

HIGH-END WORKSHOP ON INTELLIGENT MOBILE HYDRAULICS AND ADVANCED AUTOMATION FOR IMPROVED MOTION CONTROL OF OFF-HIGHWAY VEHICLES

11TH JULY - 16TH JULY, 2022

Organized by - Indian Institute of Technology (Indian School of Mines), Dhanbad

Sponsored by - Science and Engineering Research Board through Accelerate Vigyan Scheme (AVS), DST, Govt. of India



ABOUT WORKSHOP

'KARYASHALA' is an effort to improve research productivity and provide hands-on experience to the motivated PG and PhD students, primarily from universities and colleges, in handling high-end scientific instruments through technology transfer. The workshop is aimed to provide in-depth knowledge to the participants in understanding the advanced physics of mobile hydraulics and skill development in fluid power systems required for handling research problems. Participants will be able to explore diverse perspectives related to the design of hydraulic transmission systems used in off-highway vehicles and advanced automation to improve their motion control, enhancing the system's efficiency. After successfully completing the workshop, the participants will be able to design and develop low-cost automation circuits for industrial applications and come out with innovative design solutions.

The workshop will be of one-week duration, and the dynamic and pragmatic faculties from various IITs/Industries of distinguished disciplines will deliver the lectures. The workshop is supported by Science and Engineering Research Board (SERB) through Accelerate Vigyan Scheme (AVS), DST, Govt. of India and facilitated by IIT (ISM) Dhanbad. The participant's performance will be judged through quizzes and attendance in the workshop session, and completion certificates will be issued based on their satisfactory performance.

The participants do not have to pay any amount to attend this workshop. Registration fees and the related expenses for the participating students will be borne by the host institute through SERB funding support as per the SERB, DST, Govt. of India norms.



CHIEF GUEST
PROF. RAJIV SHEKHAR
DIRECTOR



CHAIRMAN
PROF. AMIT RAI DIXIT
HEAD OF DEPARTMENT
MECHANICAL ENGINEERING

SPEAKERS



Dr. Somashekhar S. Hiremath
Associate Professor
Department of Mechanical Engineering
IIT Madras



Prof. Sanjoy Kr. Ghoshal
Associate Professor
Department of Mechanical Engineering
IIT (ISM) Dhanbad



Prof. Ajit Kumar
Assistant Professor
Department of Mechanical Engineering
IIT (ISM) Dhanbad



Mr. Y K Singha,
Manager (E&M)
Innovation Cell, MCL
CIL



Prof. Jayanta Das
Associate Professor
Department of Mechanical Engineering
IIT (ISM) Dhanbad



Prof. K. B. Nandapurkar
Assistant Professor
Department of Electrical Engineering
IIT (ISM) Dhanbad



Mr. Krishna Singh
Manager
Bosch-Rexroth Pvt. (I) Ltd.



Prof. Subrata Kr. Ghosh
Associate Professor
Department of Mechanical Engineering
IIT (ISM) Dhanbad



Dr. Mohit Bhola
Postdoc, AAU Energy
Aalborg University
Denmark

REGISTRATION

The participants will be selected based on their academic background and interview (if required). In the selection process, the focus will be on enthusiastic, motivated, and dynamic students willing to achieve excellence in their scientific and engineering research pursuits in the area of Mobile Hydraulics. Women's participation will be encouraged. **Seats are limited!!** So hurry up and **register on the link given below:**

<https://bit.ly/3LkQQdq>

The deadline for the registration is **25.06.2022 till 5:00 PM**. Please send queries related to the workshop to the following email id: ajit@iitism.ac.in
The detailed schedule of the workshop will be shared through email with the shortlisted students for the program.

MODE OF CONDUCT OF THE WORKSHOP

The workshop duration will be for one week and will be conducted in physical mode. The venue and other details will be communicated in due course of time.



PROF. AJIT KUMAR
COORDINATOR
ASSISTANT PROFESSOR, DEPT. OF MECHANICAL ENGINEERING