

## INTERNATIONAL SYMPOSIUM ON MATERIALS EDUCATION ISME – 2011

March 26 – 28, 2011

Sponsored by

**MRSI** 

Organized by

Indian Institute of Science Education and Research – Pune

National Chemical Laboratory – Pune

Centre for Materials for Electronic Technology – Pune

#### Venue

National Chemical Laboratory – Pune









# INTERNATIONAL SYMPOSIUM ON MATERIALS EDUCATION ISME – 2011

In the last three decades, there has been an explosive growth worldwide in the field of Materials Science and Engineering. First the advanced materials (advanced / fine ceramics, advanced polymers and composites, electronic and photonic materials) surpassed several boundaries of performance. Later on, nanostructure science and technology – a broad and interdisciplinary area of research and development activity has revolutionized the ways in which the materials and products are created and the range and nature of functionalities that can be created.

The early instance of nanotechnology is young compared to nature's own technology which emerged billions of years ago when molecules began organizing into complex structures that could support life. The Materials Science and Engineering is now bridging the gap by enhancing the secrets of biology and communications to it by latest technologies with evolution of Macromolecular Science and Engineering. The breathtaking developments in information technology and biotechnology have preceded by the unprecedented developments in Materials Science and Technology. The pace of development has been so fast that we can now only predict and forecast the developments in terms of decades.

The International Council of Materials Education was established to further the cause of Materials Education in developed and developing countries. It is pertinent to organize International Symposium on Materials Education in India – having the second largest growing economy of the world, that too in Pune which is one of the foremost hubs of growing economy in India as well as the Higher Education Capital of India.

Several conferences and symposia have been organized world over coorganized or co-sponsored by ICME. For the first time, this symposium is being organized in India where there is a strong base of Materials Science and Nanotechnology with twin objectives – to popularize the subject among under / post graduates and young researchers as well as to bring the latest researches to Materials Science and Nanotechnology pedagogy. Such efforts are being made in all advanced countries fervently.

ISME – 2011 will focus on the latest in Materials Science and Nanotechnology Researches and Education

- Materials Science and Engineering in the 21st Century
- Advanced Functional Materials, Synthesis, Processing and Devices
- Physics and Chemistry of Nanomaterials
- Advanced Nano Characterization Techniques
- Nanomaterials, Supramolecular Structures and Self Assembly
- Nano Systems and Applications for Sensors, Electronics, Opto-Electronics and Photonics
- Materials for Energy, Polymer Solar Cells
- Materials Sustainability and Environment
- Teaching of Materials Science and Engineering at Undergraduate and Post Graduate Levels
- Teaching of Materials Science and Nanotechnology in higher Secondary Schools

It is expected that there will be thirty invited lectures, thirty oral presentations and seventy poster presentations. All presentations will be published in International Journals of Materials Education.

#### **International Advisory Board**

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R. P. Singh

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#### **Important Dates:**

Pre-Registration
 Abstract Submission
 Abstract Acceptance
 Registration Fee Payment
 15<sup>th</sup> August 2010
 15<sup>th</sup> September 2010
 15<sup>th</sup> October 2010

#### **Registration:**

#### **International**

Category	Non SAARC Countries	<b>SAARC Countries</b>
Student	EURO 200.00	INR 2,000.00
Regular	EURO 350.00	INR 3,500.00
Young Scientist	EURO 300.00	INR 3,000.00
Exhibitor	EURO 750.00	INR 25,000.00
Accompanying Person	EURO 200.00	INR 2,000.00

 10% Discount for registration will be given to participants of POLYCHAR – 19 at Kathmandu during 20 – 24<sup>th</sup> March 2011

#### Accommodation

Accommodation will be arranged in Hotels, YASHADA and NCL Guest Houses. The list of Hotels and Guest Houses will be put up on the website. For more details please write to Prof. R. P. Singh on singh.prakash.ram@gmail.com

## INTERNATIONAL SYMPOSIUM ON MATERIALS EDUCATION

## ISME - 2011

## **Registration Form**

☐ Participation	☐ Oral Presentation	☐ Poster Presentation	☐ Sponsors
Name:			
Position:			
Address:			
Phone:	Mobile:	Fax:	
Email:			
Abstract / Title:			
Sponsorship Category:			
All correspondence should	be addressed to:		
Prof. R. P. Singh	oro Cirolo		

Prof. R. P. Singh Sai Trinity Building, Garware Circle, Pashan, Pune—411 021 India

Fax: +91 20 25 88 97 90

Email: singh.prakash.ram@gmail.com

## **About PUNE CITY**

Pune was the capital of Maratha Empire and is known for its rich tradition of education and culture for several centuries. Pune was realized as a strategic place from army and ammunition point of view by the British rulers. This military tradition continues today and a number of defense training, research and development laboratories have been established in and around the city.

Till very recently, Pune was called the "Pensioners Paradise" and intellectuals know it as the "Oxford of the East". The city has a well known University of Pune which is one of the premier institutes in the country, imparting knowledge to thousands of students in various disciplines. The city has several R&D organizations like National Chemical Laboratory, Indian Institute of Science Education and Research, ARDE, DRDO, National Institute of Virology, IUCCA, NCRA and educational institutes and privately funded colleges. Pune is also now well known as the Information Technology hub with companies like Tata Consultancy, Infosys, Wipro, Cognizant, IBM and others in the IT park located in the suburbs. Pune is surrounded by the Sahayadri hills and has many sites to visit. It is well connected by rail, road and air. The weather in March is quite pleasant.

## **About IISER Pune**

The Indian Institute of Science Education and Research Pune is a premier institute dedicated to research and teaching in the basic sciences. Established in 2006, the institute falls under the purview of the Ministry of Human Resource Development. As a unique initiative in science education in India, IISER aims to be a Science University of the highest caliber devoted to both teaching and research in a totally integrated manner, with state-of-the-art research and high quality education, thus nurturing both curiosity and creativity.

IISER Pune has initiated a 5 years Integrated Masters programme and a post-Masters Ph.D. programme in Integrated Sciences in an intellectually vibrant atmosphere of research. Apart from classroom instruction, IISER builds student skills in areas such as scientific inquiry, problem solving, communication skills, computational sciences, electronics and instrumentation and workshop practices. IISER plans to develop advanced teaching and research labs where students will have the opportunity to pursue experiments as well as advanced research under the mentorship of world-class faculty. Eventually, this should make education and careers in basic sciences more exciting and rewarding.

We dedicate ourselves to learn, teach and serve society through excellence, in education research and public service, create learning and a working environment based on integrity, fairness, dignity and professionalism to provide equal opportunities for all and to develop and encourage a sense of environmental responsibility.

## **About NCL Pune**

The National Chemical Laboratory is the premier national laboratory in Chemical Sciences which was established in 1950 in Pune. It has a total Scientific and Technical Staff of around 1384.

The salient features of the Laboratory are:

- Approximately 200 scientific staff with PhD.
- Interdisciplinary research centre with interest in polymer science, organic chemistry, catalysis, materials chemistry, chemical engineering, biochemical sciences and process development.
- Excellent infrastructure for measurement science and chemical information.
- About 400 graduate students pursuing research towards doctoral degree; a strong and young talent pool which renews every few years.
- Publishes the second largest number of papers in chemical sciences (~ 400), files the largest number of patents, both in India (~30) and abroad (~90) and produces the largest number of Ph.Ds in Chemical Sciences in India.
- To be a globally recognized and respected R&D organization in the area of chemical sciences and engineering
- To become an organization that will contribute significantly towards assisting the Indian chemical and related industries in transforming themselves into globally competitive organizations
- To become an organization that will generate opportunities for wealth creation for the nation and, thereby, enhance the quality of life for its people
- To carry out R&D in chemical and related sciences with a view to eventually deliver a product, process, intellectual property, tacit knowledge or service that can create wealth and provide other benefits to NCL's stakeholders
- To build and maintain a balance portfolio of scientific activities as well as R&D programs to enable NCL to fulfill the demands of its stakeholders, present and future
- To create and sustain specialized Knowledge Competencies and Resource Centers within NCL which can provide support to all stakeholders of NCL

## **About C-MET Pune**

Dedicated to the furtherance of competent research and development in the firmament of Electronic Materials, the Centre for Materials for Electronics Technology (C-MET) functions as an autonomous scientific society under Dept. of Information Technology, Ministry of Communications and Information Technology (MCIT), Govt. of India. Besides augmenting core competence, C-MET envisions attainment of self-sufficiency in the sphere of Electronic materials, components and devices to cater to India's strategicand industrial- applications, exploiting indigenous resources of raw materials.

CMET's R&D activities at present include development of thick film materials, polymers for electronics, specialty chemicals and glasses, ultra high purity and refractory metals, semiconductors, electronic ceramics and fine powder processing. C-MET undertakes joint R&D, sponsored research, technology transfer and consultancy projects and provides technical services.