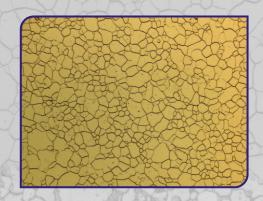


# AUTOMOTIVE STEELS

(20 - 21 August 2014)





# Organised by

METALLURGICAL AND MATERIAL ENGINEERING DEPARTMENT

and

CENTRE OF EXCELLENCE IN PHASE TRANSFORMATION AND PRODUCT CHARACTERISATION (TEQIP – II)

Jadavpur University Kolkata 700 032, India

### ABOUT THE UNIVERSITY

The great sons, patriots, freedom fighters and visionaries of the then Bengal took courage to start the National Council of Education for imparting technical education, challenging the elitist education system provided by the British rulers during the pre-independence era. One objective was to develop technical manpower for the purpose of nation building. After independence in 1947 the NCE, Bengal was converted to Jadavpur University in 1956 through an act of West Bengal State Assembly. Since then Jadavpur University is a fully state aided university providing very low cost, but very high quality engineering education. Apart from Faculty of Engineering and Technology, the university provides very high quality education in Arts, Science and also in various interdisciplinary areas. There are 17 departments under Faculty of Engineering and Technology, and Metallurgical and Material Engineering Department is one of these seventeen departments. The university is one of the first five universities in India on the basis of Teaching and Research quality as assessed by the University Grants Commission. On the basis of research excellence Jadavpur University is ranked second to only Delhi University, India.

# ABOUT THE DEPARTMENT AND COE

Established in 1966, the Metallurgical and Material Engineering Department (formerly Metallurgical Engineering), Jadavpur has matured to its current status. It is now equipped with almost all the major facilities needed for teaching and research, namely Scanning Electron Microscope (FESEM. Tungsten), EDAX (Oxford, EDAX), EBSD, Insitu Tensile Deformation Stage under SEM (5 kN, -150 to + 600°C) X-ray Diffraction Unit, Servohydraulic Dynamic Universal Testing Machine with low temperature test facility (-150°C), Welding Equipments (FSW, TIG, MIG, Spot) Thermal Analyser, Atomic Absorption Spectrophotometer, UV-VIS Spectrophotometer, Microhardness Testing Equipment, Digital Photomicrography, Gas Chromatograph etc, apart from the general laboratory facilities.

Although the department is primarily focused on achieving excellence in teaching and has all along produced a very good number of the finest graduates every year, It has also made significant contributions in research and development, consultancy and testing

related work over the last two decades. A large number of sponsored projects funded by different agencies, e.g., CSIR, DRDO, ARDB, BRNS, DST (GOI), DST (W.B), BARC, MHRD, AICTE, UGC, Ministry of Steel and Mines etc. have been successfully completed so far and many such projects are continuing. The department maintains close linkages with National Laboratories, like the National Metallurgical Laboratory, Central Glass and Ceramic Research Institute, Indian Association for the Cultivation of Science, Bhabha Atomic Research Centre, Variable Energy Cyclotron Centre etc, and also with industries, like TATA Steel, Electrosteel Castings Limited, Gontermann Piepers Limited, Esab, Garden Reach Ship Builders, BOC etc, both in terms of funded industrial projects and testing/consultancy. Faculty members and research scholars are involved in diverse fields of research to keep pace with the current research trend in Metallurgical and Material Engineering discipline. In recognition of the sustained effort of the Metallurgical and Material Engineering Department towards teaching and research, University Grants Commission, New Delhi has identified this department for different special programmes, like Departmental Research Support (DRS), Department of Special Assistance (DSA) and ASIST programmes. Also, the department enjoys the support of the FIST programme of Department of Science and Technology (GOI) in successive two terms.

The award to establish the Centre of Excellence in Phase Transformation and Product Characterisation under Technical Education Quality improvement Programme (TEQIP - II), a World Bank funded programme, under the Faculty of Engg. & Tech. with participation of departments, like Metallurgical and Material, Mechanical, Production, Chemical, Computer Science, Information Technology and in close collaboration with the National Metallurgical Laboratory, Jamshedpur, reflects the very recent achievements of different participating departments towards Engineering Education and Research excellence in India.

# **ABOUT THE SEMINAR**

Very often automotive industry passes through challenges posed by increased fuel cost, and government regulations towards safety and pollution. Around the world continued efforts are being pursued to develop new steels with focus on strength, density, formability,

crash resistance, welding, joining, corrosion and protection etc. It is always a challenge to car manufacturers and automotive grade steel producers to meet all these requirements, but at a low cost.

The seminar will provide a forum for exchanging views on automotive grade steels with focus on areas covering various aspects of automotive steel development by eminent researchers, academicians and engineers. Apart from these, the seminar will provide opportunity for the younger generations working on related areas to contribute research papers. Scientists, researchers, academicians, research scholars and practicing engineers will comprise the audience of the Seminar.

#### TOPICS TO BE COVERED

Steel Design and Development, Processing, Microstructure, Texture, Formability, Deformation, Fracture and Fatigue, Welding and Joining, Corrosion and Protection, Application of EBSD and DIC on small scale length deformation, New test techniques, testing of miniature specimens and any other related areas.

### **SESSION STRUCTURE**

In total there will be six sessions, each of which will start with Plenary Lecture followed by papers to be presented eminent Invited Speakers and presentation of two contributed papers. Interested academicians, researchers, industry personnel may use this forum to share their experience by contributing papers for oral presentation. For plenary lectures and invited presentations the time duration for each presentation is 25 minutes plus 5 minutes for discussion. For contributed presentations the time duration for each presentation is 15 minutes plus 5 minutes for discussion.

# **REGISTRATION**

<ul> <li>Participants from academic institution and R&amp;D organisations</li> </ul>	:	₹	5,000/-
<ul> <li>Participants from industry</li> </ul>	:	₹	7,000/-
<ul> <li>Research Scholars</li> </ul>	:	₹	2,500/-
<ul> <li>Postgraduate students</li> </ul>	:	₹	2,000/-
<ul> <li>Undergraduate students</li> </ul>	:	₹	1,000/-

Registration fee to be paid by Account Payee Demand Draft or Cheque drawn in favour of "AUTOSTEELSEMINARJU".

Registration fee includes Registration Material, Tea, Lunch, Dinner and Souvenir containing Extended Abstracts.

Delegates may register by filling the Registration Form and enclosing the Registration Fee with an accompanying letter to the Organising Secretary of the seminar.

# **ACCOMMODATION**

Accommodation may be arranged on first come first serve basis at the University Guest House at subsidised rate. However, since there is always heavy demand for transit accommodation in Kolkata, delegates are requested to make their own arrangement. Delegates requiring accommodation at the university Guest House should write immediately to the Organising Secretary of the seminar.

# **IMPORTANT DATES**

<ul> <li>Last Date for sending extended abstracts of maximum 2 (A4 size) page length</li> </ul>	: 07.08.2014
<ul> <li>Last Date for registration as delegate</li> </ul>	: 13.08.2014

# **SOUVENIR**

A colourful souvenir containing all the abstracts of the technical papers will be released during the seminar. Reputed organizations will find space for advertisement in the souvenir.

#### **ADVERTISEMENT TARIFF**

Full page Colour advertisement	:	₹ 30,000/-
Half page Colour advertisement	:	₹ 20,000/-
Full page B/W advertisement	:	₹ 15,000/-
Half page B/W advertisement	:	₹ 10,000/-

### **SPONSORING THE SEMINAR**

Highly reputed organization may sponsor the seminar in the following category.

Platinum Sponsor	: ₹ 2,00,000/-
Gold Sponsor	: ₹ 1,50,000/-
Silver Sponsor	: ₹ 1,00,000/-
Bronze Sponsor	: ₹ 50,000/-

# Benefit for sponsoring organisations:

- Free registration of five delegates
- Technical presentation of 15 minutes duration.
- Appropriate display for advertisement of the sponsoring organizations.

# SEMINAR ON AUTOMOTIVE STEELS

20 - 21 August 2014

# SPONSORSHIP/ ADVERTISEMENT

Date	:			
------	---	--	--	--

To
Organising Secretary
Seminar on Automotive Steels
Metallurgical and Material Engineering Department
Jadavpur University
Kolkata 700 032, India

Dear Sir,

(SIGNATURE)

NAME OF THE ORGANISATION:

**COMPLETE POSTAL ADDRESS:** 

**TELEPHONE:** 

EMAIL:

# MARK THE APPROPRIATE ONE

# SPONSORING THE SEMINAR

Highly reputed organization may sponsor the seminar in the following category.

Platinum Sponsor	:	₹	2,00,000/-	
Gold Sponsor	:	₹	1,50,000/-	
Silver Sponsor	:	₹	1,00,000/-	
Bronze Sponsor	:	₹	50,000/-	

# **ADVERTISEMENT TARIFF**

Full page Colour advertisement	:	₹	30,000/- 🗖
Half page Colour advertisement	:	₹	20,000/- 🗆
Full page B/W advertisement	:	₹	15,000/- 🗆
Half page B/W advertisement	:	₹	10,000/- 🗆

# All Correspondences be addressed to: Prof. P. C. Chakraborti

Organising Secretary
Seminar on Automotive Steels
Metallurgical and Material Engineering Department
Jadavpur University, Kolkata 700 032
E-mail: pcchakraborti@metal.jdvu.ac.in
autosteelseminar2014@gmail.com

# SEMINAR ON AUTOMOTIVE STEELS

# 20 - 21 August 2014

# **REGISTRATION FORM**

1.	Name of the delegate:
2.	Title of the delegate:
3.	Name and Address of the Organisation:
4.	Address for Correspondence :
5.	Telephone No.:
	Mobile No.:
6.	E-mail:
7.	Mark the appropriate one :
	(a) Invited speaker :
	(b) Willing to contribute a Paper:
	(c) Willing to participate as ordinary delegate:
8.	DD/Cheque No.: dated:
	Amount: ₹ drawn on



Signature with Stamp

[LAST DATE OF REGISTRATION: 13.08.2014]

# All Correspondences be addressed to: Prof. P. C. Chakraborti

Organising Secretary
Seminar on Automotive Steels
Metallurgical and Material Engineering Department
Jadavpur University, Kolkata 700 032
E-mail: pcchakraborti@metal.jdvu.ac.in
autosteelseminar2014@gmail.com

# All Correspondences be addressed to:

Prof. P. C. Chakraborti

Organising Secretary
Seminar on Automotive Steels
Metallurgical and Material Engineering Department
Jadavpur University
Kolkata 700 032
E-mail: pcchakraborti@metal.jdvu.ac.in
autosteelseminar2014@gmail.com