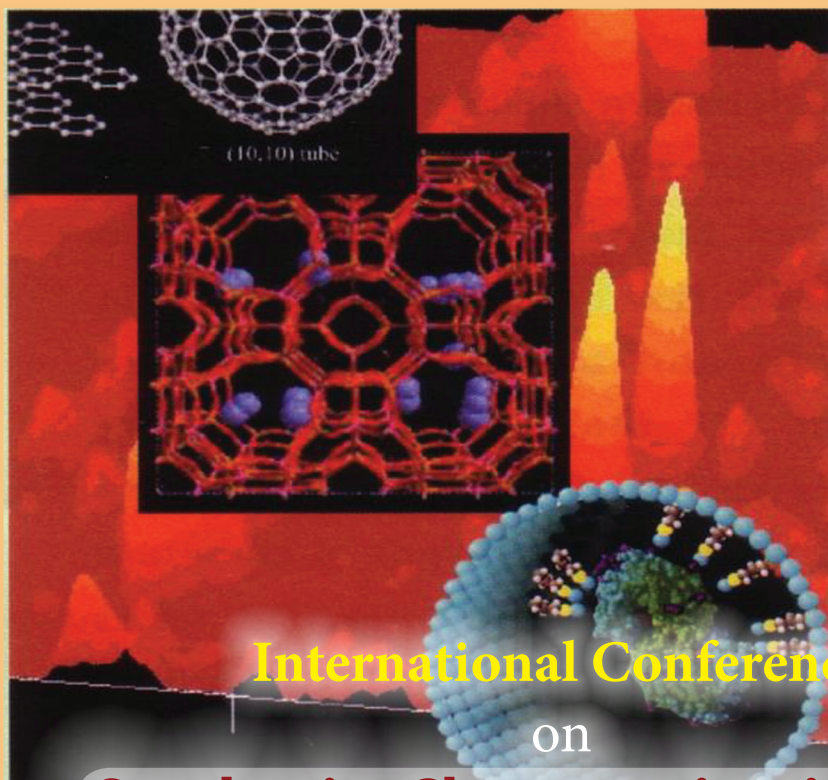
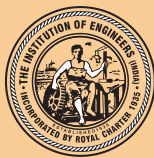


November 1-2, 2019

First Information Brochure



International Conference
on
**Synthesis, Characterization and
Application of Nanomaterials
(SCAN)**



Organised by

The Institution of Engineers (India)

Hosted by

West Bengal State Centre

Knowledge Partners



**University of Central Florida
USA**



**World Federation of Engineering Organizations
Fédération Mondiale des Organisations d'Ingénieurs**

Conference web: www.ieindia.org



Dr M N Dastur
School of Materials Science and
Engineering, Indian Institute of
Engineering Science & Technology,
Shibpur, Howrah, India

MRS
Materials Research Society
SINGAPORE

Venue: Kolkata, India

About The Institution of Engineers (India)

The Institution of Engineers (India) [IEI] is a statutory body to promote and advance the engineering science and technology, established in 1920 and incorporated by Royal Charter in 1935. It is the largest multi-disciplinary professional body of engineers encompassing 15 (fifteen) engineering disciplines with a membership of more than 0.8 Million, and serving the nation for more than 9 decades. The IEI has its headquarters located in Kolkata and it function through more than hundred Centers and several Overseas Chapters, Foras and Organ Besides, IEI has bilateral agreements with about 31 international bodies and membership of another eight international bodies of the developed nations across the globe. Being recognized as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, IEI promotes the cause of research and development by providing Grant-in-Aid support to undergraduate, post graduate students and PhD Research Scholars of Engineering Institutions and Universities.

IEI conducts Section A & B Examinations in various engineering disciplines (popularly known as AMIE examination), the successful completion of which is recognized as equivalent to Degree in appropriate field of Engineering of recognized Universities of India by the Ministry of Human Resources Development, Government of India. Every year as many as 90000 candidates appear for these exams.

IEI in collaboration with Springer regularly publishes peer-reviewed International Journal in five series, namely, Series A, Series B, Series C, Series D and Series E covering 15 engineering disciplines, which are **Scopus Indexed**.

For further details, please visit: www.ieindia.org

= Knowledge Partners =

University of Central Florida, USA

University of Central Florida or UCF, is a State University in Orlando, Florida. It has more students enrolled on campus than any other US College or University. Founded in 1963 by the Florida Legislature, UCF opened in 1968 as Florida Technological University, with the mission of providing personnel to support the growing US space program at the Kennedy Space Center and Cape Canaveral Air Force Station on Florida's Space Coast. As the school's academic scope expanded beyond engineering and technology, Florida Tech was renamed The University of Central Florida in 1978. UCF's space roots continue, as it leads the NASA Florida Space Grant Consortium. Most of the student population is on the University's main campus from east of downtown Orlando and from west of Cape Canaveral. The University offers more than 200 degrees through 13 colleges at 10 regional campuses in Central Florida, the Health Sciences Campus at Lake Nona, the Rosen College of Hospitality Management in south Orlando and the Center for Emerging Media in downtown Orlando. Since its founding, UCF has awarded more than 290,000 degrees, including over 50,000 graduate and professional degrees, to over 260,000 alumni worldwide.

World Federation of Engineering Organisations

World Federation of Engineering Organisations (WFEO) is the internationally recognized and chosen leader of the engineering profession and cooperates with national and other international professional institutions in being the lead profession in developing and applying engineering to constructively resolve international and national issues for the benefit of humanity. WFEO encourages all of its national and international members to contribute to global efforts to establish a sustainable, equitable and peaceful world by providing an international perspective and enabling mechanisms:

- To provide information and leadership to the engineering profession on issues of concern to the public or the profession.
- To serve society and to be recognized, by national and international organizations and the public, as a respected and valuable source of advice and guidance on the policies, interests and concerns that relate engineering and technology to the human and natural environment.
- To make information on engineering available to the countries of the world and to facilitate communication between its member nations.
- To foster peace, socioeconomic security and sustainable development among all countries of the world, through the proper application of technology.
- To facilitate relationships between governments, business and people by adding an engineering dimension to discussions on policies and investment.

Materials Research Society of Singapore

The Materials Research Society of Singapore (MRS-S) was created in 1999 as a not-for-profit organisation to serve a rapidly emerging materials science community in Singapore. The founding President of the Society was Prof Shih Choon Fong who remains its Principal Advisor. The Society is affiliated with the International Union of Materials Research Societies (IUMRS). Since its inception the focus of MRS-S has been to promote materials science not only to researchers in Singapore, but also to publicise the niche capabilities of local researchers throughout Asia and further a field. To this end, the Society's major activity is the organisation of a biannual event - the International Conference on Materials for Advanced Technologies or ICMAT - that is held in July and attracts more than 1500 delegates from all over the world. MRS-S also awards prizes on annual basis to outstanding Honours students at the National University of Singapore. As the Society matures it plans to expand its activities through:-

- ❖ organisation of smaller, specialist conferences, and
- ❖ provision of scholarships to graduate students

Dr M N Dastur

School of Materials Science and Engineering, Indian Institute of Engineering Science & Technology, Shibpur, Howrah, India

The School of Materials Science and Engineering started functioning as a seat of multidisciplinary research and education in the year 2001. The need to integrate the efforts of scientists and engineers working with different aspects of a wide variety of materials has been the primary motivation for creation of this school. The school emphasizes at providing a holistic approach in researching materials to create new knowledge and lay the foundations for new technologies. The school aims at providing quality postgraduate education to meritorious undergraduates with keen interest in materials research. At SMSE students are provided with an educational grounding in the fundamental principles common to all materials before they could embark on research in a specialized field. The research and education at SMSE is closely associated with industry and several academic institutions of repute with an aim to foster cutting edge research and establish ourselves as a leader in this field. Interests within the school span the entire spectrum of engineering materials including metals, polymers, solid state device materials, ceramics, composites, bio-materials, energy and environmental materials with a special focus on nanomaterials. The school has resources to address these scientific and engineering problems successfully.

Objective

Nanocrystalline materials have established itself as a new class of materials and are believed to be the answer to the quest for materials with superior properties. The most striking feature of these materials is that their chemical and physical properties differ markedly from those of bulk solids and further application of these materials in novel areas and new miniaturized devices. The growing importance of Nano crystalline materials thus has eventually led to the realization of providing a platform where the Scientists, Engineers & Technologists from all over the globe can address, exchange and transpire their ideas and experiences for exploiting the full potential of Nano materials. Pursuant with this objective under the aegis of Metallurgical and Materials Engineering Division Board, West Bengal State Centre of The Institution of Engineers (India) in collaboration with University of New South Wales, Australia organized a three-day International conference on "Nanomaterials: Synthesis, Characterization and Application" and discussed in-depth on these new class of materials: its fundamental aspects, technological developments and potential applications, in November 2004 at Kolkata. Over the past two decades, scientists and engineers have been mastering the intricacies of working with nanoscale materials now they have a clearer picture of how to create nanoscale materials with properties never envisioned before.

Metallurgical and Materials Engineering Division, West Bengal State Centre of The Institution of Engineers (India) felt it worthwhile to again create a vibrant global meeting ground for renowned scientists, engineers and young researchers who are involved in the exploration of nanomaterials and their applications by organizing an International Conference "Synthesis, Characterization and Application of Nanomaterials (SCAN)" during November 1-2, 2019 at Kolkata. The conference will be structured in a fashion to have State-of-the-art lectures, invited talks and oral / poster presentation broadly covering the following Sub-themes from distinguished scientists, engineers and technologists as well as young research scientists from across the globe.

Areas to be Covered

- Novel Synthesis Techniques of Nanomaterials
- Characterizations / Modelling
- Functional Nanomaterials: Electronic / Magnetic / Optical Applications
- Structural Nanomaterials / Machining

- Nanomaterials for Bio-applications
- Nanocomposites: Structural, Biomedical and Energy Applications
- Nano-Tribology and Nano-filtration Applications
- Nanocoatings: Structural / Optical / Magnetic / Electronic applications
- Nanotechnology: Device and Applications

Call for Papers

Interested Research Scholars, Faculty Members, Scientists and Engineers working in Research Institutes, Universities, Colleges and Industries in the field of Materials Science and Engineering within the age of 35 years (**as on 15 July, 2019**) may submit the **Extended Abstract** to the Conference Secretariat.

Abstract Submission

- An Extended Abstract of the intended presentation highlighting important findings, relevant discussions and essential references
- Format: The Abstract should be in doc / docx; Title should be in 14 pt & Bold; Affiliation should be in 12 pt; Abstract should be in 12 pt Bold; Text of Abstract should be in 12 pt.; Maximum two figures; References in Harvard style. Maximum length of Abstract should be in two full A4 size pages.

[The extended abstract should be in Times New Roman 1.5 spacing]

Only those abstracts which follow the mentioned format will be considered for evaluation by the Scientific Committee of the Conference.

The extended Abstract should be sent to: **scan.iei.2019@gmail.com** on or before **July 15, 2019**.

Poster Presentation

On evaluation, the Abstracts may be selected either for Oral or Poster presentation. The Organizers will confer **Best Oral** and **Best Poster Awards** sponsored by 'Materials Research Society of Singapore' based on the quality of presentations as would be adjudicated by the Panel of Experts

Poster size should be 1 m x 1 m

Nodal Dates

Abstracts of papers	:	15 July, 2019
Acceptance of abstract	:	01 August, 2019
Full length paper	:	15 September, 2019
Acceptance of paper	:	30 September, 2019

All selected Abstracts, Plenary, Invited Lectures and Contributory Papers will be published in the Book of Abstract

Publication in IEI-Springer Journal

The selected papers those will be presented in the Conference will be published in the Regular Issue of 'IEI – Springer Journal of The Institution of Engineers (India): Series D' after Peer Review process in the following categories:-

- Original Contribution
- Case Study
- Review Paper
- Article of Professional Interest
- Brief Communication



SCOPUS Indexed

Registration

Corresponding / Presenting Author(s) have to register themselves for the International Conference, without which the paper will not be considered for presentation

Registration Fee for the Conference

Member of IEI	:	INR 4000
Individual	:	INR 5000
Students / Research Scholar	:	INR 3000
Foreign Delegate	:	US\$ 350

Payment

- Demand Draft / Cheque on any Bank in favour of “The Institution of Engineers (India), West Bengal State Centre” payable at Kolkata, India

For online payment, please follow the details:-

Bank Name : State Bank of India
Address of the Bank : State Bank of India, Gokhale Road (02062)
Branch, 1/2 Harish Mukherjee Road, Kolkata - 700 020, India
SWIFT Address of the Bank : SBININBBJ46
Country of the Bank : India
Beneficiary's Name : The Institution of Engineers (India), West Bengal State Centre
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Address of beneficiary : 8, Gokhale Road, Kolkata - 700 020
IFSC Code : SBIN0002062
PAN NO. : AAATT3439Q
TAN NO. : CALT00968C
GST NO. : 19AAATT3439Q2ZQ

Note: Registration Fee includes Participation in all Sessions of the Conference, the Exhibition, Official Banquet, Opening & Closing Ceremonies, Buffet Lunch along with Tea / Coffee, Delegate Kit

Venue: Kolkata

Date: November 1-2, 2019

Accommodation

All Delegates have to arrange their own accommodation within the close proximity of the Conference venue. The list of available Hotels at all categories is mentioned at the back side of this Brochure.

Conference Website

The Conference website is located at: **www.ieindia.org**

About Kolkata

Kolkata, the “City of Joy” situated by the side of river, Ganges. It is well connected by road, rail and air. It has a strong cultural heritage, well acknowledged for its literacy stance, art and music. Significant landmarks in this city are Howrah Bridge, Vidyasagar Setu (first cable Steid bridge of India), Victoria memorial, Indian Museum, Birla Planatorium, Yubabharati Kriranga, Belur Math, Dakshineswar Temple, Pareshnath Temple, Fountain of Joy, Science City etc. Climate in Kolkata in November is pleasant and the day temperature ranges between 20°C to 30°C. Light warm clothing will be comfortable.



Advertisement Tariff

A few selected advertisements of reputed organizations will be published in the Proceeding. The Advertisement material may be sent along with prescribed fee (below) may be sent on or before 31 October, 2019.

Back Cover (outside) Multi-Colour	:	INR 60000
Back Cover (inside) Multi-Colour	:	INR 40000
Full Page Multi-Colour (Inside)	:	INR 30000
Full Page (Inside) Black & White	:	INR 20000
Half Page (Inside) Black & White	:	INR 10000

Note: GST & Tax included

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Sponsorship

Organizations interested to sponsor various activities may send the details of Sponsorship along with A/C payee Cheques / Demand Draft drawn in favour of "*The Institution of Engineers(India), West Bengal State Centre*" payable at Kolkata.

Tariff

Platinum Sponsor : INR 3,00,000 for 5 delegates + inside full page advertisement free + One stall for 2 days
Gold Sponsor : INR 2,00,000 for 3 delegates + inside full page advertisement free
Silver Sponsor : INR 1,00,000 for 3 delegates + inside full page advertisement free

Note: GST and Tax included

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International Advisory Committee

Chairman	Prof Srikanta Bandyopadhyay, UNSW, Australia
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Members	Prof Hans-Jörg Fecht, Ulm University, Germany
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	Mr S S Rathore, Vice President, WFEO and Chair, CIC-WFEO
	Prof B V R Chowdari, President, MRS-Singapore
	Prof Mark Schulz, University of Cincinnati, USA
	Prof Sudipta Seal, UCF, Orlando, USA
	Prof Ashutosh Sharma, Secretary, Department of Science & Technology, GoI
	Prof Parthasarathi Chakrabarti, Director, IEST, Shibpur, Howrah, India
	Prof M K Sanyal, Emeritus Professor, SINP, Kolkata, India
	Prof Samir Kumar Ray, Director, S N Bose National Centre for Basic Sciences, Kolkata, India
	Prof D D Sarma, Chairman, Solid State and Structural Chemistry Unit IISc, Bangalore

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	Dr K Muraleedharan, FIE, Director, CSIR-CGCRI, Kolkata
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	Prof Harish Hirani, FIE, Director, CSIR- CMERI, Durgapur
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	Prof P P Chattopadhyay, Director, NIFFT, Ranchi
	Prof Pallab Banerji, Head, Materials Science Centre, IIT Kharagpur

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International Conference on
Synthesis, Characterization and Application of Nanomaterials (SCAN)

November 1-2, 2019, Kolkata, India

COLLABORATOR/SPONSOR/SUPPORTER

(Please Complete in Block Capitals)

Dear Sir / Madam,

We would like to participate in the International Conference on 'Synthesis, Characterization and Application of Nanomaterials (SCAN)' to be held in Kolkata on November 1-2, 2019 as Sponsor / Collaborator / Supporter / Donor.

Enclosed please find a DD / Cheque No. Dated for Rs.
..... (in words).....

Thanking you.

Yours faithfully,

(Signature with Official Seal)

Date

Please complete and return to:

The Organising Secretary

International Conference on Synthesis, Characterization and Application of Nanomaterials

The Institution of Engineers (India), West Bengal State Centre

8, Gokhale Road Kolkata 700020, India

Phone: (91) (033) 22233140, 26688140; Mobile: 9830636479 / 6291271007

Fax: (91) (033) 22233140

E-mail: wbsc@ieindia.org; scan.iei.2019@gmail.com

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International Conference on
Synthesis, Characterization and Application of Nanomaterials (SCAN)

November 1-2, 2019, Kolkata, India

REGISTRATION FORM

(Please Complete in Block Capitals)

Name (Prof / Dr / Mr / Ms)

Job Title

Organisation with address.....

Country.....

Tel Mobile :

E-mail

Title of the paper:

Preferred method of presentation: [] Oral [] Poster [] Either

Please find enclosed a DD / Cheque No. Dated:.....

Signature with date

Please complete and return to:

The Organising Secretary

International Conference on Synthesis, Characterization and Application of Nanomaterials

The Institution of Engineers (India), West Bengal State Centre

8, Gokhale Road Kolkata 700020, India

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