

# **MRSI** Newsletter

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

# Volume B 13 Number 1

# From the Editors' Desk

Global demand for low cost, efficient and sustainable energy production is increasing day by day. Principal areas such as solar cells, batteries & supercapacitors, hydrogen storage, fuel cells & fuels, thermoelectric and light emitting diodes have fascinated material scientists. One of the vital components is the materials development. With the advent of nanomaterials, materials research plays an important role to meet the future energy needs. To express the significance of the field, a theme symposium on Advanced Materials for Energy Applications along with the **Twenty** Fourth Annual General Body Meeting of MRSI is being organized at the Sarabhai Auditorium, IGCAR, Kalpakkam during 11-13<sup>th</sup> February 2013. The details of the programme of the meeting are provided in this issue.

The editor takes this opportunity to wish all the members of MRSI a very happy, prosperous year ahead.

K K Nanda Editor

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

www.mrsi.org.in

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# MRSI NEWSLETTER

Volume B 13, Number 1 January 2013

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:

# <u>Editors</u>

# **MRSI** Newsletter

Materials Research Society of India IISc Campus, Bangalore 560 012, India

Email: office@mrsi.org.in nanda@mrc.iisc.ernet.in

# January 2013

### 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.

R N Basu	National Metallurgist of the Day Award (2011) under Energy, Environment and Waste Management (conferred by Ministry of Steel, Govt. of India)
K. Bhanu Sankara Rao	National Metallurgist Award from Ministry of Steel, Government of India

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 **Twenty Fourth Annual General Body Meeting** of MRSI will be held on **11<sup>th</sup> February 2013** between **18.00-19.00 hrs** at the Sarabhai Auditorium, IGCAR, Kalpakkam.

The Agenda for the Meeting is as follows:

- ➢ Welcome by the President, MRSI
- Confirmation of the Minutes of the 23<sup>rd</sup> Annual General Meeting and action thereon
- Presentation of the Annual Report for 2012
- 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 2012
- Election of Honorary Members
- Venue for the 25<sup>th</sup> AGM, 28<sup>th</sup> Council Meeting (2014) & 26<sup>th</sup> AGM, 29<sup>th</sup> Council Meeting (2015)
- ➢ Items from the members
- > Hosting of IUMRS-ICA 2013 in Bangalore, India
- > Any other matter

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

# MRSI AWARDS FOR 2013

The MRSI Awards and Prizes for the year 2013 have been announced. The awardees will deliver lectures at the 24<sup>th</sup> AGM of MRSI to be held IGCAR, Kalpakkam during February 11-13, 2013.

International Medal for Materials Science and Technology	Prof. Sir. Richard Friend, Cambridge University, UK
Distinguished Materials Scientist of the year award	Dr. T Ramasami, DST, New Delhi
MRSI Distinguished Lecturership Award	Dr. Suresh Das, NIIST, Thiruvanathapuram
CNR Rao Prize Lecture in Advanced Materials	Prof. M K Sanyal, SINP, Kolkata
MRSI-ICSC Superconductivity & Materials Science Annual Prizes	Dr. M P Janawadkar, IGCAR, Kalpakkam Dr. R Muralidharan, SSPL, Delhi
MRSI Medal Awardees	
Dr. Subi Jacob George, JNCASR, Bangalore Prof. Aninda Jiban Bhattacharyya, IISc, Bangalore Dr. Sabu Thomas, M G University, Kottayam Dr. Kota Murali, IBM India, Bangalore Dr. Sheela Berchmans, CERI, Karaikudi Dr. G Padmanabham, ARCI, Hyderabad Dr. A M Biradar, NPL, New Delhi	Prof. Jyotsna Dutta Majumdar, BESU, Shibpur Dr. G Amarendra, IGCAR, Kalpakkam Dr. Kulamani Parida, Institute of Minerals and Materials Technology, Bhubaneswar Prof. Nikhil K Singha, IIT, Kharagpur Dr. S K Gupta, BARC, Mumbai Dr. Lakshmi Kantam, IICT, Hyderabad

#### 24th ANNUAL GENERAL MEETING OF MRSI AND THEME SYMPOSIUM ON

#### **ADVANCED MATERIALS FOR ENERGY APPLICATIONS**

#### FEBRUARY 11-13, 2013

## INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH, KALPAKKAM

#### **TENTATIVE PROGRAMME**

FEBRUARY 11, 20	013	10.15-11.00 hrs	Prof. R C Budhani, NPL, New Delhi
Venue: Sarabhai Auditorium			<i>CSIR Initiatives for Conversion of Solar</i> <i>Radiation into Electricity</i>
09.00 hrs 09.30-10.30 hrs 10.30-11.00 11.00-13.00 hrs	MRSI-AGM Registration Inaugural function Tea Break Technical Session-I	11.00-11.30 hrs 11.30-13.00 hrs	Tea Technical Session-IV MRSI-ICSC Superconductivity and Materials Science Annual Prizes
11.00-13.00 hrs	International Materials Science and	11.30-12.15 hrs	Dr. R Muralidharan, SSPL, Delhi
11.00-12.00 IIIS	<b>Technology Award Lecture</b> <b>Prof. Sir. Richard Friend</b> , University c Cambridge, UK		Epitaxial growth and characterization of AlGaAs/InGaAs/GaAs and AlFaN/GaN heterostructures
12.00-13.00 hrs	Distinguished Materials Scientist of th year Award Lecture Dr. T Ramasami, DST, New Delhi	12.15-13.00 hrs	<b>Dr. M P Janawadkar</b> , IGCAR, Kalpakkam Title awaited
		13.00-14.00 hrs	Lunch
13.00-14.00 hrs	Lunch	14.00-15.30 hrs	Technical Session-V Medal lectures
14.00-15.30 hrs	Technical Session-II MRSI Distinguished Lecturership	14.00-14.30 hrs	Dr. Subi Jacob George, JNCASR,
14.00-14.43 1115	Award Lecture Dr. Suresh Das, NIIST, Trivandrum Exploring the role of self-assembly in the	ML 1	Bangalore Functional Organic and Hybrid Materials via Self-Assembly
14.45-15.30 hrs	design of organic photofunctional mater CNR Rao prize lecture in advanced materials Prof. M K Sanyal, SINP, Kolkata Title awaited	14.30-15.00 hrs ML 2	<b>Prof. Aninda J Bhattacharyya</b> IISc, Bangalore <i>Materials for building electrochemical</i> <i>energy storage systems for large scale</i> <i>applications</i>
	The awaited	15.00-15.30 hrs	Prof. Nikhil K Singha, IIT,
15.30-16.00 hrs	Tea	ML 3	Kharagpur Tailan wada functional watariala hu
16.00-17.30 hrs	Poster Session-I		Tailor made functional materials by controlled radical polymerization
17.30-18.00 hrs 18.00-19.00 hrs	Awards Distribution Function MRSI AGM	15.30-16.00 hrs	Теа
19.30 hrs	Dinner	16.00-17.30 hrs	Technical Session VI
		10.00-17.50 Ill's	Medal Lectures
FEBRUARY 12, 2 Venue Sarabhai A		16.00-16.30 hrs ML 4	<b>Dr. Kota Murali</b> , IBM, India Bangalore <i>Challenges in 22nm and beyond</i>
09.30-11.00 hrs	Technical Session-III Advanced Materials for Energy		Nanoelectronic Devices
09.30-10.15 hrs	Applications-I Dr. S Banerjee, DAE Homi Bhabha Chair, Mumbai Advanced Materials for energy applications	16.30-17.00 hrs ML 5	<b>Dr. Jyotsna Dutta Majumdar, IIT, Kharagpur</b> Laser Surface Engineering of Ti-6Al-4V for Bio-implant Application

17.00-17.30 hrs ML 6	<b>Dr. G Padmanabham</b> , ARCI, Hyderabe Some microstructural effects in laser processing of materials	ad 14.30-15.00 hrs ML 11	<b>Dr. Sabu Thomas</b> , M G University, Kottayam Viscoeleastic phase separation process in
17.30-19.00 hrs	Poster Session-II		epoxy based blends nd the development of micro and nanomorphologies
19.00-20.00 hrs	<b>Evening Lecture</b> <b>Dr. Anil Kakodkar</b> , DAE, Mumbai Development of solar energy in India	15.00-15.30 hrs ML 12	<b>Dr. S K Gupta</b> , BARC, Mumbai Development of high mobility cobalt and iron phthalocyanine thin films
		15.30-16.00 hrs	Tea
February 13, 2013 Venue Sarabhai Auditorium		16.00-17.00 hrs	Technical Session –X G C Jain Memorial Lectures
09.30-11.00 hrs	Technical Session-VII Advanced materials for energy applications -II	1	<b>Dr. P Shima Damodaran</b> , ICMD, France Nanofluids with tunable and extraordinary thermal properties
09.30-10.15 hrs	<b>Dr. Baldev Raj,</b> IGCAR, Kalpakkam <i>Materials for</i> Fast and Fusion <i>Reactors</i>	2	<b>Dr. Soumen Samanta</b> , BARC, Mumbai Title awaited
10.15-11.00 hrs	<b>Prof. Satish Vitta</b> , IIT, Mumbai Thermoelectric Materials	3	<b>Dr. Sanjay Singh</b> , DAE- CSR, Indore Title awaited
11.00-11.30 hrs	Tea	17.00-18.00 hrs	Technical Session-XI
11.30-13.00 hrs	Technical Session VIII		Medal Lectures
11.30-12.00 hrs	Medal Lectures Dr. A M Biradar, NPL, New Delhi	17.00-17.30 hrs ML 13	<b>Dr. Lakshmi Kantam</b> , IICT, Hyderabad Title awaited
ML 7	Storage devices based on ferroelectric liquid crystal materials	17.30-18.00 hrs ML 14	Prof. R Vijayaraghavan, VIT University, Vellore
12.00-12.30 hrs ML 8	<b>Dr. Sheela Berchmans</b> , CERI, Karaikudi Building Bioelectrochemical Interfaces		p-type and n-type conducting oxides: Role of Materials chemistry for device fabrication
	with Functional Materials	18.00-18.30 hrs	Concluding session
12.30-13.00 hrs ML 9 13.00-14.00 hrs	<b>Dr. G Amarendra</b> , IGCAR,Kalpakkam Title waited Lunch	L	
14.00-15.30 hr	Technical Session IX Medal Lectures		
14.00-14.30 hrs ML 10	<b>Dr. Kulamani Parida</b> , Instt. of Mineral and Materials Technology, Bhubaneswa Design and Development of visible light photocatalytic materials for energy and environmental applications	r	

#### For further details contact:

The Secretariat, 24<sup>th</sup> AGM of MRSI, Materials Science Group, IGCAR, Kalpakkam 603 102, Tel No. 044 - 27480500 - Ext 22442, Fax No. 044- 27480081, E-mail : mrsiagm2013@igcar.gov.in



# IUMRS – ICA 2013

December 16-20, 2013 Indian Institute of Science Bangalore 560 012, India



# **Conference Chair**

Prof. S B Krupanidhi Materials Research Centre Indian Institute of Science Bangalore 560 012 India

Home			
Welcome Message	IMPORTANT DATES		
Announcement		est — e	
Committees	Preregistration opens	: 1 <sup>st</sup> February 2013	
Topics	Abstract Submission opens	: 1 <sup>st</sup> May 2013	
Programme	Abstract Submission closes	: 31 <sup>st</sup> July 2013	
Abstract Submission	Communication of	-1	
Accommodation	acceptance of Abstracts	: 2 <sup>nd</sup> September 2013	
Sponsors	Online registration with payment opens	: 1 <sup>st</sup> Aug 2013	
<b>General Information</b>			
Contact us	Online registration with payment closes	: 15 <sup>th</sup> November 2013	

On behalf of the International Union of Materials Research Societies, Materials Research Society of India cordially invites you to the International Conference in Asia- 2013 (IUMRS-ICA 2013). This conference will be organized at Indian Institute of Science, Bangalore 560 012, India, under the aegis of MRSI. The conference will provide a platform for the Asian scientists to present and deliberate cutting edge research and development in the field of materials science and forge international collaboration.

# <u>New Members</u> Enrolled between September 1 December 31, 2012

#### Life Members

Biswapriya Deb (LMB2087) Photosciences and Photonics, CSTD CSIT-NIIST Industrial Estate, PappanamcodeP.O **Thiruvananthapuram 695 019** Tel (Off): : 0471-2515282 Email: biswapriya.deb@gmail.com

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#### Annual Members

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# CALENDAR OF EVENTS (JAN 2013-DEC 2013)

**8-10 January 2013**, National Conference on luminescence and its applications (NCLA 2013), Dr. K.R.Nagabhushana, Convener, NCLA 2013, Department of Science and Humanities, P.E.S. Institute of Technology, an Autonomous Institute under VTU, Belgaum & UGC, New Delhi), 100 ft Ring Road, B.S.K. III stage, Bangalore-560 085, Phone (off): +91-80-26722108, 26721983, 26724781, +91-80- 26724782 Extn. 240, Cell: +91 9481037231, Email: ncla2013@gmail.com,bhushankr@gmail.com, Web: www.ncla2013.pes.edu

**01-02 February, 2013,** International Conference in Recent Trends in Applied Physics and Material Science, RAM 2013, Dr. Sudhir Bhardwaj, Convener, Govt. College of Engineering and Technology, Karni Industrial Area, Pugal Road, Bikaner 334 004, Mobile : 91-9351672524, +91-9414486278, Email: <u>ram2013india@gmail.com, Website</u>: www.ram2013.com

**11-13, February 2013**, 24<sup>th</sup> Annual General Meeting of MRSI, IGCAR, Kalpakkam. 24<sup>th</sup> AGM Secretariat, IGCAR, Kalpakkam 603 102, Tel No. 044-2740500-Ext. 2442, Fax No. 044-27480081, Email: mrsiagm2013@igcar.gov.in,website: http://www.igcar.gov.in/mrsi/agm2013

**16-20, December, 2013**, IUMRS International Conference in Asia (IUMRS-ICA 2013), Indian Institute of Science, Bangalore 560 012, India, Website: www.iumrs-ica2013.org.in

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:

Prof. S B Krupanidhi General Secretary, MRSI Materials Research Centre Indian Institute of Science Bangalore 560 012 Email : svsmrsi@physics.iisc.ernet.in

# Book Post / Newsletter

From:

Editors MRSI Newsletter Materials Research Society of India IISc Campus Bangalore 560 012