TEQIP - III

Technical Education Quality Improvement Programme

Sponsored Short Term Course

On

Advances in Welding and Materials Processing

18th to 20th December 2017

Organized by,

Department of Mechanical Engineering

PSG College of Technology Coimbatore

(Government Aided Autonomous Institution)

Coimbatore - 641004, Tamil Nadu, India.

ABOUT THE COLLEGE

PSG College of Technology is a Government aided autonomous Institution affiliated to Anna University, Chennai. It is the first government aided private engineering college in India started in the year 1951 by the PSG & Sons' Charities. Today, the institution has made substantial progress by way of offering undergraduate, post-graduate and doctoral programmes in several disciplines of engineering, management and applied sciences and is also conducting engineering education programmes for practicing engineers / professionals from industries. The institution has set up a TIFAC – CORE in product design, optimization and collaborative product commerce, **Centre for Excellence in Welding Engineering and Technology (Funded by the Ministry of Heavy Industries & Public Enterprises, Government of India)**. PSGCT was conferred with the award for "Overall best industry, linked engineering institute" by AICTE-CII at the 4th Global Higher Education Summit of CII-2012, New Delhi on 8th November 2012. PSG College of Technology ranked in the top best 35 Institutions in India (Including IISc, IITs and NITs) by National Institutional Ranking Framework (MHRD).

ABOUT THE DEPARTMENT

The department has evolved a comprehensive student centric learning approach, designed to add significant value to the learner's understanding in an integrated manner through workshops, laboratory sessions, assignments, industrial training, seminars, internships, projects and independent study. The department has established many centers and laboratories with support from industries like FESTO, RANE, Ashok Leyland, and National Instruments, etc. The department maintains a close liaison with a large number of universities, industries within and outside the country, through collaborative and research projects. A large number of sponsored research projects have been undertaken with funding from various agencies, viz., DST, SERB, AICTE, AR&DB, ISRO, DRDO, BARC, BRNS, IGCAR., etc. The department is well known for its contribution to industry through its publication of PSG Design Data Book and design & development of critical care ventilator. The department offers two undergraduate programmes (Regular and Sandwich), five post graduate programmes and Ph.D. programme in Mechanical Engineering. The department has been recognized as the best Department in Mechanical Engineering discipline for its Industry-Institute Interaction practice by CII-AICTE in 2012. In 2014, the department has been accredited by National Board of Accreditation, under Washington Accord for a period of six years.

ABOUT THE COURSE

Advanced materials are at the core of many technological developments and find applications in many strategic areas. High strength aluminium alloys, steels and other materials play a vital role in the automotive, marine and aerospace sectors in the world. The use of these materials is mostly driven by their increased corrosion resistance, also. However, when subjected to thermal processes such as welding, the properties get deteriorated due to the formation of secondary phases and other microstructural changes. The researcher's/manufacturing engineers continuously explore possible techniques and procedures to alleviate such problems. This course is intended to discuss the challenges and opportunities with regard to the processing of advanced high strength materials, focusing on the following thrust areas, in particular.

- The issues, prospects and development of sustainable techniques those are relevant to the joining of high strength aluminium alloys and the implications of these in the aerospace and automotive industries.
- The challenges and latest developments in joining of thin stainless steel sheets.
- Developments in environmentally compatible automated welding technologies for non-ferrous alloys.
- Challenges in joining of advanced high strength aluminium alloys and steels.

WHO SHOULD ATTEND?

Faculty members, Scientists, Engineers in public and private sector, Research Scholars, Post graduate and Under graduate students engaged in teaching and research aiming to advance their understanding of advances in welding and materials processing techniques.

RESOURCE PERSONS

Dr. Sudarsanam Suresh Babu, UT/ORNL Governor's Chair of Advanced Manufacturing (Professor), Dept. of Mechanical and Materials Engineering, University of Tennessee, USA

Dr. Leijun Li, Professor, Dept. of Chemical and Materials Engineering., University of Alberta, Canada

Dr. P.V. Venkitakrishnan, Associate Director, Vikram Sarabhai Space Centre, ISRO

Dr. Madusudhan Reddy, Scientist-H, Defence Metallurgical Research Laboratory, Hyderabad

Dr. P. Ramesh Narayanan, Head, Materials Characterization Division, Vikram Sarabhai Space Centre, ISRO

Dr. Sathish Vasu Kailas, Professor, Dept. of Mech. Engg., Indian Institute of Science, Bangalore

Dr. S. Aravindan, Professor, Department of Mechanical Engineering, Indian Institute of Technology Delhi

Dr. G.D. Janaki Ram, Associate Professor, Department of Materials science and Metallurgical Engineering, Indian Institute of Technology Madras

Dr. S.G.K. Manikandan, Scientist, ISRO Propulsion complex, ISRO

Dr. K.K. Ramachandran, Associate Professor, Dept. of Mech. Engg, Govt Engg. College, Thrissur

Special invited talk from Integral Coach Factory, Chennai

ORGANIZING COMMITTEE

Patron: Shri. L. Gopalakrishnan, Managing Trustee, PSG & Sons' Charities, Coimbatore

Chairman: Dr. R. Rudramoorthy, Principal, PSG College of Technology, Coimbatore

Convenor: Dr. P.R. Thyla, Professor and Head, Department of Mechanical Engineering, PSG College of Technology, Coimbatore

CO-ORDINATORS

Prof. V. Satish Chandran, Assistant Professor (S.G),
Prof. R. Ramesh, Assistant Professor,
Prof. Eldho Jacob Joy, Assistant Professor,
Department of Mechanical Engineering
PSG College of Technology, Coimbatore

IMPORTANT DATES

Last date for registration : 05-12-2017
Intimation of Selection : 06-12-2017

PROGRAMME SCHEDULE

Click here: Link

REGISTRATION FEE DETAILS

Industry Professionals and Scientists from R & D organizations – Rs.3,000/-

For Non-TEQIP – III Institutions

Faculty members	– Rs.2,500/-
Research Scholars	– Rs.1,500/-
UG and PG Students	– Rs.1,000/-

For TEQIP – III Institutions

Faculty members	– Rs.3,000/-
Research Scholars	– Rs.2,000/-
UG and PG Students	– Rs.1,500/-

ONLINE REGISTRATION LINK

Click here: https://goo.gl/forms/RXdCesLKtGIJZDDc2

(Or)

You may scan the QR Code for Registration

REGISTRATION FORM

The filled-in registration form duly signed by the head of the department (or) head of the institution along with the DD in favor of **"The Principal, PSG College of Technology" payable at Coimbatore** and send it to the following address on or before **05-12-2017.**

R. Ramesh, Assistant Professor,
Department of Mechanical Engineering
PSG College of Technology, Coimbatore - 641004,
Tamilnadu.
Mobile: 9789815125; **Email: ram@mec.psgtech.ac.in**
9946800167

Also, send the scanned copy of the filled-in registration form and DD to **ram@mec.psgtech.ac.in**

TEQIP - III Sponsored Short Term Course

On

Advances in Welding and Materials Processing

18th to 20th December 2017

Online Registration Link: https://goo.gl/forms/RXdCesLKtGIJZDDc2

(Or)

You may scan the QR Code for Registration

Registration Form

Name : .....

Designation : .....

Organization : .....

Address : .....

.....

.....

E-mail : .....

Mobile : .....

Demand draft No & Date : .....

Bank : .....

Amount : .....

Total experience in years : .....

Teaching: ..... Research: ..... Industry: .....

Accommodation Required** : Yes / No

Signature of Candidate

Signature of Head of the department
(or) Head of the institution with seal

** Accommodation will be arranged for outside participants on request subject to availability on chargeable basis.

1. The filled-in registration form duly signed by head of the department (or) head of the institution along and DD in favor of **"The Principal, PSG College of Technology" payable at Coimbatore** and send it to the following address:

   R. Ramesh, Assistant Professor, Department of Mechanical Engineering, PSG College of Technology, Coimbatore - 641004, Tamilnadu. **Mobile No: 9789815125**, **Email: ram@mec.psgtech.ac.in**

2. Also, send the scanned copy of the filled-in registration form and DD to **ram@mec.psgtech.ac.in**