A Five-Day Online Faculty Development Programme (FDP) on Teaching and Learning of Advances in Manufacturing Technologies (TLAMT-2020) 30th November – 04th December, 2020

Organized by Department of Mechanical Engineering

In association with Teaching Learning Centre National Institute of Technology Warangal - 506 004, Telangana State

Coordinators
Dr. Manjaiah M Assistant Professor, MED
Dr. Gangadharudu Talla Assistant Professor, MED
Prof. A Kumar Professor & Head, MED
Prof. Krishnanand L Professor, MED

ABOUT THE INSTITUTE
National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 13 Departments offering eight undergraduate and 32 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study in the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, state of the art library, seminar halls, guest houses and laboratories.

ABOUT THE DEPARTMENT
The Department of Mechanical Engineering offers an UG program, seven PG programs and a Ph.D program as well. There are 47 qualified and experienced faculty in the department. The department has liaison with reputed industries and R&D organizations like NFTDC, ARCI, BHEL, DMRL, DRDL, CMTI, etc. Presently the department is handling several R&D projects and consultancy works. The department has also been recognized as a QIP centre for M. Tech and Ph.D programs.

ABOUT THE TEACHING LEARNING CENTRE OF NIT WARANGAL
The Teaching-Learning Centre (TLC) is established at NIT Warangal with grants from the Ministry of Human Resource Development, Government of India under the scheme, ‘Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching’ (PMMMNMTT). Under this scheme a separate building for TLC with the state-of-art training facilities which include a studio for video recording of lectures is going to come up. Many senior and young faculty members across various departments of the Institute are associated with this center as members of the Core-Team.

One of the important objectives of the center is to conduct short term and medium-term training programs for Newly Inducted Teachers, In-Service Teachers and Teacher-Aspirants in Science and Engineering disciplines, so as to enhance their skills.

Other activities of the TLC include preparation of e-learning materials, offering courses on-line, curriculum development, carrying out research in pedagogy and integrating ICT into teaching-learning process.
ABOUT THE PROGRAMME
With the globalization, India is emerging as one of the key manufacturing hubs and there is considerable demand from industry for manufacturing engineers capable of meeting the challenging requirements. In this workshop, participants will be introduced to the various developments in metal cutting such cryogenic machining, dry machining, minimum quantity lubrication, vibration assisted machining, grinding of hard metals. Current research trends in nontraditional machining processes (electrochemical machining, electric discharge machining, abrasive flow finishing) will be highlighted. State of the art in friction stir welding process will be emphasized. The participants of this course will also learn the importance of Additive Manufacturing and its role in Global Product Development and Innovation. The participants will learn theory of AM to compare the traditional versus next generation manufacturing & will learn to have a rich knowledge of AM Metal Printing technologies, devices, capabilities, materials and applications along with various software tools, processes and techniques enabling personal fabrication.

COURSE OBJECTIVES
• To update the participants with the state of the art technologies in advanced machining, welding and metal additive manufacturing.
• To enable participants to learn the advanced machining process applications which are used in industries, and developments in AM technology.
• To familiarize the participants with the latest tools and techniques.
• To empower the teaching and learning capabilities of the participants with emphasis on improvisation of their teaching skills of advanced topics.

TOPICS TO BE COVERED
• Minimum Quality Lubrication
• Cryogenic Machining
• Advanced coatings for cutting tools
• Grinding of Hard Materials
• Functionally Graded Bioceramic Coatings for Biomedical Applications
• Electro Discharge Machining and Abrasive Flow Finishing
• Additive Manufacturing Technologies
• Digital pedagogy
• Instructional Design for Online Learning

WHO CAN ATTEND?
Faculty members/ research scholars/ Scientists/ Engineers working in Private/ Public/ Govt. organizations/ industries etc.

HOW TO APPLY
Interested candidates need to pay the registration fee and register using any of the following links on or before 26th November 2020.
Registration form, TLAMT-2020.gform
OR
https://tinyurl.com/y3qbo95a

REGISTRATION FEE

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<tr>
<th>Category of participants</th>
<th>Amount</th>
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<tr>
<td>Participants from Industry</td>
<td>Rs. 1000/-</td>
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<tr>
<td>Faculty from Universities and Colleges</td>
<td>Rs. 600/-</td>
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<td>Research Scholars</td>
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Registration fee may be sent in the form of a DD or remitted through On-line/NEFT to the Bank account given below. Scanned copy of the DD / Proof of remittance of registration fee (with transaction number if online transaction) shall be attached to the google form.

RESOURCE PERSONS
1. Dr S Gangopadhyay, Ph.D. (IITKGP)  
   Associate Professor, IIT Bhilai.
2. Dr. Amitava Ghosh, Ph.D. (IITKGP)  
   Associate Professor, IIT Madras.
3. Dr. M Ravi Shankar, Ph.D. (IITK)  
   Associate Professor, IIT Tirupati.
4. Dr. Dinesh Setti, Ph.D. (IITD)  
   Assistant Professor, IIT Palakkad.
5. Dr. D Chakradhar, Ph.D (NITW)  
   Assistant Professor, IIT Palakkad.
6. Dr. C K Biswas, Ph.D (IITKGP)  
   Professor, NIT Rourkela.

Scientists from CMTI, HAL, RRCAT, Faculty members of NIT Warangal and other premier institutes.

CONTACT US
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   Assistant Professor, Mobile: 9440747257  
   E-mail: gtalla@nitw.ac.in

ACCOUNT DETAIL

Account Name: DIRECTOR, RESEARCH ACCOUNT, NIT WARANGAL
Account Number: 62266262236
Bank: State Bank of India (SBI)
Branch: NIT Warangal Campus
IFSC code: SBIN0020149

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