

MHRD – AICTE

Staff Development Programme

on

**Recent Trends in
Corrosion Control & Surface Engineering
(CC & SE - 2009)**

June 08-20, 2009



CC & SE - 2009

Convenor : Dr. S. Natarajan, Professor & Head

Coordinators : Dr .S.P. Kumaresh Babu, Asst.Professor
: Dr. S. Muthukumaran, Asst. Professor



Organised by

Dept. of Metallurgical and Materials Engineering
National Institute of Technology
Tiruchirappalli- 620015
Tamil Nadu

ABOUT THE INSTITUTE

As one of the top ranking institutes, well known for its academic and excellence in the field of technical education in our country, the National Institute of Technology, Tiruchirappalli (formerly known as R.E.C. Trichy) has been pioneering fundamental and advanced research for more than four decades. This Institute grows stronger and stronger in all required dimensions. Presently the institute offers 10 undergraduate and 23 postgraduate programmes besides MS by Research in Engineering and Ph.D. programmes offered by all departments.

ABOUT THE DEPARTMENT

Incepted in 1967, the Department of Metallurgical and Materials Engineering, has been offering, besides B. Tech Programme two courses at PG level namely Welding Engineering and Materials Science & Engg, attracting students of multi disciplinary background. This department is presently engaged in many research and consultancy projects sponsored from Government agencies / companies of repute such as DRDO, MHRD, DST, AICTE, UGC, AR&DB, ISRO, BHEL, TATA STEEL and so on. In appreciation of these credentials, Government of India has recognized this Department as a Centre for Quality Improvement Program in PG and Ph. D. courses for benefit of the faculty spread all over India. Very recently this department has been adjudged as **The Best Department** of the Institute and **Faculty** of this department have brought laurels by **winning National and other prestigious awards** for their contributions.

Special mention, in this connection, is to be made that under TEQIP, a World Bank Funded Project, Surface Engineering Laboratory has been established in this department and many Doctoral research programs are in progress.

IMPORTANCE AND SCOPE OF THE PROGRAMME

Recent survey by Government agency has indicated that India encounters a loss of 40% GNP which is estimated at Rs. 35,000 crores due to the phenomenon of corrosion. Hence, efforts to combat corrosion are mandatory. Product life and maintenance are key issues in all manufacturing sectors. The design of the component parts must be adequate to ensure the desired life of a product. Parts must be able to resist aging, fatigue, corrosion and wear. The field of surface engineering encompasses not only a multitude of coating and surface modification technologies but also a wide range of coating / surface characterization techniques and application oriented performance tests. Thus, it is believed, the scope for further improving the reliability and increasing the durability of engineering components in service condition will be amply provided by this forum. Research in surface engineering thus helps in achieving plant efficiency, better performance and significant savings.

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Registration form

1. Name :
2. Gender & Age :
3. Qualification :
4. Designation :
5. Professional experience :
6. Official Address :
7. Email address :
8. Details of DD :
9. Signature of the applicant:

DECLARATION BY THE APPLICANT

The above mentioned information is true to the best of my knowledge and belief. I agree to abide by the rules and regulations governing the AICTE-MHRD Programme. I shall attend the course for entire duration.

Place:

Date:

Signature of Applicant:

SPONSORSHIP CERTIFICATE

Mr./ Ms./Dr. _____

_____ is an employee of our institute and is sponsored to attend the AICTE-MHRD SDP, if selected.

Place:

Date:

Signature and seal of sponsoring authority

TOPICS TO BE COVERED**Corrosion Science/ Engineering**

- Basic concepts of corrosion
- Different forms of corrosion
- Corrosion monitoring and testing
- Corrosion and its control in power plants
- Bio and marine corrosion
- Protective coatings
- Cathodic protection
- Corrosion inhibitors
- Environmentally induced cracking

Surface Science / Engineering

- Electro and Electroless plating
- Anodising
- Thermal spray and electric arc spray coatings
- Tribology
- Physical / Chemical vapour deposition
- Cladding / Laser alloying
- Thin film Technology

Laboratory Session

Few experiments will be demonstrated in the area of corrosion and wear studies.

ADDRESS FOR CORRESPONDENCE

Dr.S.Natarajan

Professor & Head,

Convenor, CC&SE-2009

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Mobile: 9486001125

Phone (Office) : 0431-2503451 & 56

RESOURCE PERSONS

The lectures will be delivered by eminent scientists from R&D labs, industry persons and faculty from IISc, IITs and NITT.

ELIGIBILITY & REGISTRATION

Faculty from AICTE approved institutions belonging to departments of Physics, Chemistry, Chemical, Civil, Mechanical, Production and Metallurgical Engg. are eligible to apply.

Participants from industries, Govt./ Semi govt. organizations and institutions not approved by the AICTE are also eligible, provided they meet their TA/DA, etc. and they must pay the following fees

- Faculty members : Rs. 500/- (refundable)
- Other members : Rs. 2000/-

Registration can be made with the course coordinators in the prescribed application form along with crossed Demand Draft in favour of "The Director, NIT Trichy" payable at Tiruchirappalli.

TRAVEL & ACCOMMODATION

Selected faculty members from AICTE approved Institutions will be paid maximum AC-3 tier to and fro journey by shortest route from their respective place of work on production of travel tickets. Boarding and lodging will be provided in the college hostels

IMPORTANT DATES

Last date for receiving the
completed registration form : 02-06-2009
Notification regarding selection : 03-06-2009

All correspondence will be made through email
(Photo copies can be used for registering more than one person)