MRSI Newsletter

A quarterly publication of the Materials Research Society of India for circulation amongst its members

Volume B 09, Number 1 **January 2009**

From the Editors' Desk

Rationally designed organic/inorganic composites and functional hybrid materials have rapidly become an emerging and fascinating field of research in materials science. These materials provide several intriguing features and a wealth of opportunities for the development of novel materials with improved properties for variety of applications. Encouraged by overwhelming success of this innovative research area, the theme 20th Annual General Meeting has been chosen as ***"new generation composites and hybrid materials: concept to applications"*** for the special symposium. This meeting will be held at Saha Institute of Nuclear Physics, Kolkata during February 10-12, 2009. The details of the programme of the meeting are provided in this newsletter.

It is our humble request to all the MRSI members to participate by sending your comments, proposing topics and providing us with information important to the field, so that we exchange ideas, thoughts and vision for the future of materials science.

K K Nanda
Satish Patil
Editors

For more details about the activities of MRSI, members are advised to visit the society's website at

www.igcar.ernet.in/mrsi

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MRSI NEWSLETTER

Volume B 09, Number 1

January 2009

The MRSI Newsletter is a quarterly update published by the Materials Research Society of India. Members are requested to contribute information of interest to Materials Science community. Members can inform through the Newsletter, recognitions/awards received by them, changes in address, forthcoming events, and any interesting scientific/technological developments in the area of materials. The relevant information should be sent to the following address:

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MRSI Newsletter

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Awards & Distinctions Conferred on Members

We are happy to report that the following members of Materials Research Society of India have received awards and distinctions shown against their names. MRSI congratulates them.

D Chakravorty	2nd Bangalore Nano National Award (2008)
Ashutosh Sharma	TWAS Prize in Engineering Sciences (2008)
A Ghosh	(i) D N Agarwal Memorial Award by the Indian Ceramic Society (2008) (ii) Elected Fellow of Indian Academy of Sciences (2009)
Manu Krishnan	Research Award by Indian Orthodontic Society (2008)
G S Mukherjee	Elected President of Indian Science Congress (2009)
L N Satapathy	Malaviya Award by Indian Ceramic Society, Kolkata
Rabibrata Mukherjee	(i) Shah Schulam Best PhD Thesis Award from IIChE (2008) (ii) INAE Best PhD Thesis Award (2008)

P.S: Members are requested to communicate to the Editorial office about the Awards, Honours and Distinctions they have received from various agencies.

NOTICE

ANNUAL GENERAL BODY MEETING OF MRSI

The **Twentieth Annual General Body Meeting** of MRSI will be held on **11th February 2009** between 18.30 to 20.00 hrs at Saha Institute of Nuclear Physics Auditorium, Kolkata.

The Agenda for the Meeting is as follows:

- Welcome by the President, MRSI
- Confirmation of the Minutes of the 19th Annual General Meeting and action thereon
- Presentation of the Annual Report for 2008
- Report on International links of Materials Research Society of India
- MRSI-Publications-Report by the Editor
- Award for the Best Paper published in Bulletin of Materials Science
- Presentation of the Statement of Accounts for 2008
- Election of Honorary Members
- Venue for the 21st AGM, 24th Council Meeting (2010) & 22nd AGM, 25th Council Meeting (2011)
- Items from the members
- Any other matter
  - Renewal of recognition to MRSI by DSIR under SIRO scheme
  - Institution of a new award, 'International Medal for Materials Science and Technology'

Kindly communicate the details of the AGBM to all the members of MRSI.

APAM INDIA CHAPTER MEETING AND 20th ANNUAL GENERAL MEETING OF MRSI AND THEME SYMPOSIUM ON NEW GENERATION COMPOSITES AND HYBRID MATERIALS: CONCEPTS TO APPLICATIONS
FEBRUARY 10-12, 2009
SAHA INSTITUTE OF NUCLEAR PHYSICS
KOLKATA

TENTATIVE PROGRAMME

FEBRUARY 09, 2009
Venue: **SINP Auditorium**

14.00-16.00 hrs	**MRSI-AGM Registration**
14.30-15.30 hrs	APAM India Chapter Meeting
15.30-17.00hrs	**APAM Lectures**
	D. D. Sarma, IISc, Bangalore
	How to do Microscopy Without any Lateral Resolution? An Improbable Solution – Spectroscopy
	J.V. Yakhmi, BARC, Mumbai
	Nano-scale Self-Assembly for Functional Materials and Devices
17.00 hrs	Tea

FEBRUARY 10, 2009

08.30-09.30 hrs	**MRSI-AGM Registration**
09.30-10.00 hrs	**Welcome Address**
	Bikas Sinha, Director, SINP
	Introductory Remarks
	S B Krupanidhi, Secretary, MRSI
	Inaugural Session: Chief Guest
	CNR Rao, JNCASR, Bangalore & Founder President, MRSI
	Presidential Address
	T Ramasami, Secretary, DST & President, MRSI
	Vote of Thanks
	N R Bandyopadhyay, Chairman, Kolkata Chapter and 20th AGM
10.00-11.00 hrs	**International Medal for Materials Science & Technology Lecture**
	CNR Rao (title awaited)
11.00-11.30 hrs	Tea Break
11.30-13.30 hrs	**Technical Session I**
	Medal Lectures (ML)
ML 1	**Uday Maitra, IISc, Bangalore**
	Soft materials Derived from Bile Salts
ML 2	**A. Sundaresan, JNCASR, Bangalore**
	Universal Surface Ferromagnetism in Nanoparticles of Inorganic Materials
ML 3	**Absar Ahmad, NCL, Pune**
	Biological synthesis of Inorganic Nano Particles
ML 4	**Shantikumar Nair, ACNS, Kochi**
	Biomedical Applications of Nanomaterials
13.30-14.30 hrs	LUNCH
14.30-16.30 hrs	**Technical Session II**
	Medal Lectures (ML)
ML 5	**A. Basumallick, BESUS, Howrah**
	Nanocrystalline Cu Based - Fe, Co, Ni Binary and Ternary Alloys : Structure and Properties
ML 6	**S. Sethuraman, CeNTAB, Thanjavur**
	Nanostructured Materials for HealthCare Applications
ML 7	**B.V.R. Tata, IGCAR, Kalpakkam**
	Phase Behavior of Nanoparticle Dispersions and Thermo-responsive Nanogels
ML 8	**T. Prem Kumar, CECRI, Karaikkudi**
	Carbon Nanostructures as Lithium Insertion Anode Materials in Lithium Ion Batteries
16.30-16.45 hrs	Tea Break
16.45-18.00 hrs	**MRSI Council Meeting/Poster Session-I**
18.00-18.15 hrs	**M.K. Sanyal, SINP, Kolkata**
	Materials Research using Indian Beamlines at Synchrotrons
18.15-19.30 hrs	**MRSI Awards Presentation and AGBM**
19.30 onwards	**Cultural Programme & Conference Dinner**

FEBRUARY 11, 2009
Venue : SINP Auditorium

09.00-11.30 hrs	**Technical Session III**
0900-10.00 hrs	**Distinguished Materials Scientist of the Year Award Lecture**
	Baldev Raj, IGCAR, Kalpakkam
	Science and Technology of Fast Reactor Materials: Challenges and Achievements
10.00-11.30 hrs	**MRSI-ICSC Superconductivity & Materials Science Annual Prize Lectures**
	H S Maiti, CGCRI, Kolkata
	Functional Oxide Ceramics and Their Applications : A Journey towards Technology Development
	C P Sharma, SCTIMST, Thiruvananthapuram
	Blood compatibility of Materials - Surfaces & Nanoparticles
11.30-11.45 hrs	Tea Break
11.45-13.15 hrs	**Technical Session IV**
	Medal Lectures (ML)

ML 9	**M T Sebastian, NIIST, Thiruvanathapuram** Dielectric materials for wireless Communication
ML 10	**Subodh Kumar De, IACS, Kolkata** Magnetic and Magnetotransport Properties of Ferromagnetic Shape Memory Alloys
ML 11	**S.K. Bhaumik, NAL, Bangalore** Working with NiTi Shape Memory Alloys: An Experience
ML 12	**Karabi Das, IIT, Kharagpur** Synthesis of In-Situ Tic-Reinforced Ferrous-Based Composites from an Industrial Waste by Thermit Reduction Route
ML 13	**Tata Narasinga Rao, ARCI, Hyderabad** Synthesis and Processing of Nanosilver and Nanotitania for Antimicrobial and Self-cleaning Commercial Applications
13.15-14.00 hrs	LUNCH
14.00-15.15 hrs	**POSTER SESSION II**
15.15-16.30 hrs	**Technical Session V** **MRSI Distinguished Lecturership Award** **R. P. Singh, Pune** High Technology Materials from Modified and Unmodified Polysaccharides
ML 14	**Subhasis Ghosh, J. N. University, New Delhi** Multifunctional Device Based on Organic Semiconducting Materials
16.30-16.45 hrs	Tea Break
16.45-17.45 hrs	**Technical Session VI** **GC Jain Memorial Lectures** **Mahesh Kumar, NPL, New Delhi** Epitaxial Adsorption of Metals on Single Crystal Silicon Surfaces and Interfacial Superstructure Formation **Richa Srivastava, Lucknow University, Lucknow** Synthesis and Characterization of Nanosized Intrinsic and Doped ZnO and their Applications as Humidity Sensors **Rabibrata Mukherjee, CGCRI, Kolkata** Self Organization and Patterning of Soft Polymer Films **Kavita Arora, JNU, New Delhi** Studies on Application of Conducting Polymers to Genosensors
18.00-19.00 hrs	**Business Session: ICON Analytical** **Peter Schlossmacher** **Greg S. Lance**
19.00-19.30 hrs	**MRSI Singapore**
19.30 onwards	**Dinner**
FEBRUARY 12, 2009	
Theme Symposium :	**New Generation Composites and Hybrid Materials: Concepts to Applications**
Venue :	**SINP Auditorium**
09.00-11.20 hrs	**Technical Session VII**
09.00-10.30 hrs	**Plenary Lectures (P)**
P 1	**Hans J. Fecht**, **Ulm University, Germany,** New Generation Composites and Hybrid Materials
P 2	**Subrata Ray, IIT, Roorkee** Nano-Composites – A New Frontier
10.30-11.20 hrs	**Invited Lectures (IL)**
IL 1	**A. Ajayaghosh, NIIST, Thiruvananthapuram** Lotus-Effect of a Self-assembled Superhydrophobic Nanocomposite
IL 2	**I. Manna, IIT, Kharagpur** Synthesis and Characterization of Nanometric Metallic and Ceramic Particle Dispersed Water and Ethylene Glycol Based Nanofluidsfor Enhanced Heat Transfer Applications
11.20-11.30 hrs	Tea Break
11.30-12.45 hrs	**Technical Session VIII** **Invited Lectures (IL)**
IL 3	**P.P. Chattopadhyay, BESU, Howrah** A Novel Class of Aluminium Based High Strength Materials
IL 4	**Goutam De, CGCRI, Kolkata** Refractive Index Controlled Inorganic-Organic Hybrid Nanocomposites: Development of Antireflective Coatings and Plasmon Tuning of Embedded Metal Nanoparticles
IL 5	**Sumitesh Das, R&D, Tata Steel** Learnings From Nature: Soft Computing in Steel
12.45-13.30 hrs	**Valedictory Session** Valedictory Address Dr. S Banerjee, BARC, Mumbai Comments: Dr. Joerg Heber, Senior Editor, Nature Materials, London
13.30 hrs	LUNCH

For further details contact : The 20th AGM Secretariat, Bengal Engineering ad Science University, Shibpur, Howrah 711 103, Tel : 033-26688140, Fax: 033-26682916 / 9925, Email: nrb@matsc.becs.ac.in, dranoopkumar@gmail.com, Website: http://www.mrsi-kolkata.org, http://www.cimindia.net/mrsi2009

New Members

Enrolled between November 1 and December 31, 2008

Life Members

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CALENDAR OF EVENTS
(FEB - JUNE 2009)

February 6-7, 2009, National Conference on Nanomaterials: Synthesis and Applications. For more details refer to the website www.davjalandhar.com/nano-09
February 10-12, 2009, 20th Annual General Meeting of MRSI, Dr. N R Bandyopadhyay, Chairman, Tel: +91-33-26688140, Email: nrb@matsc.becs.ac.in, Dr. A K Mukhopadhyay, Convenor, Central Glass & Ceramics Research Institute, Kolkata, Tel: +91-33-24733469/76/77, Fax: +91-33-24730957, Email: dranoopkumar@gmail.com
February 26-27, 2009, National Conference on Recent Advances in Surface Engineering, Dr. Bharathi Bai J Basu / Dr. Harish C Barshillia, Surface Engineering Division, National Aerospace Laboratories, P B No. 1779, Bangalore 560 017, Tel: 080-25086498, 080-25086498 / 25086494, Fax: 080-25210113, Email: convener_rase09@css.nal.res.in
March 1-3, 2009, National Seminar on Physics and Technology of Sensor, Prof. D C Tiwari, Convener, NSPTS 14, Director, Institute of Engineering, Jiwaji University, Gwalior 474 011, Email: dctiwari2001@yahoo.com
28 June-3 July 2009, ICMAT 2009 and IUMRS-ICA 2009, for more information, refer to the website: http://mrs.org.sg/icmat2009/

Members are requested to give information about the conferences/symposia/workshops they are organizing well in advance so that the same can be inserted in the 'calendar of events'.

Patron Membership

Professional Societies, Research bodies, Laboratories and Companies willing to support activities of MRSI (through a one-time contribution of Rs. 50,000/- are enrolled as Patron members by the Council of the MRSI.

Privileges of Patron Members

- Publication of their names in MRSI Newsletter
  - Bulletin of Materials Science / MRSI Newsletter
  - MRSI Update
- Free supply of all periodicals published by MRSI such as:
  - Symposium proceedings at prices applicable to members
  - Display of Company Literature free of charge at MRSI meetings
  - Discounts on advertisements in Newsletter
  - Advance notification of programmes and Events
  - Free employment Advertisements in the MRSI Newsletter
  - Registration of 2 company representatives in each society meeting at member registration rates.

We appeal to all organizations/laboratories/ companies involved in the R&D/Educational activities of Materials Science and Technology to become Patron members. ***Request for Patron membership may be made to:***

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