One Week
e-Faculty Development Program

In Association With TEQIP-III

On

"Advances In Manufacturing"
(AIM-2021)

June 15th to 19th, 2021

Organized by

Mechanical Engineering Department
Birsa Institute of Technology

BIT Sindri, Dhanbad, Jharkhand-828123
Phone: 0326-2350495, 2350496
www.bitsindri.ac.in

About the Institute

BIT, Sindri was started as College of Mechanical and Electrical Engineering in 1949. The institute grew and flourished rapidly during the early days under the dynamic leadership of Prof. D. L. Despande, the then Director, who is regarded as the architect of the institute. The fully residential institute of about 450 acres is located near the eastern bank of river Damodar at a distance of 28 kms from Dhanbad railway station. The Department of Higher, Technical Education & Skill Development, Govt. of Jharkhand governs the institute. The main aim of the institute is to provide valuable human resources for the industry and society through excellence in technical education and research for sustainable development. The college offers B. Tech courses in 10 disciplines of engineering namely Mechanical, Electrical, Metallurgy, Production, Chemical, Electronics & Communications, Civil, Mining, Computer Science, and Information Technology besides 10 M. Tech. specializations. Multimedia auditoriums, seminar rooms, class rooms, state of art rich library, modern laboratories and campus wide network & State of Art Siemens Centre of Excellence help to meet institute objectives & industry demands. The wide range of activities on campus, fully residential hostels, good sports facilities and never dying zeal of staffs and students for pursuit of excellence provides a pleasant and intellectually stimulating, proactive, conductive environment to students to feed their curiosities / interest and help them to prepare for the professional, academic and social life.

About the Department

Mechanical Engineering Department established in 1949. It runs one UG program in Mechanical Engineering and two PG program (Heat Power and Machine Design). The Department is continuously striving to achieve excellence in education, academics and industry oriented research & consultancy work to serve the society. Faculty members of the department are engaged in research in classical as well as upcoming areas of Mechanical Engineering. To meet the research requirements new research laboratories are developed in the areas of Robotics, CAD, CAM, Thermal Engineering, and Manufacturing.

About the Course

The aim of this one week e-FDP is to enlighten the participants in regards to the emerging technologies in Mechanical Engineering, which will be helpful for them in their future endeavors in teaching learning and research activities. This course includes innovative lectures, demonstration and visualization in emerging trends and technology.

Objective

The objective of the FDP is to bring together the experts from industry and academia to share their experience and exchange their knowledge related to emerging areas of Mechanical Engineering. The FDP will eventually open opportunities for teaching learning, research and consultancy in the upcoming areas of mechanical Engineering.

Theme

The main themes are:

- Industry 4.0, 3D Printing
- Artificial Intelligence, Machine Learning
- Hybrid Machining, Chatter elimination
- Condition monitoring & maintenance
- Modelling & Simulation
- Advances in material Science
- Processing of Nano Lamellar Materials

Who Can Attend?

Faculty members, Research scholars (PG & Ph. D) looking to expand their knowledge about Advancement in Mechanical Engineering. This can also be fruitful for persons working in different industries related to Mechanical engineering.

Eminent Speakers

Name & Affiliation		Area
Dr. K G. Krishan Sr. Principal Scientist NML CSIR Jamshedpur		3D Printing: Challenges & Opportunities
Dr. Ashwini Sharma Dean -SOET Adamas University Kolkata		Industry 4.0
Dr. Mukul Shukla Professor MED, NIT, Allahabad		Topology optimization & Generative Design
Dr. Pavan Kankar Asso. Professor MED, IIT Indore		Machine Learning & CBM
Dr. Divyang Pandya Professor & Head LDRP Ghandhinagar		Chatter in High Speed Machining
Dr. Joy P. Mishra Assistant Professor MED IIT BHU		Hybrid Machining
Dr. Prashant Sharma Post Doc Researcher CEMHTI-CNRS, FRANCE		Advances in Material Science
Dr. Sankalp Goel Assistant Professor Nanjing University China		Nano-lamellar Materials
Dr.Shailendra Bhadoriya Assistant Professor DIPE NIT, Jalandhar		Analysis of Fracture & Fatigue
Dr. Himanshu Khandelwal Assistant Professor MED NIFFT, Ranchi		AI Enabled Metal Casting

No registration fee to attend/join this FDP

Organizing Committee

Patron

Prof. (Dr.) D. K. Singh, Director, BIT, Sindri

Advisory Committee

Dr. Upendra Prasad – Dean Academic Cum PC TEQIP, BIT Sindri

Dr. S. C. Roy – Prof., MED, BIT Sindri

Prof. Mithilesh Kumar Asso. Prof, MED, BIT Sindri

Dr. Ajay Tripathi, Asso Professor, GEC Raipur

Dr. Manoj Kumar Prof., MED, BIT Sindri

Dr. Vijay Pandey Prof., MED, BIT Sindri

Dr. Vijay Verma Asst Professor, BIT Jhansi

Convener

Prof. (Dr.) S.K Singh, HoD, ME, BIT, Sindri

Course Coordinator(s)

Dr. C Sharma, Asso. Prof., MED, BIT Sindri

Course Co- Coordinator(s)

Dr. Chandan Kumar, Asso. Prof., MED, BIT Sindri

Dr. Pankaj Kumar, Asso. Prof., MED, BIT Sindri

Contact Persons:

Dr. Chandan Kumar/Dr. Pankaj Kumar

Contact Number's: 8506949851/9334774797

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pkumar.me@bitsindri.ac.in

Registration: Before June 12th, 2021

Registration (Google Form) link:

https://forms.gle/MAcvDxY5YEYqSkEq6

FDP (Google Meet) link:

https://meet.google.com/vdj-rtdo-occ

E-Certificate will be provided to all Participants.

Note: *Detailed schedule will be sent by e-mail*

Vision of the Department

To provide valuable resources for industry and society through excellence in technical education and research in mechanical engineering with moral values for the economic and sustainable growth of the country.

Mission of the Department

- To offer state-of-the-art undergraduate, post graduate and doctoral programs in mechanical engineering
- To generate new knowledge by engaging in cutting edge research and development in mechanical engineering of new technology.
- To provide conducive environment for collaborative projects with academia and industries.
- To Promote innovation and entrepreneurship.
- To develop professional skills with ethical values.

Program Specific Outcomes

PSO1: Graduates will demonstrate the knowledge of applied mathematics and advanced software tools for thermal, design specification, development such as fabrication, analysis such as testing and operation of the physical systems, components and processes involved in mechanical engineering.

PSO2: Graduates will demonstrate the knowledge, skill and attitude to analyze the cause and effects on machine elements, processes and systems.

PSO3: Able to pursue a career in mechanical and interdisciplinary fields.