	Superannuation Age	60 for staff , 65 for Faculty.	
(iii)	Early Retirement & Disablement	"10 per thousand p.a. 6 above age 45 3 between 29 and 45 1 below age 29 "	
(iv)	Discount Rate	6.97 %	
(v)	Inflation Rate	6.00%	
(vi)	Return on Asset	Not Applicable	
(vii)	Remaining Working Life	9 for Staff, 15 for Faculty	
(viii)	Formula Used	Projected Unit Credit Method	

Indian Institute of Engineering Science and Technology

Disclosures in terms of Accounting Standard-15
Pension
Total expense recognised in the Statement of Profit & Loss

Amount in ₹

Sr. No.	Particulars	For the year ended on 31.03.2024	For the year ended on 31.03.2023
(i)	Current service cost	46,30,08,809	-
(ii)	Past Service Cost	-	
(iii)	Interest cost	-	-
(iv)	Expected return on plan assets	-	-
(v)	Curtailment cost/(credit)	-	-
(vi)	Settlement cost/(credit)	-	-
(vii)	Actuarial losses/(gains) recognized in the year	2,09,50,82,148	-
(viii)	Expense Recognized in Statement of Profit/Loss	**2,55,80,90,957**	**-**
	Amount to be recognized in the Balance Sheet		
(i)	Present value of the obligation at the beginning of the period	-	
(ii)	Acquisition Adjustment	-	
(iii)	Interest cost	-	
(iv)	Past Service Cost	-	
(v)	Current service cost	46,30,08,809	
(vi)	Curtailment Cost	-	
(vii)	Settlement Cost		
(viii)	Benefits paid (if any)	-	
(ix)	Actuarial (gain)/loss on obligation	2,09,50,82,148	
(x)	Present value of the obligation at the end of the period	**2,55,80,90,957**	
	Actuarial Assumptions		
(i)	Mortality Rate	IIAM 2012-2015 (Ultimate)	
(ii)	Superannuation Age	60 for Staff,65 for faculty	
(iii)	Early Retirement & Disablement	"10 per thousand p.a. 6 above age 45 3 between 29 and 45 1 below age 29 "	
(iv)	Discount Rate	6.97 %	
(v)	Inflation Rate	6.00%	
(vi)	Return on Asset	Not Applicable	
(vii)	Remaining Working Life	8 for Staff, 11 for Faculty	
(viii)	Formula Used	Projected Unit Credit Method	

Indian Institute of Engineering Science and Technology

PROVIDENT FUND ACCOUNT

Balance Sheet as at 31.03.2024

Amount in ₹

Liabilities	Amount	Assets	Amount
GPF			
Opening balance	67,21,13,706	Recoverable Advance	16,62,88,625
Add : Subscription received	8,58,79,680		
Add : Interest	7,63,96,735	Howrah Treasury a/c	66,37,11,941
Less : Withdrawal	2,37,65,087		
(A)	**81,06,25,034**	Interest accrued as on 31/03/2024	3,94,22,555
CPF			
Opening balance	84,16,325		
Add : Subscription received	8,38,428		
Add : Interest	12,44,908		
Less : Withdrawal	-		
(B)	**1,04,99,661**		
CPF (Institute Contribution)			
Opening balance	71,08,646		
Add : Subscription received	7,14,843		
Add : Interest	10,52,381		
Less : Withdrawal	-		
(C)	**88,75,870**		
Interest Reserve Account	3,94,22,555		
	86,94,23,121		**86,94,23,121**

Joint Registrar (Finance) **Registrar (Actg.)** **Director**

For **DEBASIS BANDYOPADHYAY & CO.**

Chartered Accountants
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

Indian Institute of Engineering Science and Technology

PROVIDENT FUND ACCOUNT

Receipts and Payments Account for the year ended 31.03.2024

Amount in ₹

Receipts	Amount	Payments	Amount
Opening Balance [11020301]	56,51,36,273	GPF Advance [07040100]	4,37,86,221
GPF Subscription [07010503]	8,46,03,600	GPF Withdrawal [07040300]	2,37,65,087
CPF Subscription [07010509]	8,38,428		
CPF Contribution by Employers [20030200]	7,14,843		
GPF Advance refund [07010504]	12,76,080		
Interest received [03020200]	7,86,94,025	Closing Balance [11020301]	66,37,11,941
	73,12,63,249		**73,12,63,249**

Income and Expenditure Account for the year ended 31.03.2024

Amount in ₹

Receipts	Amount	Payments	Amount
Interest credited to PF a/c	7,86,94,025	Interest accrued for the year	3,94,22,555
		Interest received for the years	
		2021-22 &2022-23	7,86,94,025
Surplus / (Deficit)	3,94,22,555		
	11,81,16,580		**11,81,16,580**

Joint Registrar (Finance) **Registrar (Actg.)** **Director**

For **DEBASIS BANDYOPADHYAY & CO.**

Chartered Accountants
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

Indian Institute of Engineering Science and Technology

ANNEXURE - I

Endowment Fund Fixed Deposits as at 31.03.2024

Amount in ₹

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2024			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
1	Von Newman Scholarship Fund	0171100443029	9/12/2018	6.00%	53,747		53,747	6/11/2024	55,614
2	Dr. S. P. Brambha Memorial Merit Scholarship Fund	0171100442992	9/12/2018	6.00%	106,895		106,895	6/11/2024	110,609
3	Probir Sengupta Memorial Prize Fund	0171100433112	5/17/2023	6.50%	15,446	1,119	16,565	5/17/2028	21,322
4	Renu Chakraborty V. L. Fund	0171100433105	5/17/2023	6.50%	56,553		56,553	5/17/2028	56,553
5	Dr. Fazlur Kader Memorial Scholarship Fund	0171100442800	9/12/2018	6.00%	180,880	17,891	198,771	6/11/2024	243,958
6	J. N. Neogi Students' Benefit Fund	0171100442862	9/12/2018	6.00%	113,020	36,902	149,922	6/11/2024	152,433
7	Sunita Memorial Prize Fund	0171100442879	9/12/2018	6.00%	24,101	7,870	31,971	6/11/2024	32,507
8	Dr. B. N. Dey Scholarship Fund	0171100442886	9/12/2018	6.00%	58,692	19,162	77,854	6/11/2024	79,160
9	Kunja Kusum Scholarship Fund	0171100442961	9/12/2018	6.00%	77,444		77,444	6/11/2024	80,134
10	Sarat Kanta Nirmalya Basini Biswas Golden Jubilee Scholarship Fund	0171100433099	11/1/2022	6.00%	20,087		20,087	5/17/2028	20,380
11	Prof. N. N. Sen Memorial Scholarship Fund	0171100443074	9/12/2018	6.00%	39,432		39,432	6/11/2024	40,802
12	Acharya P. C. Roy Scholarship	0171100443012	9/12/2018	6.00%	91,587		91,587	6/11/2024	94,770
13	Ramlal Nandy & Genoda Sundari Memorial Scholarship Fund	0171100442947	9/12/2018	6.00%	46,928		46,928	6/11/2024	48,558
14	Liluah Iron Works Ltd. Scholarship	0171100443043	9/12/2018	6.00%	46,928		46,928	6/11/2024	48,559
15	R & K Ahmed Merit Scholarship	0171100443036	9/12/2018	6.00%	56,769		56,769	6/11/2024	58,741
16	The President of India Gold Medal	0171100443050	9/12/2018	6.00%	56,769		56,769	6/11/2024	58,740
17	Alumni Donation Seminar Series	0171100433075	10/31/2022	6.00%	666,197	57,262	723,459	17-15-2028	933,102
18	Jogesh Chandra Banerjee Memorial Scholarship Fund	0171100443081	9/12/2018	6.00%	478,376		478,376	6/11/2024	494,996
19	Anil Burnwal Merit cum Means Scholarship Fund	0171100303499	5/17/2023	6.50%	111,753		111,753	5/17/2028	111,753
20	Jaya Smriti Puroskar (BESUS)	0171100404736	8/8/2017	6.00%	33,205	11,594	44,799	6/11/2024	44,977
21	BECA - 1964	0171100441964	9/12/2018	6.00%	358,558	124,005	482,563	6/11/2024	492,662
22	Prof. S. C. Dasgupta Gold Medal	1532100009461	8/8/2022	6.50%	284,695	105,853	390,548	17.05.2028	392,373
23	Jaya Smriti Puroskar	1532100009478	8/8/2022	6.50%	40,601	664	41,265	17.05.2028	55,959
24	Dhaibat Ghosh Memorial Scholarship	1532100058113	4/23/2022	5.25%	832,158	55,755	887,913	4/23/2027	1,080,106
25	Prabodh Kumar Chatterjee Fund - 1	1532100047560	4/17/2021	5.36%	254,125		254,125	4/17/2024	254,125
26	Prabodh Kumar Chatterjee Fund - 2	1532100058122	4/23/2021	5.20%	50,000		50,000	4/23/2024	50,000
27	Rai Sahib Amulya Chandra Mitra Endowment Fund	1532100047588	5/17/2021	5.36%	409,963	45,505	455,468	5/17/2024	480,967
28	Rai Sahib Amulya Chandra Mitra Endowment Fund	1532100047579	5/17/2021	5.36%	305,689		305,689	5/17/2024	305,689
					4,870,597	**483,582**	**5,354,179**		**5,899,549**
					4,870,597	**483,582**	**5,354,179**		**5,899,549**

Indian Institute of Engineering Science and Technology

ANNEXURE - I

Endowment Fund Fixed Deposits as at 31.03.2024 *(Contd...)*

Amount in ₹

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2024			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
29	S. C. Dasgupta Memorial Fund	1532100047384	5/17/2021	5.36%	2,254,351	329,425	2,583,776	5/17/2024	2,644,797
30	Madhusudan Bhattacharjee Memorial Fund	1532100062116	7/12/2021	5.10%	200,000		200,000	7/12/2024	200,000
31	Sougata Mukherjee Memo. Award for Excellence Fund	1532100089751	3/14/2024	6.80%	509,541		509,541	12/14/2025	509,541
32	Students Reward Programme Fund	1532100089760	3/13/2024	6.80%	1,650,000		1,650,000	12/13/2025	1,650,000
33	Suhas Choudry Swimming Excellence Prize Fund	1532100055888	4/25/2024	6.75%	127,577		127,577	4/25/2025	127,577
34	Ujjal Dasgupta Scholarship Corpus Fund	1532100055912	4/25/2024	6.75%	1,422,298		1,422,298	4/25/2025	1,422,298
35	GAABESU Admission Grant - 2	1532100055930	3/15/2024	7.00%	582,443		582,443	3/15/2027	582,443
36	Prof. P. C. Mitra Memorial Award	1532100070364	12/3/2022	6.10%	103,812	11,333	115,145	12/3/2027	140,510
37	Prof. P. C. Mitra Memorial Award	1532100090632	9/26/2023	6.50%	204,175	12,709	216,884	9/26/2028	281,847
38	K. K. Pal Chaudhuri Arch.	1532100084640	7/2/2023	6.50%	103,812	6,676	110,488	7/2/2028	143,304
39	Prof. A. K. Seal Gold Medal	23690310006207	2/26/2024	5.50%	183,903	899	184,802	11/26/2024	191,594
40	Prof. Amiya Basu Endowment Fund - 1	23690310011904	11/23/2021	5.00%	3,150,000		3,150,000	11/23/2024	3,150,000
41	Prof. Amiya Basu Endowment Fund - 2	1532100194853	12/27/2023	6.75%	1,658,787		1,658,787	12/27/2024	1,658,787
42	B.E.C. (55) Scholarship Fund	23690310006481	6/27/2023	6.50%	583,100	36,641	619,741	6/27/2024	621,935
43	Prabodh Chandra Mitra Scholarship Fund	2369031006504	6/27/2023	6.50%	115,206	7,240	122,446	6/27/2024	122,879
44	Siddhananda Memorial Lecture Fund	23690310006573	7/3/2023	6.50%	133,634	8,357	141,991	7/3/2024	142,534
45	BESU Endowment Fund	23690310006498	6/27/2023	6.50%	9,066,062	569,684	9,635,746	6/27/2024	9,669,876
46	BESU Endowment Fund	23690310011584	9/9/2023	6.50%	38,414	2,294	40,708	9/9/2024	40,972
47	B.E.C. (55) Scholarship Fund	23690310011577	9/9/2023	6.50%	2,471	148	2,619	9/9/2024	2,636
48	Bijoy Ashu Chair Professor Fund	10382034315	8/30/2022	5.60%	113,490		113,490	8/30/2025	113,490
49	Bijoy Ashu Chair Professor Fund	34205796198	6/15/2023	6.80%	8,609,397	427,530	9,036,927	6/15/2024	9,209,935
50	Bijoy Ashu Chair Professor Fund	34205799520	6/15/2023	6.80%	8,609,398	427,530	9,036,928	6/15/2024	9,209,936
51	Alpona Banerjee Memorial Endowment Fund	1532100196833	2/8/2017	6.50%	9,902,000		9,902,000	2/8/2027	9,902,000
52	Provat Chandra Neogi Memorial Endowment Fund - 1	1532100243766	6/2/2018	6.00%	450,000		450,000	6/2/2028	450,000
53	Provat Chandra Neogi Memorial Endowment Fund - 2	1532100255615	9/26/2018	6.00%	2,250,000		2,250,000	9/26/2028	2,250,000
54	Tarun Kanti Ghosh Memorial	1532100286817	7/30/2019	6.00%	347,532		347,532	7/30/2024	347,532
55	BEC 84 Change Maker Student Award	153220QPU00006552	5/31/2023	7.05%	1,450,000	87,111	1,537,111	3/27/2025	1,647,181
56	B. K. Bose Lecture Fund	153220QP00001269	12/27/2023	7.25%	225,000		225,000	3/15/2025	225,000
57	BESUS FOUNDATION	153220DP00003792	3/14/2024	7.25%	10,000,000	28,065	10,028,065	18/04/2025	10,819,650
	GRAND TOTAL :				**68,917,000**	**2,439,224**	**71,356,224**		**73,377,803**

Indian Institute of Engineering Science and Technology

ANNEXURE - II

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2024

Amount in ₹

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2024			Date of Maturity	Maturity Value	Date of Maturity
					Principal Amt.	Accumulated Int.	TOTAL			
1	BESUS Project Fund	153220QPU0000561	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020	11-01-2025
2	BESUS Project Fund	153220QPU0000552	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020	11-01-2025
3	BESUS Project Fund	153220QPU0000545	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020	11-01-2025
4	BESUS Project Fund	153220QPU0000539	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020	11-01-2025
5	BESUS Project Fund	153220QPU0000507	16-03-2023	7.25%	25,12,020		25,12,020	10-01-2025	25,12,020	10-01-2025
6	BESUS Project Fund	153220PU00005766	17-03-2023	7.25%	1,75,66,324	17,59,611	1,93,25,935	11-01-2025	2,00,18,884	11-01-2025
7	BESUS Project Fund	153220PU00005623	16-03-2023	7.25%	1,76,04,196	15,22,445	1,91,26,641	10-01-2025	2,00,62,044	10-01-2025
8	BESUS Project Fund	153220PU00005757	17-03-2023	7.25%	1,76,06,122	16,51,440	1,92,57,562	11-01-2025	2,00,64,238	11-01-2025
9	BESUS Project Fund	153220QPU0000525	17-03-2023	7.25%	90,85,810		90,85,810	11-01-2025	90,85,810	11-01-2025
10	BECE International Symposium	153220PU00005863	23-03-2023	7.25%	3,20,739	19,034	3,39,773	17-01-2025	3,65,520	17-01-2025
11	BECE International Symposium	153220PU00005872	23-03-2023	7.25%	12,28,186	72,885	13,01,071	17-01-2025	13,99,662	17-01-2025
12	IIEST SHIBPUR R & C MISC A/C	23690310036686	04-09-2023	6.80%	8,00,00,000	31,66,622	8,31,66,622		8,55,80,299.00	04-09-2024
	SUB TOTAL				**15,59,71,477**	**81,92,037**	**16,41,63,514**		**16,91,36,557**	
13	BESUS Overhead Fund	153220QPU0000570	20-03-2023	7.00%	5,00,000		5,00,000	20-03-2026	5,00,000	20-03-2026
14	BESUS Overhead Fund	1532100036795	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000	09-03-2026
15	BESUS Overhead Fund	1532100036801	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000	09-03-2026
16	BESUS Overhead Fund	1532100036810	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000	09-03-2026
17	BESUS Overhead Fund	1532100036829	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000	09-03-2026
18	BESUS Overhead Fund	1532100036838	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000	09-03-2026
19	BESUS Overhead Fund	153220QPU0000589	20-03-2023	7.25%	5,24,988		5,24,988	04-01-2025	5,24,988	14-01-2025
20	BESUS Overhead Fund	153220QPU0000516	19-03-2023	7.25%	5,25,036		5,25,036	11-01-2025	5,25,036	11-01-2025
21	BESUS Overhead Fund	153220QPU00005933	31-03-2023	7.00%	90,85,342	9,63,203	1,00,48,545	31-03-2026	1,11,83,047	31-03-2026
22	BESUS Overhead Fund	153220PU0005678	17-03-2023	7.25%	10,68,631	1,13,745	11,82,376	11-01-2025	12,17,830	11-01-2025
23	BESUS Overhead Fund	153220PU00005687	17-03-2023	7.25%	21,37,270	2,27,494	23,64,764	11-01-2025	24,35,070	11-01-2025
24	BESUS Overhead Fund	153220PU00065748	17-03-2023	7.25%	55,30,341	5,36,585	60,66,926	11-01-2025	63,02,471	11-01-2025
25	BESUS Overhead Fund	153220PU00005632	16-03-2023	7.25%	55,22,898	5,36,194	60,59,092	10-01-2025	62,93,989	10-01-2025
26	BESUS Overhead Fund	153220PU00005784	20-03-2023	7.00%	75,81,824	7,99,435	83,81,259	20-03-2026	93,36,556	20-03-2026
27	BESUS Overhead Fund	153220PU00005605	16-03-2023	7.25%	98,69,641	9,51,502	1,08,21,143	10-01-2025	1,12,47,612	10-01-2025
28	BESUS Overhead Fund	153220PU00005599	16-03-2023	7.25%	98,69,641	8,84,896	1,07,54,537	10-01-2025	1,12,47,612	10-01-2025
29	BESUS Overhead Fund	153220PU00005614	16-03-2023	7.25%	19,25,743	1,85,655	21,11,398	10-01-2025	21,94,610	10-01-2025

Indian Institute of Engineering Science and Technology

ANNEXURE - II

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2024 *(Contd...)*

Amount in ₹

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2024			Date of Maturity	Maturity Value	Date of Maturity
					Principal Amt.	Accumulated Int.	TOTAL			
30	BESUS Overhead Fund	153220PU00005793	20-03-2023	7.00%	81,91,823	8,37,925	90,29,748	20-03-2026	1,00,87,733	20-03-2026
31	BESUS Overhead Fund	1532100105484	31-03-2023	7.00%	36,27,624	3,83,608	40,11,232	31-03-2026	44,67,199	31-03-2026
32	BESUS Overhead Fund	153220PU00005739	17-03-2023	7.25%	1,23,74,468	13,32,621	1,37,07,089	11-01-2025	1,41,02,156	11-01-2025
33	BESUS Overhead Fund	153220GR00000088	15-03-2024	7.25%	6,00,00,000	1,59,032	6,01,59,032		6,44,69,701	15-03-2025
34	BESUS Overhead Fund	153220GR00000060	14-03-2024	7.25%	7,00,00,000	1,96,452	7,01,96,452		7,52,14,651	14-03-2025
	SUB TOTAL				**21,08,35,270**	**81,08,347**	**21,89,43,617**	**9,17,646**	**23,38,50,261**	
35	BESUS Foundation	23690310007990	23-01-2023	6.30%	21,12,302	1,61,072	22,73,374	19-10-2025	25,07,098	19-10-2025
36	BESUS Foundation	23690310011676	17-02-2023	6.50%	9,218	718	9,936	22-12-2024	10,383	22-12-2024
37	Corpus Fund	23690310006405	17-06-2023	6.50%	1,32,96,119	8,41,177	1,41,37,296	17-06-2023	1,41,81,662	17-06-2024
38	Corpus Fund	1532100142847	13-07-2022	5.30%	9,03,914	47,555	9,51,469	13-07-2023	9,52,782	11-06-2024
39	Maintenance Fund	23690310006436	17-06-2023	6.75%	2,16,41,298	14,29,808	2,30,71,106	17-06-2023	2,31,39,480	17-06-2024
40	Maintenance Fund	1532100142816	13-07-2022	5.30%	13,48,367	70,930	14,19,297	13-07-2023	14,21,263	11-06-2024
41	Equipment Replacement Fund	1532100142823	17-05-2023	6.80%	7,33,726	50,745	7,84,471	17-05-2023	7,84,906	17-05-2024
42	Faculty Development Fund	1532100142830	13-07-2022	5.30%	7,94,990	41,777	8,36,767	13-07-2023	8,37,969	11-06-2024
43	Staff Development Fund	23690310006412	17-06-2023	6.50%	1,07,17,084	6,78,016	1,13,95,100	17-06-2023	1,14,30,839	17-06-2024
44	Depreciation Fund	23690310006429	17-06-2023	6.50%	93,48,699	5,91,443	99,40,142	17-06-2023	99,71,337	17-06-2024
45	B.E. College - General Fund A/c	1532100046932	14-09-2023	7.00%	1,00,00,000	-	1,00,00,000	14-09-2023	1,00,00,000	14-09-2026
46	BEC General Fund	23690310008157	08-02-2023	6.30%	1,07,415	7,767	1,15,182	03-11-2025	1,27,469	03-11-2025
47	BEC General Fund	23690310011669	16-04-2023	6.50%	2,445	161	2,606	16-04-2023	2,762	08-03-2025
48	BEC General Fund	23690310008140	08-02-2023	6.30%	88,53,972	6,74,272	95,28,244	03-11-2025	1,05,07,019	03-11-2025
49	BEC General Fund	23690310011515	10-04-2023	6.50%	19,827	1,312	21,139	10-04-2023	22,389	28-02-2025
50	BEC General Fund	23690310008133	08-02-2023	6.30%	77,02,947	5,86,615	82,89,562	03-11-2025	91,41,097	03-11-2025
51	BEC General Fund	23690310033456	23-02-2024	6.75%	7,74,50,970	53,38,107	8,27,89,077	23-02-2024	8,28,12,738	23-02-2025
52	BEC General Fund	23690310011645	11-02-2023	6.50%	1,77,239	13,903	1,91,142	14-12-2024	1,99,576	14-12-2024
53	BEC General Fund	23690310033487	23-02-2024	6.75%	2,85,70,803	19,69,169	3,05,39,972	23-02-2024	3,05,48,700	23-02-2025
54	BEC General Fund	23690310011638	11-02-2023	6.50%	65,381	5,128	70,509	14-12-2024	73,621	14-12-2024
55	BEC General Fund	23690310033449	23-02-2024	6.75%	6,50,58,815	44,84,010	6,95,42,825	23-02-2024	6,95,62,700	23-02-2025
56	BEC General Fund	23690310011621	11-02-2023	6.50%	1,48,881	11,679	1,60,560	14-12-2024	1,67,644	14-12-2024
57	BEC General Fund	23690310033470	23-02-2024	6.75%	3,44,22,654	23,72,493	3,67,95,147	23-02-2024	3,68,05,662	23-02-2025
58	BEC General Fund	23690310011614	11-02-2023	6.50%	78,772	6,179	84,951	14-12-2024	88,699	14-12-2024
59	BEC General Fund	23690310007945	23-01-2023	6.30%	1,69,82,650	13,42,246	1,83,24,896	12-01-2025	2,01,56,758	12-01-2025

Indian Institute of Engineering Science and Technology

ANNEXURE - II

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2024 *(Contd...)*

Amount in ₹

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2024			Date of Maturity	Maturity Value	Date of Maturity
					Principal Amt.	Accumulated Int.	TOTAL			
60	BEC General Fund	23690310033463	23-02-2024	6.75%	2,92,59,257	20,16,619	3,12,75,876	23-02-2024	3,12,84,814	23-02-2025
61	BEC General Fund	23690310011591	11-02-2023	6.50%	66,957	5,252	72,209	14-12-2024	75,395	14-12-2024
62	Institute General Fund	23690310033425	23-02-2024	6.75%	5,00,04,522	34,46,432	5,34,50,954	23-02-2024	5,34,66,230	23-02-2025
63	Institute General Fund	23690310011324	05-03-2023	6.00%	1,00,969	7,330	1,08,299	18-10-2023	1,12,089	31-05-2024
64	IIEST-Student Fee Collection Fund	23690310033432	23-02-2024	6.00%	16,85,87,988	1,16,21,969	18,02,09,957	23-02-2024	20,15,66,862	23-02-2027
65	BESU	34087266649	05-02-2024	6.80%	97,65,210	1,03,295	98,68,505	05-02-2024	1,04,46,370	05-02-2025
66	BESU	34087253584	05-02-2024	6.80%	97,65,210	1,03,295	98,68,505	05-02-2024	1,04,46,370	05-02-2025
					57,80,98,601	**3,80,30,474**	**61,61,29,075**		**64,28,52,683**	
					57,80,98,601	**3,80,30,474**	**61,61,29,075**		**64,28,52,683**	
67	BESU	34087265125	05-02-2024	6.80%	97,65,210	1,03,295	98,68,505	05-02-2024	1,04,46,370	05-02-2025
68	BESU	34087241863	05-02-2024	6.80%	97,65,209	1,03,295	98,68,504	05-02-2023	1,04,46,369	05-02-2025
69	BESU	34087247413	05-02-2024	6.80%	97,65,209	1,03,295	98,68,504	05-02-2023	1,04,46,369	05-02-2025
70	BESU	34087250572	05-02-2024	6.80%	97,65,209	1,03,295	98,68,504	05-02-2023	1,04,46,369	05-02-2025
71	BESU	31688180670	08-03-2022	5.20%	6,76,663	77,629	7,54,292	02-12-2024	7,79,282	02-12-2024
72	BESU	31744729481	24-04-2022	5.20%	1,11,36,520	11,72,235	1,23,08,755	18-01-2025	1,28,27,222	18-01-2025
73	Digital Education Hub	40821107056	02-03-2022	5.45%	70,00,000	8,03,951	78,03,951	02-03-2025	82,34,283	02-03-2025
74	CORPUS FUND	153220DP00003783	14-03-2024	7.25%	36,50,000	12,804	36,62,804		39,49,172	18-04-2025
75	IIEST SHIBPUR GENERAL FUND	153220GR00000024	14-03-2024	7.25%	4,00,00,000	1,12,258	4,01,12,258		4,29,79,801	14-03-2025
76	IIEST SHIBPUR GENERAL FUND	153220GR00000015	14-03-2024	7.25%	4,00,00,000	1,12,259	4,01,12,259		4,29,79,801	14-03-2025
77	BE COLLEGE DEVELOPMENT FUND	153220GR00000033	14-03-2024	7.25%	2,00,00,000	56,129	2,00,56,129		2,14,89,900	14-03-2025
78	IIEST SHIBPUR MISCELLANEOUS FUND	153220GR00000051	14-03-2024	7.25%	2,00,00,000	56,129	2,00,56,129		2,14,89,900	14-03-2025
79	IIEST SHIBPUR MISCELLANEOUS FUND	153220GR00000042	14-03-2024	7.25%	4,00,00,000	1,12,259	4,01,12,259		4,29,79,801	14-03-2025
SUB TOTAL					**79,96,22,621**	**4,09,59,307**	**84,05,81,928**		**88,23,47,322**	
GRAND TOTAL :					**1,16,64,29,368**	**5,72,59,691**	**1,22,36,89,059**		**1,28,53,34,140**	

Indian Institute of Engineering Science and Technology

ANNEXURE - III & IV TO SCHEDULE - 6 (6) & SCHEDULE - 7(3)(a)

GENERAL FUND FIXED DEPOSITS AS AT 31.03.2024

Amount in ₹

Sl. No.	Name of Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2024			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
1	BECSOMS	23690310006399	17-06-2023	6.50%	36,72,048.40	2,32,212.00	39,04,260.40	17-06-2024	39,16,612.40
2	BECSOMS	1532100058900	09-03-2022	5.25%	99,00,000.00		99,00,000.00	07-08-2026	99,00,000.00
3	BECSOMS	1532100058919	07-11-2021	5.10%	26,00,000.00		26,00,000.00	07-11-2024	26,00,000.00
4	PDSIT	003414136321	06-04-2020				Transferred to Sweep A/c (It was not a F.D.)		
5	IIEST, SHIBPUR	38783155112	20-03-2023	5.77%	1,03,74,343.00	2,68,822.00	1,06,43,165.00	20-05-2024	1,07,25,198
6	IIEST, SHIBPUR	38471491524	20-08-2022	5.10%	22,71,924.00	1,35,015.00	24,06,939.00	21-05-2025	25,82,900.00
7	IIEST, SHIBPUR	38692442983	16-08-2022	5%	6,61,196.00	29,181.00	6,90,377.00	17-08-2024	7,27,885.00
GRAND TOTAL :					**2,94,79,511.40**	**6,65,230.00**	**3,01,44,741.40**		**3,04,52,595.40**

Indian Institute of Engineering Science and Technology

ANNEXURE - V

Sub : CURRENT BANK ACCOUNT (2023-24)

Amount in ₹

Sl. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Closing Balance as on 31.03.2024
	P.N.B.	0171050031501	C/A	BEC General Fund	9,34,775.54
	P.N.B.	0171050031510	C/A	BEC Development Fund	7,42,374.14
	P.N.B.	0171050031528	C/A	BEC Employees Benefit Fund	7,12,537.87
	P.N.B.	0171050031536	C/A	BEC Miscellaneous Fund	5,09,902.18
	P.N.B.	Sweep A/c E/150	C/A	BEC General Fund	1,14,50,000.00
	P.N.B.	Sweep A/c E/151	C/A	BEC Development Fund	30,00,000.00
	P.N.B.	Sweep A/c E/152	C/A	BEC Employees Benefit Fund	75,50,000.00
	P.N.B.	Sweep A/c E/153	C/A	BEC Miscellaneous Fund	2,72,60,000.00
	P.N.B.	0171050031293	C/A	QIP	14,610.91
	S.B.I., Howrah	31906556458	C/A	Prof. Tax	1,02,96,803.00
	TOTAL				**6,24,71,003.64**

Indian Institute of Engineering Science and Technology

ANNEXURE - VI

Sub : Savings Bank Account (2023-24)

Amount in ₹

Sl. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Closing Balance as on 31.03.2024
1	P.N.B.	0171010375799	S.B.	Corpus Fund	40,915.05
2	P.N.B.	1532010020688	S.B.	Faculty Development	38,936.00
3	P.N.B.	1532010020679	S.B.	Equipment Replacement	79,067.93
4	P.N.B.	0171010375829	S.B.	Maintenance Fund	4,613.00
5	P.N.B.	0171010375811	S.B.	Depreciation Fund	1,00,978.00
6	P.N.B.	0171010375802	S.B.	Staff Development	4,444.00
7	P.N.B.	1532010006354	S.B.	BESUS Foundation	91,385.91
8	P.N.B.	Sweep A/c	S.B.	BESUS Foundation	1,13,00,000.00
9	ICICI	003401010516	S.B.	P.D.S.I.T.	27,306.00
10	ICICI	Sweep A/c	S.B.	P.D.S.I.T.	1,64,23,640.00
11	P.N.B.	0171010348333	S.B.	B.E.C. Scholarship	12,86,638.14
12	P.N.B.	0171010348350	S.B.	B.E.C. Prize	2,98,810.25
13	P.N.B.	1532010029740	S.B.	BESUS - NSS A/C	4,16,658.30
14	P.N.B.	1532010077288	S.B.	Visvesvaraya PHD Fellowship	17,33,356.52
15	P.N.B.	1532010079772	S.B.	GIAN Courses	1,65,873.20
16	P.N.B.	1532010079763	S.B.	Students Welfare Fund	13,42,717.25
17	U.C.O.	23690110000489	S.B.	Tuition Fees	1,82,998.94
18	U.C.O.	Sweep A/c	S.B.	Tuition Fees	79,72,49,954.00
19	U.C.O.	23690110000960	S.B.	Academic Services	1,36,804.97
20	U.C.O.	Sweep A/c	S.B.	Academic Services	82,73,300.00
21	U.C.O.	23690110091845	S.B.	IIEST, Shibpur General A/c	21,96,998.94
22	U.C.O.	23690110040461	S.B.	Prof. Amiya Basu Endowment	1,76,937.24
23	U.C.O.	Sweep A/c - 461	S.B.	Prof. Amiya Basu Endowment	7,28,442.00
24	S.B.I. Shalimar	10381942908	S.B.	Bijou Ashu Prof.	9,87,544.85
25	S.B.I., BESUS	33725727857	S.B.	I.I.E.S.T.	19,36,47,932.06
26	S.B.I., BESUS	39212800500	S.B.	Alumni Cell IIEST, Shibpur	22,95,940.00
27	P.N.B.	1532010005180	S.B.	Research & Consultancy Fund	(1,93,85,921.90)
28	P.N.B.	Sweep A/c-5180	S.B.	Research & Consultancy Fund	6,88,00,000.00
29	P.N.B.	0171010301001	S.B.	BE College Testing Fees Fund	53,573.30
30	P.N.B.	Sweep A/c-1001	S.B.	BE College Testing Fees Fund	52,00,000.00
31	P.N.B.	1532010005173	S.B.	Institutional Development Fund	77,12,656.30
32	P.N.B.	Sweep A/c-5173	S.B.	Institutional Development Fund	33,00,000.00
33	P.N.B.	1532010084491	S.B.	BCMFRL of Homoeopathy	6,31,83,998.92
34	P.N.B.	1532010011963	S.B.	Continuing Education Centre (CEC)	44,77,975.66
35	UCO	23690110091852	S.B.	IIEST SHIBPUR R&C MISC. A/C	1,13,450.00
36	UCO	Sweep A/c-1852	S.B.	IIEST SHIBPUR R&C MISC. A/C	71,00,000.00
37	P.N.B.	1532010089955	S.B.	ISDCS	11,154.41
			TOTAL		**1,17,97,99,079.24**

Indian Institute of Engineering Science and Technology

ANNEXURE - VII

List of Unadjusted Advance Given to Employees as on 31.03.2024

Amount in ₹

Sl. No.	Name of the Employees	Closing Balance as on 31.03.2024
1	Basudeb Bhattacharyya	50,000.00
	TOTAL	**50,000.00**

ANNEXURE - VIII

List of Unadjusted Advance Given to Suppliers as on 31.03.2024

Amount in ₹

Sl. No.	Name of the Employees	Closing Balance as on 31.03.2024
1	India Tourism Development Corporation Ltd.	1,00,000.00
	TOTAL	**1,00,000.00**

महानिदेशक लेखा परीक्षा का कार्यालय (केंद्रीय) , कोलकाता

सत्यमेव जयते

O/O THE DIRECTOR GENERAL OF
AUDIT (CENTRAL), KOLKATA
8 K S Roy Road
GIP Building
Kolkata , West Bengal
PIN 700001

Ltr No: INSPECTION WING/2024-2025/DIS-2287140
Date: 17 Dec 2024

To,

The Director,
Indian Institute of Engineering Science and Technology,
Howrah, Botanical Garden, Dist.-Howrah,
West Bengal-711103

Subject: Separate Audit Report on the accounts of the Indian Institute of Engineering Science and Technology, Howrah, for the financial year 2023-24

Sir/Madam,

A copy of the Separate Audit Report, alongwith Annexure, on the accounts of the Indian Institute of Engineering Science and Technology, Howrah, for the financial year 2023-24, is forwarded to the The Director, Indian Institute of Engineering Science and Technology, Howrah, Botanical Garden, Dist.-Howrah, West Bengal-711103 for information and necessary action.

Arrangement may please be made for preparation of Hindi Version of the Separate Audit Report, with Annexure, at your end, and sending the same directly to the Ministry.

It may please be ensured that the Audited Accounts and the Separate Audit Report, along with Annexure, are placed before the apex body, for consideration and adoption, before the same are sent to the Government for being placed in the Parliament.

Two copies of the printed Annual Report, for the financial year 2023-24 (both English and Hindi Version), containing the Audited Accounts and the Separate Audit Report, along with Annexure, as laid before the Parliament, may please be forwarded to this Office, for necessary action at this end.

Yours faithfully,

Encls: As above

Uday Shankar Prasad
Director General

Copy to:-

Ltr No : INSPECTION WING/2024-2025/DIS-2287140/C1/For Information
1 Finance and Accounts Section, IIEST, Howrah for information and necessary actions
Ltr No : INSPECTION WING/2024-2025/DIS-2287140/C2/For Information
2 OAD-AB Section, O/o the DGAC, Kolkata

Separate Audit Report on the accounts of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, West Bengal for the year ended 31 March 2024

We have audited the attached Balance Sheet of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, as at 31 March 2024, the Income and Expenditure Account and Receipts and Payments Account for the year ended on that date, under Section 19(2) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971, read with Section 22(2) of the National Institute of Technology, Science Education and Research (Amendment) Act, 2014. These financial statements are the responsibility of the Institute's Management. Our responsibility is to express an opinion on these financial statements, based on our audit.

2. This separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only, with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms etc. Audit observations on financial transactions in regard to compliance with extent Laws, Rules & Regulations (i.e. Propriety and Regularity aspects) and efficiency-cum-performance aspects etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.

3. We have conducted our audit in accordance with the Auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

i. We have obtained all the information and explanations, which, to the best of our knowledge and belief, were necessary for the purpose of our audit;

ii. The Balance Sheet and Income and Expenditure Account/Receipt and Payment Account, dealt with in this report, have been drawn up in terms of the format prescribed by the Ministry of Education, Government of India, vide order No. 29-4/2012-FD dated 17 April 2015.

iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, as required under Section 22(2) of the National Institute of Technology, Science Education and Research (Amendment) Act, 2014, insofar as it appears from our examination of books.

iv. We further report that:

Comments on Accounts

A Balance Sheet

1.1 Liabilities

1.1.1 Corpus/ Capital Fund (Schedule 1): (-) ₹31.55 crore

a) Despite being pointed out in the previous year Audit Report, the above head was overstated by an amount of ₹2.41 crore, due to booking of the amount as capital grants utilized, but actually paid to CPWD as advance yet to be adjusted. This further resulted in understatement of 'Current Liabilities and Provisions' (Schedule 3) by ₹2.41 crore.

b) Despite being pointed out in the previous year Audit Report, the above head was overstated by an amount of ₹9.01 crore, due to addition of the amount to the 'Corpus/Capital Fund', as value of assets purchased out of Earmarked Funds/ Sponsored Projects, without transferring of ownership to the Institute. This further resulted in overstatement of 'Fixed Assets' (Schedule 4),by ₹9.01 crore.

1.2 Assets

1.2.1 Fixed Assets (Schedule 4): ₹140.70 crore

The above head (Capital Works in Progress) was understated by an amount of ₹31.50 crore, due to non-transferring of the advance paid to CPWD in respect of six construction works, *viz.* 100 capacity G+10 single seated Boys' Hostel (₹30.55 crore), G+5 Building for Structural Engineering Lab (₹0.59 crore), Providing and Laying Hybrid Polyurethane and polyurea V Chemical Water Proofing (₹0.13 crore), Renovation of Bituminous Road (₹0.22 crore), Providing complete Electrical work, LAN networking including civil interior work at Ramanujan Central Library (₹10,258/-) and Renovation work including Civil, Sanitation & Plumbing works at SDME Building (₹60,180/-), which were adjusted during the financial year 2023-24. This further resulted in overstatement of 'Loans, Advances and Deposits' (Schedule 8), by ₹31.50 crore.

B. General Comments

2.1 The Institute paid different amount of advances towards CPWD in respect of four works viz. Major Renovation of Workshop of IIEST Shibpur under sub-heads: Roof treatment of the workshop, Plaster, Painting & Toilet work etc., Renovation of Floor & Doors and Windows and Rapair and Renovation of various Hostels/Halls and booked the same either in 'Loans, Advances and Deposits' or in 'Fixed Assets'. However, on receipt of the utilisation from the CPWD, the Institute erroneously booked the utilised amount towards each work again either in 'Loans, Advances and Deposits' or in 'Fixed Assets' without reconciliation of the previously booked amounts. This needs reconciliation and required adjustments.

2.2 The Institute received an amount of ₹19.13 crore in respect of different sponsored projects as depicted in Schedule 3(a) of 'Current Liabilities and Provisions'. However, ₹18.52 crore was shown in the Receipts and Payments Accounts as receipts against Sponsored Schemes. This discrepancy needs to be reconciled.

2.3 Despite being pointed out in the previous year's Audit Report, the Institute had booked an amount of ₹1.96 crore as 'Term Deposit' under the head 'Current Assets' (Schedule 7), which was not accounted for in Receipts and Payments Accounts as Closing Balances, in contravention to the guidance issued by the MoE for compilation of Financial Statement of Central Education Institutions.

2.4 The Institute had not accounted for ₹0.09 crore, being value of the 1027 gifted books during the financial year 2023-24.

C. Grants in Aid

The Indian Institute of Engineering Science and Technology is mainly financed by grants-in-aid from the Government of India (GoI). The Institute had an opening balance of Grants of ₹33.47 crore as per previous year's SAR. During the financial year 2023-24, Grants-in-aids received by the Institute was ₹180.18 crore (GIA-General and Salaries: ₹163.78 crore and GIA-Capital: ₹16.40 crore). Out of the total grants of ₹213.65 crore, so available, the Institute spent ₹209.27 crore (Revenue Expenditure: ₹163.78 crore and Capital Expenditure: ₹45.49 crore[1]), leaving an overall unspent balance of ₹4.38 crore (which is included in capital advances to CPWD).

D. Net Effect

The net impact of the comments given in the preceding paragraphs is that both the Assets and Liabilities were overstated by ₹9.01 crore as at 31 March 2024..

v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income and Expenditure Account and Receipts and Payments Account, dealt with by this report, are in agreement with the books of accounts.

vi. In our opinion, and to the best of our information, and according to the explanations given to us, the said financial statements, read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in

[1] Total Capital Grants received(₹16.40 crore) – Advance paid to CPWD(₹2.41 crore)+Previous advances adjusted during the current financial year(₹31.50 crore)

Annexure to this Audit Report, give a true and fair view, in conformity with accounting principles generally accepted in India:

a. insofar as it relates to the Balance Sheet, of the state of affairs of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, as at 31 March 2024 and

b. insofar as it relates to the Income and Expenditure Account of the *deficit*, for the year ended on that date.

For and on behalf of the C&AG of India

(Uday Shankar Prasad)
Director General of Audit
(Central), Kolkata

Place: Kolkata
Date: 16·12·2024

Annexure

A. Adequacy of the Internal Audit System

The Internal Audit System of the Institute is inadequate, on account of the following:

i. There is no Internal Audit wing in the Institute and internal audit is being done by external agency (CA Firm) annually.

ii. The Institute does not have any Internal Audit manual.

B. Adequacy of the Internal Control System

The Internal Control System of the Institute is inadequate, on account of the following:

i. Cheque Protectors are not being used.

ii. Identity Cards of the employees are not being periodically renewed.

iii. None of the purchase departments in the Institute is compiling a list of pending purchase orders, at least once every quarter.

iv. Receipts of material is not being evidenced by pre-numbered Goods Received Notes.

C System of Physical Verification of Fixed Assets and Inventories

The Institute had conducted Phyical Verification of fixed assets and Inventories for the financial year 2023-24.

D Regularity in payment of Statutory Dues:

The Institute was regular in payment of its Statutory Dues.

Indian Institute of Engineering Science and Technology, Shibpur
Howrah - 711103, West Bengal, INDIA
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