

Advances in Welding and Materials Processing

Organized by
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Department of Mechanical Engineering
National Institute of Technology Calicut
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ABOUT THE NIT CALICUT

National Institute of Technology Calicut (NITC), originally established in 1961 as Regional Engineering College Calicut, is fully centrally funded by MHRD and is governed by the NIT Act 2007. Institute has ten departments, three schools and nine research centers. It offers ten UG, and thirty PG programmes along with the Ph.D programme in various fields of Science, Technology and Engineering. Faculties in the various Departments have active collaborations with universities and elite institutions within and outside India. For details see the website: www.nitc.ac.in

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 of Mechanical Engineering is one of the oldest departments in this institute. It was established at the inception stage of the Calicut Regional Engineering College (CREC) in 1961, which was the forerunner to the present National Institute of Technology Calicut (NITC). At present, the department offers two undergraduate programmes – B.Tech. (Mechanical Engineering) and B.Tech. (Production Engineering). It also offers six post graduate programmes – Industrial Engineering and Management, Thermal Sciences, Manufacturing Technology, Materials Science and Technology, Energy Engineering and Management, and Machine Design – leading to the M.Tech. degree of the Institute. The department also offers Ph.D. programme in various fields of Mechanical Engineering. The Department is a recognized QIP centre of the AICTE for both M.Tech. and Ph.D. programmes.

Besides teaching, the members of the faculty are involved in research, consultancy work (Design & Development, Energy Auditing, Industrial Sickness Evaluation, Testing, etc.), sponsored research

(sponsored by DST, AICTE, ARDB, etc.), and product development..

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.

ABOUT THE WORKSHOP

Advanced materials are at the core of many technological developments and find applications in many strategic areas. High strength aluminum 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.

SELECTION

Selection will be on first-come-first-served basis and will be intimated through e-mail. The maximum seats for participants are 40.

RESOURCE PERSONS

All the sessions will be handled by faculty of IITs NITs and invited experts from industry.

REGISTRATION FEE

The fee (including GST) for participants is given below:

- Faculty: Rs. 300
- Industry/Research Organizations: Rs. 500
- Full-time Research Scholars/PG Students: Rs. 150

For registration, the scanned copy of the duly filled registration form along with the online payment receipt should be mailed to: jagdishsg@nitc.ac.in. Also, mention your name, official address and phone number in the mail.

Hard copies of registration form and online payment receipt should be submitted on the registration day.

The bank details are given Acc. Name: Director NIT Calicut, Continuing education programme, Account No: 37618269594; Branch: SBI NIT Calicut, IFSC code:SBIN0002207

Boarding and Lodging will be extra

Boarding & Lodging (limited) will be provided for participants in Hostel on chargeable basis, based on their request. Only working lunch will be provided.

Travel expenses

No TA/DA will be paid for any participant. Parent Institutions are expected to provide the support.

CO-ORDINATORS

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IMPORTANT DATES

Last date for registration : 17-12-2018

Intimation of Selection : 18-12-2018

REGISTRATION FORM



DST - SERB sponsored workshop on

Advances in Welding and Materials Processing

December 29-30, 2018

Bank transaction ID:

Name of the Bank:

Amount:

Total experience in years:

Teaching: Research: Industry:

Accommodation Required**: Yes / No

Name:

Designation:

Organization:

Address:

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E-mail:

Mobile Number:

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.

Registration fee to be paid online to the following account. The scanned copy of the receipt should be sent along the registration form should be sent to jagdishsg@nitc.ac.in on or before 17-12-2018. Hard copies has to be submitted on the registration day