### **TEQIP-II**

SPONSORED SHORT TERM COURSE ON

# **Advanced Materials Processing in Past, Present and Future**

30th June to 2nd July, 2016

Co-ordinators

# Dr.K. PANNEERSELVAM Dr.P.SATHIYA Dr.A.NOORUL HAQ

Organised by



DEPARTMENT OF PRODUCTION ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI – 620 015
TAMILNADU, INDIA.

### ABOUT THE DEPARTMENT OF PRODUCTION ENGINEERING

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli. situated in the heart of Tamil Nadu on the banks of river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering to the needs of manpower in technology for the country. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. The Department of Production Engineering is one of the best in the country. Established in the year 1983, the department strives towards excellence in the fields of production and manufacturing. The vision of department is to become a center of excellence for the learning, research and model manufacturing. It was declared as the best department of the institute for the year 2006-07. The Department of Production Engineering offers B.Tech. (Production Engineering), M.Tech. (Manufacturing Technology, Industrial Engineering and Management), M.S. and Ph.D. programs. The highly experienced faculty of the Department contributes to the vital role in Academic research. Many research papers have been published in reputed national and international journals and conferences by the faculty. Government of India has recognised this Department as a Centre for Quality Improvement Programme in PG and Ph.D. courses

#### HOW TO REACH NIT-TRICHY

NIT- Tiruchirappalli is located about 22 km from Tiruchirappalli Junction/Central Bus-stand on the Tiruchirappalli-Thanjavur Highway. The simplest and most economical way to reach NIT-Tiruchirappalli is by bus. Board Thanjavur bound route bus and get down at NITT. The journey time from Tiruchirappalli will be around 45 minutes.

#### COURSE OBJECTIVES

Since mid-1980's, the development of plethora of cast, wrought and rapidly solidified powder metallurgy alloys in virtually every structured alloy family has progressed at a rapid pace. In most alloys development programs, improvements in physical, mechanical and corrosion properties are achieved with minimal consideration for joinability. This course will be much helpful for faculty members to pursue their Ph.D. in the area of Advanced Materials Processing. Exposure to such type of advanced topics will lead to do consultancy projects in association with industries who have the thrust area in Advanced Material Processing.

The objectives of this course are

- ◆ To provide a forum for the faculty members from various engineering colleges to interact, discuss and exchange their knowledge with the resource persons.
- To provide guidelines and directions to begin research and to ongoing research in the field of Advanced Materials Processing and
- To appraise on the applications of Advanced Materials
   Processing to be used in the research work.

#### **COURSE CONTENTS**

The following topics will be covered in the course:

Joining of advanced materials-FCAW process, Laser-GMAW (Hybrid welding process.), MIAB welding, A-TIG welding and MIG welding, Hotwire TIG process, Nanotechnology in advanced materials processing, Solid State Joining Process, DOE in advanced materials processing, Composite material Processing, Optimization in advanced materials processing

#### **FACULTY**

The course faculty includes resource person from various institution like NIT's, IIT's and R&D industries like WRI/BHEL.

#### **ELIGIBILITY**

The Faculty of Engineering/Science colleges, research scholars and practicing engineers are eligible to attend. The number of participants is limited to 40.

#### REGISTRATION FEE

Application for participation in the workshop shall be sent to the coordinator as given in the attached format along with the registration fee of Rs.330/-for Academicians/Research scholars and Industrial participants by D.D. drawn in favor of The Director, NIT, Tiruchirappalli-620015 payable at SBI, NIT Branch (Code -01617).

#### **BOARDING AND LODGING**

Boarding and lodging facilities will be provided to the selected candidates from AICTE approved Institutions in the Hostel/Guest house at NIT Tiruchirappalli. Accommodation will be on twin sharing basis. Local Participants will not be provided accommodation. No TA/DA will be given.

#### IMPORTANT DATES

Last date for receiving Application : 26-06-2016 Intimation of selection (By email only) : 26-06-2016

Last date for receiving Application and Intimation of selection (By email) is Extended to : 29-6-2016

Additional registration forms may be photocopied or downloaded from the website www.nitt.edu.

#### ADDRESS FOR CORRESPONDENCE

#### Dr.K. PANNEERSELVAM

Co-ordinator,
Short Term Course on
Advanced Materials Processing in
Past, Present and Future
Department of Production Engineering
National Institute of Technology,

Tiruchirapalli – 620 015, Tamil Nadu, India.

Phone: 0431 – 2503515 Mobile: 09952842776 Fax : 0431 – 2500133 Email: kps@nitt.edu

Note: Please email us a soft copy of your duly filled application followed by a hard copy of the same to the above mentioned address.

#### **REGISTRATION FORM**

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# Advanced Materials Processing in Past, Present and Future

30<sup>th</sup> June to 2<sup>nd</sup> July, 2016

1. Name

| 2. Designation   | :                      |        |
|------------------|------------------------|--------|
| 3. Department    | :                      |        |
| I. Organization  | :                      |        |
| 5. Mailing       | :                      |        |
| Address          |                        |        |
|                  |                        |        |
| Phone:           |                        |        |
| Email:           |                        |        |
| 6. Accommodat    | tion Required: Yes [ ] | No [ ] |
| 7. Details of Re | gistration Fee         |        |
| A mount:         | DD No :                |        |

Signature of Applicant

Signature of the HOD/Principal/Sponsoring Authority

Date: Place:

Date:

Bank name & Place: