

  
**ICONSAT**  
2012

# International Conference on Nano Science and Technology

January 20-23, 2012, Hotel Taj Krishna, Hyderabad, India

Sponsored by

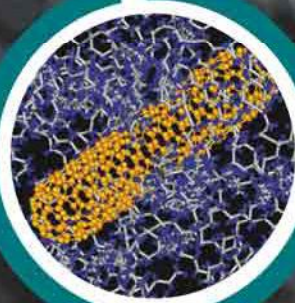
**NANO MISSION**

Department of  
Science and Technology  
Govt. of India

Organized by



ए आर सी आई  
**ARCI**



## about ICONSAT...

The International Conference on Nanoscience and Technology (ICONSAT - 2012) will be held from January 20 to 23, 2012 at Hyderabad, India. The conference is being organized by International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), which is a grants-in-aid institute of the Department of Science and Technology (DST), Government of India. ICONSAT is a regular biennial feature supported under the Nano initiative of the DST and is being conducted every alternate year since 2003, primarily motivated by the desire to promote scientific exchange between experts in India and abroad in the area of nanoscience and technology. ICONSAT - 2012 is the fifth in the above series of international conferences and comes at a time when nanoscience and technology is on the upswing and the varied Nano Mission initiatives are beginning to bear fruit.

ICONSAT - 2012 will provide an opportunity for scientists, academicians, students and entrepreneurs to interact on the current developments and future trends in nanoscience and nanotechnology. Based on the success of previous events, significant participation from experts across the world is expected, thus rendering the event an ideal platform to forge mutually rewarding collaborative linkages.

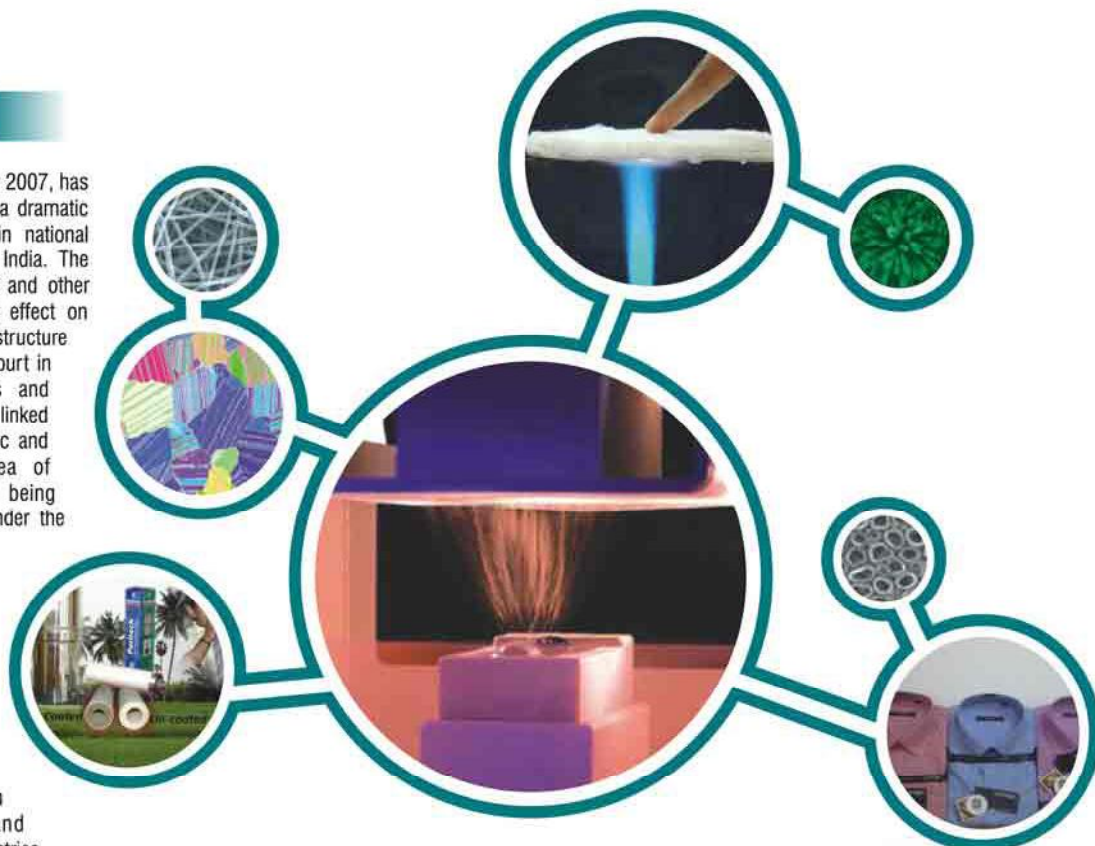
## about NANO MISSION...

The Nano Mission, launched by DST in May 2007, has been singularly responsible for catalyzing a dramatic increase in nano-based R&D activities in national laboratories and academic institutions in India. The Nano Mission's capacity building efforts and other initiatives have already had a significant effect on India's nano canvas in terms of infrastructure creation, greater reach of R&D support, spurt in human resource development activities and encouragement of industry - institute linked projects. Implementation of industry-centric and application-driven projects in the area of nanoscience and technology is also being encouraged through specific programs under the Nano Mission.

## about ARCI

ARCI, the event organizer, is an R&D institution of DST specifically setup with a mission to develop unique, novel and techno-commercially viable technologies in the area of advanced materials and subsequently transfer them to Indian industries.

"Translating Research to Technology" has been ARCI's motto and the institute has set for itself the task of striving to bridge the gap between conventional research institutes & laboratories and the high-technology industries. In recent years, ARCI has been very active in the development of technologies for pilot-scale production of a wide range of nanopowders, as well as exploring their utilization for applications, which cater to either a globally relevant application that has a large Indian market or a market unique to India. A centre of excellence dedicated to nanomaterials was setup at ARCI in 2003. ARCI has made substantial progress not only in establishing a vast array of synthesis, processing and characterization facilities, but also in application development in the areas of nanosilver for drinking water disinfection, nano-ZnO for electrical varistors, nano alumina, tungsten carbide and titanium carbonitride based cutting tool materials and nanotungsten carbide as non-noble catalyst in PEM fuel cell electrodes. New projects related to functional textile finishes, utilization of aerogels for thermal insulation applications, electrospun nano-fibres for medical scaffolds, synthesis of chalcogenide based solid lubricants, graphene, lithium ion based battery materials, nanostructured coatings and catalysts by electrodeposition have also been recently taken up. Synthesis of CNTs and investigation of metal-CNT nanocomposites are also areas of specific focus at ARCI. More recently, ARCI has established a Centre for Knowledge Management of Nanoscience and Technology (CKMNT) with partial assistance from the Nano Mission. This centre aims to offer comprehensive one - stop nanoscience and technology information services to researchers, industry, policy makers, venture capitalists, funding agencies etc., and thereby help in fulfilling the objectives of the Nano Mission.



## Registration

The Registration Fee structure for participation in ICONSAT-2012 is as follows:

Registration Fee	Till December 15, 2011	After December 15, 2011	Payment by electronic transfer should be made to the following account:	
Foreign participants	USD 500	USD 600	Account name: <b>Director, ARCI</b>	Account number: <b>104510100053115</b>
Foreign students	USD 200	USD 250	Account Type: <b>Savings</b>	Bank: <b>Andhra Bank</b>
Indian Participants	Rs. 6000	Rs. 7500	IFSC Code: <b>ANDB0001045</b>	Branch: <b>BDL Campus</b>

The above indicated Registration Fee for Indian participants reflects the subsidy made possible by funds provided by Governmental sponsoring agencies. The Registration Fee shall include (a) entry to all technical sessions, (b) conference kit and (c) refreshments, lunches & dinners on all conference days. An Early-Bird Registration Discount will be applicable to all participants who register before December 15, 2011. Payment by Indian participants may be made either by demand draft/cheque, electronic transfer or credit card, while foreign participants can choose to pay by credit card or by electronic transfer. The demand draft/cheque should be drawn in favour of "ARCI ICONSAT 2012" payable at Hyderabad. Interested participants may either fill out the enclosed Registration Form and send it to the Conference Secretariat or complete the process online at the earliest.

## Distinguished Speakers

### Plenary Speakers

C.N.R. Rao (JNCASR, Bengaluru, India) – Inaugural  
 A. Fujishima (Tokyo University of Science, Japan)  
 K. Nihara (Nagaoka University of Technology, Japan)  
 Uzi Landman (Georgia Tech., USA)  
 Seeram Ramakrishna (NUS, Singapore)  
 Vinayak Dravid (Northwestern University, USA)  
 Jagdish Narayan (North Carolina State University, USA)  
 P.M. Ajayan (Rice University, USA)  
 A.K. Sood (IISc, Bengaluru, India)  
 D.D. Sarma (IISc, Bengaluru, India)

### Keynote Speakers

S. Veprek (Technical University, Munich, Germany)  
 M. Endo (University of Shinshu, Japan)  
 Xiangwu Zhang (North Carolina State University, USA)  
 Etienne Duguet (Université Bordeaux-1, France)  
 Heinrich Lang (Chemnitz Univ. of Technology, Germany)

Hiroshori Iwai (Tokyo Institute of Technology, Japan)  
 Henry I. Smith (MIT, USA)  
 Sadhan C. Jana (University of Akron, USA)  
 Apparao M. Rao (Clemson University, USA)  
 Li Changming (NTU, Singapore)  
 Ashutosh Sharma (IIT-Kanpur, India)  
 Tata Narasinga Rao (ARCI, Hyderabad, India)  
 V. Ramagopal Rao (IIT-Mumbai, India)  
 Shanti Nair (Amrita Institute of Medical Sciences, India)  
 Pushan Ayub (TIFR, Mumbai, India)  
 K.N. Ganesh (IISER-Pune, India)  
 A.K. Raychaudhuri (SNBNCBS, Kolkata, India)  
 G.U. Kulkarni (JNCASR, Bengaluru, India)  
 S.M. Shivaprasad (JNCASR, Bengaluru, India)  
 T. Pradeep (IIT-Madras, India)

### Invited Speakers

Lionel Montagne (Université Lille-1, France)  
 Arun Bansil (Northeastern University, USA)

Nikhil Koratkar (Rensselaer Polytechnic Inst., NY, USA)  
 Larry Nagahara (National Cancer Institute, MD, USA)  
 Gautam De (CGCRI, Kolkata, India)  
 Ganapati Ramanath (Rensselaer Polytechnic Inst., NY, USA)  
 Valentyn Novosad (Argonne Natl. Lab, USA)  
 B.R. Mehta (IIT-Delhi, India)  
 Indranil Manna (CGCRI, Kolkata, India)  
 B.S. Murty (IIT-Madras, India)  
 U. Ramamurty (IISc, Bengaluru, India)  
 B.V.R. Tata (IGCAR, Kalpakkam, India)  
 Satishchandra B. Ogale (NCL-Pune, India)  
 John Philip (IGCAR, Kalpakkam, India)  
 B.L.V. Prasad (NCL-Pune, India)  
 D. Bahadur (IIT-Bombay, India)  
 S. Ramaprabhu (IIT-Madras, India)  
 Vivek Polshettiwar (KAUST, Kingdom of Saudi Arabia)  
 R. Sooryakumar (Ohio State Univ., Columbus, USA)  
 M.K.Sanyal (SINP, Kolkata, India)

## Call for ABSTRACTS

Abstracts may be submitted on any theme allied to the field of nanoscience and nanotechnology including, but not restricted to, the following:

- Advances in nanomaterial synthesis
- Biotechnology and biomedical applications
- NEMS, lithography, etc.
- Surface engineering and tribological applications
- Technology and commercialization
- CNTs and Graphene
- Catalysis
- Advances in nanomaterials characterization
- Energy applications
- Physics of nanomaterials
- Nanocomposites
- Nanotoxicology and nanoregulatory aspects

Authors may either submit abstracts online by visiting the conference website ([www.iconsat2012.com](http://www.iconsat2012.com)) or by e-mail to the Convener or Conference Secretary. The abstract format should comply with the template available on the conference website. Authors should indicate their preference for oral or poster presentation, although a final decision will be based on a review by an Expert Committee.

## Programme-at-a-glance

Day	9:00 -10:30	10:30 - 11:30	11:30 -13:15	13:15 - 14:00	14:00 -15:30	15:30 -16:15	16:15 -18:30	19:00
January 20			Registration		Inauguration and Inaugural lecture by Prof. CNR Rao	Tea	Plenary Session 01 15:45 -18:30	
January 21	Plenary Session 02	Exhibition/ Poster Session/ Tea	Parallel Technical Sessions 01-04	Lunch	Parallel Technical Sessions 05-08	Exhibition/ Poster Session/ Tea	Parallel Technical Sessions 09-12	Dinner
January 22	Plenary Session 03		Parallel Technical Sessions 13-16		Parallel Technical Sessions 17-20		Parallel Technical Sessions 21-24	
January 23	Plenary Session 04		Parallel Technical Sessions 25-28		Parallel Technical Sessions 29-32		Parallel Technical Sessions 33-36	

## Free Participation of Students/Young Researchers

A special effort is being made to encourage and facilitate participation of Indian students/young researchers actively engaged in research associated with areas aligned to nanoscience and nanotechnology, but not yet permanently employed (age limit 30 years). About 200 slots are being reserved for this category of participants. Interested students/young researchers may apply, for these slots by submitting (i) a detailed CV highlighting their research accomplishments (ii) letter from their research supervisor or Head of the Department certifying their affiliation and area of research and (iii) an abstract for poster presentation. Applications shall be subjected to screening by an Expert Committee. Selected students/young researchers shall be provided Registration Fee waiver, free accommodation and to-and-fro travel costs between their place of stay and Hyderabad (restricted to train fare by IIIAC Class) on production of travel tickets.

## Important Dates

Application for free participation by students/young researchers: Nov-15, 2011; Intimation of acceptance: Nov-30, 2011	Submission of abstracts: Nov-30, 2011; Intimation of acceptance: Dec-10, 2011	Payment of Registration Fee to avail early bird discount: Dec-20, 2011	Application for accommodation: Dec-20, 2011
---	--	--	---

## Conference Venue

The Conference will be held at Hotel Taj Krishna, a much sought after hotel in the heart of Hyderabad. This architectural masterpiece sits perched above the city in Banjara Hills, a prime residential and commercial area in the city. Nestled in beautifully landscaped gardens, the hotel has distinctive charm and magnificent views of the city. The hotel is surrounded by everything that is uniquely Hyderabad, be it the Pochampalli fabric boutiques, the pearl shops, the film theatres, Hussain Sagar Lake. Complete details regarding facilities at the hotel can be obtained from the website <http://www.tajhotels.com/Luxury/City-Hotels/Taj-Krishna-Hyderabad/Overview.html>. It is also located at a reasonable distance from the plush new airport and the three major railway stations (i.e. Secunderabad, Hyderabad & Kacheguda).

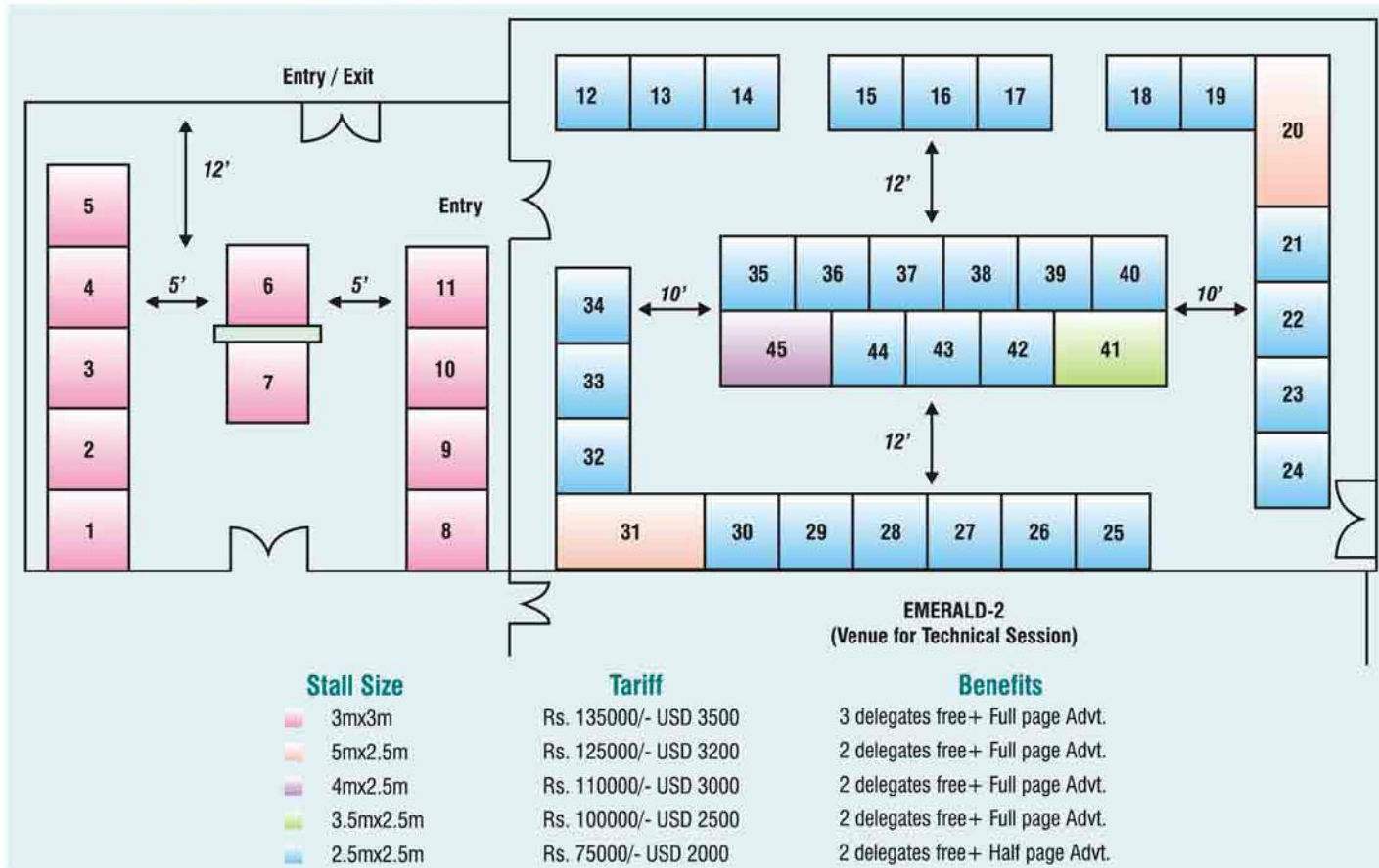
## Hyderabad City: A Blend of Rich Tradition and Modern Sophistication

Hyderabad, with its twin city Secunderabad, is the 5<sup>th</sup> largest city in India and the capital of the state of Andhra Pradesh. Well-connected by air, rail and road to all major Indian cities, this South Indian city with a rich history has undergone significant developments to become a major industrial centre and a prominent R&D hub. Hyderabad also offers a rich fare for the tourist, with the major tourist attractions being the Birla Mandir, Charminar, Golconda Fort, Salarjung Museum, Lumbini Park, Shilparamam, Botanical gardens, Ramoji Film City and Mecca Masjid. More details about tourism opportunities in and around Hyderabad can be obtained from [www.aptourism.in](http://www.aptourism.in).

## Exhibition & Sponsorship

ICONSAT - 2012 provides a golden opportunity for companies to exhibit their products/equipment or advertise their capabilities. The market potential in India for nanotechnology - related products and services is enormous, and the above event will bring exhibitors face-to-face with a wide cross-section of prospective customers. The event offers various avenues for a company to promote itself among a targeted audience, either by booking a stall at the exhibition to be organized adjacent to one of the technical sessions to ensure maximum attention from the participants or by utilizing one of the many diverse sponsorship opportunities available to get the desired 'visibility'.

## Exhibition Layout & Tariff



## Sponsorship Opportunities / Tariff

Category	Platinum	Gold	Conference kit	Dinner	Lunch	Tea	Technical session	Full page advt. (Colour)	Half page advt. (Colour)
Tariff	Rs. 500000 (USD 12500)	Rs. 300000 (USD 7500)	Rs. 500000 (USD 12500)	Rs. 350000 (USD 9000)	Rs. 250000 (USD 6500)	Rs. 75000 (USD 2000)	Rs. 150000 (USD 4000)	Rs. 30000 (USD 900)	Rs. 15000 (USD 600)

## National Advisory Committee (Comprising all Nano Mission Council Members)

Prof CNR Rao, JNCASR, Bangalore	Prof K. VijayRaghavan, NCBS, Bangalore	Dr. G. Sundararajan, ARCI, Hyderabad
Dr. T. Ramasami, Secretary, DST, New Delhi	Dr. Baldev Raj, PSG Institutions, Coimbatore	Dr. G.V. Ramaraju, DIT, New Delhi
Prof D. Chakravorty, IACS, Kolkata	Prof AK Sood, IISc, Bangalore	Dr. Praveer Asthana, DST, New Delhi

## Accommodation

To ensure a comfortable stay for the delegates in Hyderabad at affordable rates during ICONSAT - 2012, arrangements have been made at a few hotels/hostels, conveniently located with respect to the conference venue and spanning a wide budget range, at specially discounted rates. Details of rooms blocked by the organizers and the corresponding tariffs are provided on the conference website. Accommodation will be arranged in the above places by the organizers on a first-come-first-served basis. Delegates who wish to avail of this facility are required to submit the accommodation form available on the website.

Name of Hotel/Hostel	Distance from Conference Venue (Kms)	Tariff starting from (Rs./per day)
Hotel Taj Krishna, Banjara Hills	0	9000
Taj Deccan, Banjara Hills	0	5000
Hotel Minerva Grand, Secunderabad	7	2799
Marriott Courtyard - Secunderabad	6	3099
Hotel Quality Inn Residency, Nampally	6	3500
Green Park, Greenlands	2.5	2000
Marigold Green Park, Greenlands	2.5	2999
MCR HRD Institute (Hostel), Jubilee Hills	3	750

The above rates are specially discounted for ICONSAT 2012 delegates. Please visit our website for details and other options.

## Contacts:

Chairman: G Sundararajan, Director, ARCI

Convener: Dr. Shrikant V Joshi, Associate Director, Tel: +91-40-24441077, Fax: +91-40-24443168, Email: convener@iconsat2012.com  
Conference Secretary: Dr. TN Rao, Team Leader, Centre for Nanomaterials, Tel: 040-24443170, Fax: 040-24442699, Email: secretary@iconsat2012.com

International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI),  
Balapur Post, Hyderabad 500005, Andhra Pradesh, India



## Registration Form for Participation

Name: ..... Designation:.....  
 Affiliation: .....  
 Mailing address: .....  
 .....  
 PIN: .....  
 Phone: ..... Mobile: .....  
 Fax: ..... E-Mail: .....

### Category (Please tick)

**Conference Participant**

**Indian Participant**  **Indian Student/Young Researcher\***  **Foreign Participant**  **Foreign Student**

\*Indian students/young researchers are required to apply on-line for free participation

**Author- Oral Presentation**

**Author- Poster Presentation**

**Sponsor**

**Platinum**  **Gold**  **Conference Kit**  **Dinner**  **Lunch**  **Tea**  **Technical Session**

**Exhibitor**

**3m x 3m**  **5m x 2.5m**  **4m x 2.5m**  **3.5m x 2.5m**  **2.5m x 2.5m**

**Stall Number Preference** First:  Second:  Third:

Allotment after receipt of payment, on first-come-first-served basis

**Advertiser**

**Full Page**  **Half Page**

(Registration Details and Sponsorship Opportunities/Tariff overleaf)

### Payment Details

Please find enclosed herewith Rs./USD.....(Rupees/US Dollar (in words) .....  
 .....vide demand draft / Cheque No.....  
 dated .....payable at Hyderabad, drawn in favour of ARCI-ICONSAT 2012.

**Payment online**  
 (only for online registrations)

**Payment by wire transfer**  
 (Refer to brochure for wire transfer details)

Date: .....

Signature with Seal



# International Conference on Nano Science and Technology

## Registration Fee Structure

Registration Fee	Till December 15, 2011	After December 15, 2011
Foreign participants	USD 500	USD 600
Foreign students	USD 200	USD 250
Indian Participants	Rs. 6000	Rs. 7500

Payment by electronic transfer should be made to the following account:

Account name: <b>Director, ARCI</b>	Account number: <b>104510100053115</b>
Account Type: <b>Savings</b>	Bank: <b>Andhra Bank</b>
IFSC Code: <b>ANDB0001045</b>	Branch: <b>BDL Campus</b>

## Sponsorship Opportunities/Tariff

Category	Tariff	Benefits
<b>Platinum</b>	Rs. 500000 (USD 12500)	<ul style="list-style-type: none"> <li>● Display of sponsor's logo on backdrop during plenary sessions on all 4 days</li> <li>● Branding of sponsor at Poster and Exhibition areas ● Technical presentation slot-15mins</li> <li>● Exhibition stall of 3mx3m on all 3 days ● Registration for 3 delegates +1 Full page Advertisement</li> </ul>
<b>Gold</b>	Rs. 300000 (USD 7500)	<ul style="list-style-type: none"> <li>● Display of sponsor's logo on backdrop during plenary sessions on all 4 days</li> <li>● Branding of sponsor at Poster and Exhibition areas ● Technical presentation slot-15mins</li> <li>● Exhibition stall of 2.5mx2.5m on all 3 days ● Registration for 2 delegates +1 Full page Advertisement</li> </ul>
<b>Conference Kit</b>	Rs. 500000 (USD 12500)	<ul style="list-style-type: none"> <li>● Display of sponsor's name on the conference kit ● Technical presentation slot-15mins</li> <li>● Exhibition stall of 2.5mx2.5m on all 3 days ● Registration for 2 delegates + 1 Full page Advertisement</li> </ul>
<b>Dinner</b>	Rs. 350000 (USD 9000)	<ul style="list-style-type: none"> <li>● Branding of sponsor at dinner venue ● Technical presentation slot-15mins</li> <li>● Exhibition stall of 2.5mx2.5m on all 3 days ● Registration for 2 delegates + 1 Full page Advertisement</li> </ul>
<b>Lunch</b>	Rs. 250000 (USD 6500)	<ul style="list-style-type: none"> <li>● Branding of sponsor at lunch venue ● Technical presentation slot-15mins</li> <li>● Registration for 2 delegates + 1 Full page Advertisement</li> </ul>
<b>Technical Session</b>	Rs. 150000 (USD 4000)	<ul style="list-style-type: none"> <li>● Technical presentation slot-15mins</li> <li>● Registration for 2 delegates + 1 Full page Advertisement</li> </ul>
<b>Tea</b>	Rs. 75000 (USD 2000)	<ul style="list-style-type: none"> <li>● Branding of sponsor at tea venue</li> <li>● Registration for 1 delegate + 1 Full page Advertisement</li> </ul>
<b>Advertisement (Colour)</b>	Rs. 30000 (USD 800)	Full page advertisement
	Rs. 15000 (USD 400)	Half page advertisement

(Registration Form for Participation overleaf)



Mail filled-in registration form to :  
 Conference Secretary: Dr. T N Rao, Team Leader, Centre for Nanomaterials,  
 International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI),  
 Balapur Post, Hyderabad 500005, Andhra Pradesh, India.  
 Tel : +91-40-24443170, Fax : +91-40-24442699, Email: secretary@iconsat2012.com