



**International Seminar**  
**on**  
**"Nanotechnology:**  
**Perspectives and Prospects"**  
**May 25-26, 2006**  
**TIFR Conference Hall, Colaba**  
**Navy Nagar Mumbai**  
**Organisers: IICChE-MRC & TIFR**

# International Seminar on

## Nanotechnology: Perspectives and Prospects

May 25-26, 2006

Venue:  
TIFR Conference Hall  
Mumbai



Organized By

Indian Institute of Chemical Engineers  
Mumbai Regional Centre

&

Tata Institute of Fundamental Research

### Background

The **Indian Institute of Chemical Engineers (IICChE)**, estd. 1947, is the apex professional society of Chemical Engineers in India. With 18,000 members and activities spread across India, it has emerged as an important national platform overseeing the interest of academia and industry in multifarious fields of chemical engineering. The **IICChE Mumbai Regional Centre (MRC)** wants to keep its doors open to new ideas and visions in its journey forward. To enthuse the Chemical Engineering community & improve their sense of pride in their profession MRC had organized many events like the **Outstanding Young Chemical Engineer Contest (OYCE)** in Dec '05, following it up soon thereafter with the **Holck Larsen Memorial Lecture** delivered by Dr Haldor Topsoe in Feb this year as well as a number of student chapter festivals.

Our next big forthcoming event will be the **International Seminar on "Nanotechnology-Perspectives and Prospects"**. This event will be held in collaboration with **Tata Institute of Fundamental Research** shall be host to a number of eminent personalities from particularly young researchers and engineers from India and abroad. Top industries like **RIL, M&M, L&T, Tata Chemicals & Unilever** are supporting the seminar which showcases international luminaries like **Dr. S. Iijima, NEC, Japan** alongwith top notch Indian researchers from **TIFR, IITK, IITB, MUICT & IICT**. The Seminar is aimed at generating a high level of interest and enthusiasm with a special focus on young participants under the age of 35. For this purpose a poster competition has been planned in the course of the seminar.

### Poster Competition Details

All teams are initially required to submit an abstract for the screening round. Contributors of short listed posters will be given a free entry to the seminar. The winners of the event will be invited to present their paper on the next day.

### Awards:

1st prize: Rs 5000/-  
2nd prize (Industries/ Research scholar): Rs 2500/-  
2nd Prize (UG Students): Rs 2500/-

### Evaluation Criteria

The four criteria elaborated below are used for judging the posters

**Content:** The completeness of the poster. i.e., how comprehensively the contestants covered the concerned area of work. as regards the a) Structure b) Content c) Clarity and d) Coverage of Pros and Cons for alternative solutions considered.

**Overall Presentation:** Judged by the aesthetic appeal of the poster.

**Innovation:** Whether the findings in the poster are path breaking? Have they added a whole new dimension/ procedure to the way design/construction/research and any other activities can be executed/structured?

**Impact:** Gauged from the business value realized or the potential savings in terms of cost and time.

### Judges

A panel of eminent professionals from corporate & academic institutions.

### Important date:

**Last date for submission of abstract : 25/4/2006**

**Declaration of shortlisted abstracts : 10/5/2006**

### Venue:

**TIFR Conference Hall, Navy Nagar, TIFR Mumbai**

### Seminar Registration Fees

- IICChE student members – Rs 500/-
- Young Participants below 35 yrs of age – Rs 750/-
- Others – Rs 1000/-
- Free entry for selected poster participants
- **The cheque payable at Mumbai, is to be drawn in favor of 'Indian institute of Chemical Engineers, Mumbai Regional Centre'**

### Speakers

- Prof. Sabyasachi Bhattacharya (Director, TIFR)
- Dr. Murali Sastry (Chief Scientist, Tata Chemicals)
- Dr. G N Mathur (Ex-Director, DMSRDE)
- V M Naik (Dy Head, R & D, Unilever Ltd)
- Dr. Arup Chatterjee (Research Scientist, Mahindra & Mahindra)
- Dr. Laxmi Kantam (Head, Catalysis, IICT)
- Prof. Ashutosh Sharma (IIT Kanpur)
- Prof. P Ayyub (TIFR)
- Prof. G D Yadav (UICT)

**ORGANISERS: IChE-Mumbai & Baroda (Video Conference) and TIFR**

**9.00 Registrations and Breakfast**  
Anchor : Dr. Sanjay Mahajani (IIT B)

**Inaugural Session**

- 9.30 **Welcome by IChE MRC Chairman**  
Mr. K. Venkataramanan
- 9.45 **Wide Angle View :Applications Panorama**  
Prof. S Bhattacharya (Director, TIFR)
- 10.00 **The Chemical Engineering Connection**  
Prof. G. D. Yadav (HOD, Chem Engg Dept., MUICT)
- 10.15 **Address**  
Dr. S. Banerjee, Director, BARC
- 10.30 **Keynote address**  
Prof. C. N. R. Rao, JNCASR (to be confirmed)

**Inauguration of Poster competition**

Mr. M Rohatgi, CMD, EIL

**11.15 TEA BREAK**

**Nanotechnology at work**

- 11.25 **Introduction by Session Chairman**  
Mr. Sahasranaman (GM Process, UHDE India Ltd.)
- 11.40 **Emergence & role of nano phenomena in consumer goods**  
V.M. Naik (VP, Corporate Research, Unilever Research India, HLRC, Bangalore)
- 12.10 **Innovative Applications of Nanomaterials**  
Dr. Arup Chatterjee (Tech Dir, United Nanotechnologies)

**12.40 LUNCH BREAK**

**Nanocatalysis: Adding New Dimensions to Nanotechnology**

- 1.30 **Introduction by Session Chairman**  
Prof. Periswamy (HOD, Dept. of Chemical Sciences, TIFR)
- 1.45 **Applications of Nano-Catalysis in the synthesis of Pharmaceutical Intermediates**  
Dr. Ms Laxmi Kantam (Head, Catalysis, IICT)
- 2.15 **Imaging of Nano-catalysts**  
Dr. Eric Van Cappellen (FEI, USA)
- 2.45 **Nanocatalysis- Impact on Chemical Industry**  
Dr. R. Krishnamurthy, IPCL (Live VC from Baroda)

**3.15 TEA BREAK**

**Synthesis of Better Materials**

- 3.30 **Introduction by Session Chairman**  
Prof. M. B. Kurup (Dean, TIFR)
- 3.45 **Recent Trends in Polymer Nanocomposites**  
Dr. Biswas (RIL, Mumbai)
- 4.15 **Physical Synthesis of Nanomaterials**  
Prof. P Ayyub (Dept. of Material Science, TIFR)
- 4.45 **Materials for Strategic Applications**  
Dr. G.N. Mathur (Ex-Director, DMSRDE, IIT K)
- 5.15 **Nanoplastics**  
Nitin Kothari - DSM India
- 5.45 **HIGH TEA**

May 26, 2006

**ORGANISERS: IChE-Mumbai & Baroda (Video Conference), ISCA & TIFR**

**9.00 BREAKFAST**

**NanoBioTechnology**

- 9.30 **Introduction by Session Chairman**  
Dr. S. Ganeshan, TOYO Engg Ltd., India
- 9.40 **Nanotechnology for Biomedical Applications**  
Dr. A. B. Mathur, IPCL (Live VC from Baroda)
- 10.10 **Prospects & Challenges of nanosize liposomes for targeted drug delivery in cancer therapy**  
Dr. K P Mishra, BARC, Mumbai
- 10.40 **Use of Nanotechnology in Drug Delivery Systems**  
Prof. R. S. R. Murthy, M. S. Univ, Baroda (Live VC from Baroda)
- 11.10 **Poster Session**  
Poster evaluation by Prof. Mallik, IIT-B and Dr. H. Shrihari, DJSCOE

**11.30 TEA BREAK**

**Pathways to the Future: Words of Wisdom**

- 11.45 **Introduction by Session Chair**  
Dr. Govil, ISCA,
- 11.55 **R&D in Nanotechnology**  
Dr. Hameed Bhombal, Aditya Birla
- 12.25 **Prospects of Nanopigments in INDIA**  
Prof. V.C. Malshe (HOD, Paint Technology, MUICT)
- 12.55 **Nanotechnology in IITB**  
Prof. Khilar (Dean R & D, IIT-B)

**1.25 LUNCH BREAK**

**2.05 Panel Discussion**

- New Vistas for Entrepreneurship**  
Panel Chairman: Prof. B.M. Arora (Dept. of Material Science, TIFR, Mumbai), Speakers  
-Mr. Chodankar CMD Mechvac Fabricators - Others
- 2.50 **Prize Distribution and Presentation by Winners**
- 3.30 **Vote of Thanks**  
Mr. Vijay Sane, Secretary IChE
- 3.45 **Tea**

**Sponsorship**

IChE MRC invites co-sponsorship for the event.

Sponsors will be entitled to provide banners at the venue entrance & inside the hall. They can also provide handouts.

For details of the amount to be paid for sponsoring the items referred, please contact the convenor.

**The cheque payable at Mumbai, is to be drawn in favor of 'Indian institute of Chemical Engineers, Mumbai Regional Centre'**

**IChE MRC - EXECUTIVE COMMITTEE :**

Venkataramanan K., *Chairman*  
Sahasranaman K., *Vice Chairman*  
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More S.B.  
Sankholkar A. S  
Saxena P.K.  
Srihari Dr. H  
Srivastava V.K.  
Trivedi Dr.R.N.

**Convenors: Mr. A. Sankholkar, IChE-MRC  
Prof. A. K. Nigam, TIFR**

**Contact:**

Dr. Sanket Salgaonkar : 022-67052698  
Nitesh Jain : 022-67051091  
iiche@LNTENC.com  
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# **International Seminar on Nanotechnology: Perspectives and Prospects**

## **Sponsorship Details**

1. Sponsor	Rs 300,000/-	3 Free delegates
2. Co - Sponsor	Rs 200,000/-	2 Free delegates
3. Associate Sponsor	Rs 100,000/-	1 Free delegates
4. Well Wishers	Rs 15,000/- and above	

- In categories 1, 2 & 3, Company Name & Logo will be displayed at the venue
- Company Brochure/CD will be distributed in the registration kit
- Souvenir CD will include brief write-up on the company

# REGISTRATION FORM

Name (Dr/Mr/Ms/Mrs): \_\_\_\_\_

Company: \_\_\_\_\_ Job Title: \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

I would like to register as: \_\_\_\_\_

## Delegate Type

Student Members

Participants below 35yrs of age

Others

## Registration Fees

INR 500

INR 750

INR 1000

## Payment\*:

I have enclosed payment of INR \_\_\_\_\_ by cheque no./DD no. \_\_\_\_\_ made payable to “Indian Institute of Chemical Engineers - Mumbai Regional Centre” at Mumbai

## Poster Competition\*\*:

Like to present Poster: Yes/No

If Yes then Name of People presenting poster: \_\_\_\_\_

\* Send Cheque to: Mr. Avinash Sankholkar, C/O L & T Powai, Gate No.1, 6th Floor, EPC Block, E & C, Saki Vihar Road, Mumbai - 400072

\*\* If poster is selected then registration fees will be refunded to you

# Send poster abstract by 25/4/06

# Sponsorship Form

Name (Dr/Mr/Ms/Mrs): \_\_\_\_\_

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I would like to sponsor the event in Category (1,2,3 & 4): \_\_\_\_\_

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| 3. | Associate Sponsor | Rs 100,000/-          | 1 Free delegates |
| 4. | Well Wishers      | Rs 15,000/- and above |                  |

**Name of Delegates for category 1, 2 & 3:** \_\_\_\_\_

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