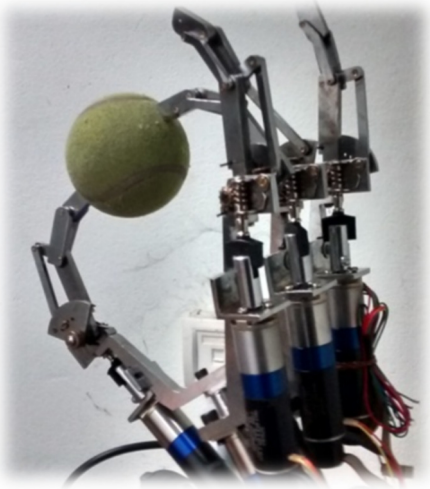
NEWSLETTER

September 2024- January 2025



SCHOOL OF MECHATRONICS AND ROBOTICS

RENEWAL OF MOU WITH CSIR

CSIR has agreed to conduct M. Tech. in Mechatronics programme jointly with IIESTS, through three of its participating institutes namely CSIR-CEERI, CSIR-CSIO and CSIR-CMERI.

The objective of the collaboration is to conduct M. Tech. in Mechatronics programme of four semesters (two years) duration jointly by IIESTS and CSIR by utilizing the expertise and facilities available at the participating institutes of CSIR at CSIR-CEERI, CSIR-CSIO and CSIR-CMERI, synergistically. While the course will be conducted at IIESTS, CSIR-CEERI, CSIR-CSIO and CSIR-CMERI premises, the academic degree will be awarded to the students by IIESTS on successful completion of the course.

ESTABLISHMENT OF CO-INNOVATION IN DEEP TECH DOMAINS

The primary objective of this Centre is to promote student entrepreneurship, and start-ups in deep technology domains such as Robotics, Artificial Intelligence (AI), Machine Learning, the Internet of Things (IoT), and other related fields.

The CiC will focus on fostering new product development, advancing research and translation efforts, and supporting the creation of high-potential start-ups within these domains.

The Centre will function jointly with Institution's Innovation Council (IIC) and Tagore Centre for Green Technology Business Incubation (TCGTBI) of IIEST, Shibpur.

Dr. Tanmay Pal, participated in the Capacity Building for Design and Entrepreneurship (CBDE). The program aims to create conditions to cultivate behaviors such as tolerance for ambiguity, empathy, persistence, risk taking and IP creation, thereby taking a step towards the effective implementation of NEP 2020.

Professor Subhasis Bhaumik showcased the School facilities to the Asian Development Bank team on January 14, 2025 in the presence of Dean R&C.

NEW LABORATORY SETUP AND INSTITUTE ACTIVITIES

Two new laboratory setups involving hydraulic and pneumatic systems have been established in the School. The setups are meant to give the students an exposure to industry standard mechatronics systems.

INVITED TALKS

Dr. Anirban Nag, delivered a talk on the "Control strategies for robotics: trends and open research areas", in the Anusandhan National Research Foundation (ANRF) sponsored 5-day National Symposium on Bridging Academia and Industry for NextGen Technologies in Electrical Engineering (AI-NxtGen-EE 2024), Organized by the Department of Electrical Engineering, Indian Institute of Engineering Science and Technology, Shibpur, Howrah, West Bengal.

PUBLICATIONS

JOURNALS

Bibekananda Patra, Anirban Nag and Sandipan Bandyopadhyay, Analytical determination of the optimal effective regular workspace of a 6-6 Stewart platform manipulator for a specified orientation workspace, 203, Mechanism and Machine Theory, 2024

CONFERENCES

Shreyas Kumar, Ishita Chaudhury, Bishesa Das, Harshavardhan Siddamala and Anirban Nag, Comprehensive study of the position and orientation workspaces of the 6-RSS parallel manipulator and its experimental validation, 3rd International and 15th National Conference of Industrial Problems on Machines and Mechanisms, 2024

ACADEMIA CONNECT AND COLLABORATIONS

A team of faculties from different disciplines of **Seacom Engineering College** visited the School on December 17, 2024. The facilities were displayed and possibilities of collaborations discussed with the faculty.

Prof. Tanima Bhowmick from **IEM Kolkata**, is presently collaborating with the School faculty on a research problem related to aerial vehicles. A group of students from the same institute has been allotted to work on the same.

The faculty had a fruitful discussion with **Professor Sourav Chandra**, Department of Biosciences and Biomedical Engineering, **Indian Institute of Technology Indore,** regarding possible collaborations on exoskeletons.