



MRSI Newsletter

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

Volume B 04, Number 4

October 2004

From the Editors' Desk

The Sixteenth Annual General Meeting of MRSI will be held at NCL, Pune with 'Materials for Automotive Industries' as the theme symposium to be organized on the occasion. We expect a very large participation from our members.

We are extremely pleased to inform our readers that the IUMRS has elected MRSI to host the IUMRS-ICAM 2007 in Bangalore, India. This is indeed a recognition of the materials research activities in India. A brief write up about this appears in this issue.

With the passing away of Dr. Raja Ramanna, the country has lost an outstanding scientist who played an important role in promoting science and technology in this country. In particular, he made seminal contributions to the country's nuclear programme. The void created by his demise is hard to fill.

H L Bhat
R V Krishnan
Editors



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

www.igcar.ernet.in/mrsi

In this issue

From the Editors' Desk	1
Awards & Distinctions	2
Student's Projects	2
MRSI Awards for 2005	2
Article reproduced from MRS Bulletin/July 2004	3
Membership Directory	3
G C Jain Memorial Prize	4
IUMRS-ICAM 2007	5
New Members	6
Calendar of Events (2004-2005)	8
An Update of MRSI Activities	10
Patron Membership	18

MRSI NEWSLETTER

Volume B 04, Number 4

OCTOBER 2004

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:

Editors

MRSI Newsletter

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

Email : svsmrsi@physics.iisc.ernet.in
hlbhat@physics.iisc.ernet.in
krishnan@css.cmmacs.ernet.in

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.

Anish Upadhyaya (i) Young Scientist Award-2004 by Council of UP Science & Technology
(ii) INSA Medal for 2004 by Indian National Science Academy

Ramachandra Rao P National Metallurgist Award-2004 by the Ministry of Steel, Govt. 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.

Students' Projects

MRSI will partially support upto 10 projects of students (B.Tech, M.Sc, M.Tech, ME, Ph.D) in the area of Materials Science & Technology under the supervision of a MRSI member every year. Proposals were invited to be submitted before **September 30th 2004**. The following three proposals have been accepted and granted a support of Rs. 1000/each.

Name of the Student	Title of the Project	Project Supervisor
Bhavani R Central Leather Research Laboratory Chennai 600 020	Surface Energy and three Phase contact angle at solid/liquid interface as indices to predict isoelectric point of proteins	Dr. Aruna Dhathathreyan CLRI, Chennai
Balamurugan N Anna University, Chennai 600 025	Growth of High Quality Potassium Iodide and Cesium Iodide single crystals for Detector applications.	Prof. P Ramasamy Anna University, Chennai
Meenakshi Kumari Dept. of Physics, Univ. of Bhopal Bhopal 462 026	Structural, Electrical and Magnetic Properties of CMR materials $La_xSn_{1-x}MnO_3$	Dr. S P Sanyal Univ. of Bhopal, Bhopal

MRSI Awards for 2005 Announced

The MRSI awards and Prizes for the year 2005 have been announced. The awardees will deliver lectures at the 16th AGM of MRSI to be held at the National Chemical Laboratory, Pune during February 10-12, 2005. The AGM will have a Theme Symposium on "*Materials for Automotive Industries*" and the following Award/Prize Lectures and Medal Lectures.

Distinguished Materials Scientist of the Year Award Lecture: Prof. Jacob K T, IISc, Bangalore

MRSI-ICSC Superconductivity & Materials Science Senior Award Lecture: Prof. Ramachandra Rao P, BHU, Varanasi

MRSI Distinguished Lecturership Award Lecture: Prof. Dattagupta S, S N Bose National Centre, Kolkata

MRSI-ICSC Superconductivity & Materials Science Annual Prize Lectures: Dr. Baldev Raj, IGCAR, Kalpakkam and Prof. Ananthakrishna G, IISc, Bangalore

MRSI Medal Lectures:

Dr. Arvind Sinha, NML, Jamshedpur

Dr. Balasubramanian S, JNCASR, Bangalore

Dr. Budhani R C, IIT, Kanpur

Prof. Byrappa K, Mysore University, Mysore

Prof. Chandrasekaran S, IISc, Bangalore

Dr. Goutam De, CGCRI, Kolkata

Dr. Kulshreshtha S K, BARC, Mumbai

Dr. Radhakrishnan S, NCL, Pune

Dr. Sulabha Kulkarni, Pune University, Pune

Prof. Subhadra Chaudhuri, IACS, Kolkata

Dr. Tyagi A K, BARC, Mumbai

Dr. Umesh Waghmare, JNCASR, Bangalore

The first announcement of the AGM has been released. Members of MRSI and other scientists/technologists/students are encouraged to send abstracts of contributed papers to: The 16th MRSI AGM Secretariat, Physical & Materials Chemistry Division, National Chemical Laboratory, Pune 411 008, Fax 020-25893044, Email: mrsi2005@dalton.ncl.res.in. The last date for the receipt of abstracts is **30th November, 2004**

MATERIALS FOR LIGHT AND SMART STRUCTURES AND FOR RURAL TECHNOLOGY ADDRESSED AT MRS-I CONFERENCE

The 15th annual general meeting of the Materials Research Society of India (MRS-I) was held at Banaras Hindu University (BHU) in Varanasi, India, February 9-11. The inaugural function of the meeting was held in the main hall of Swatantrata Bhawan (i.e., Independence Building), which included the rendering of the traditional Kulgeet (i.e., anthem) of the University, composed by Shanti Swarup Bhatnagar. At this event, D. Chakravorty, president of MRS-I, presented medals and certificates to MRS-I award recipients. Earlier in the day, Chakravorty (of the Indian Association for the Cultivation of Science, IACS) gave a technical presentation on electron transport in nanomaterials and ceramic glasses. P. Ramachandra Rao, vice chancellor of BHU, presented highlights of the growth of materials industries in India. The technical session began with a lecture by MRS-I Distinguished Materials Scientist of the Year, T.V. Ramakrishnan, FRS (BHU). This was followed by the MRS-I/ICSC Superconductivity and Materials Science annual prize lectures by D. Pandey (BHU) and S.B. Krupanidhi (Indian Institute of Science, IISc). The two afternoon sessions were devoted to Medal lectures. B.D. Malhotra (National Physical Laboratory, NPL), A.K. Nandi (IACS), D. Basu (Central Glass and Ceramic Research Institute, CGCRI), V. Venugopal (Bhabha Atomic Research Centre, BARC), M. Vijayalakshmi (Indira Ghandi Centre for Atomic Research, IGCAR), and T.L. Prakash (Centre for Materials for Electronics Technology, CMET) presented their work on different aspects of materials advancement.



Materials Research Society of India officers and the MRS-I Medalists for 2004. Standing left to right): V. Venugopal (BARC), T.L. Prakash (CMET), B.D. Malhotra (NPL), B.R. Mehta (Indian Institute of Technology, IIT), B.S. Murty (IIT), B.C. Pai (RRL), Pushan Ayyub (Tata Institute of Fundamental Research), S. V. Subramanyam (vice president-general secretary of MRS-I, IISc), and H.L. Bhat (joint secretary of MRS-I, IISc). Sitting left to right : R.M.V.G.K. Rao (National Aeronautical Laboratory), Debabrata Basu (CGCRI), Arun K. Nandi (IACS), T. V. Ramakrishnan, (IISc and BHU), D. Chakravorty (president of MRS-I, IACS), Dhananjai Pandey (BHU), S.B. Krupanidhi, (IISc), Suman Kumari Mishra (NML), and M. Vijayalakshmi (IGCAR).

At the opening session on “Materials for Light and Smart Structures,” Rao addressed the relevance of the theme for automobile and packaging industries. U. Ramamurthy (IISc) and A. Gokhale (Defence Metallurgical Research Laboratory) delivered lectures on “Metallic Foams” and “Al-Li Alloys: Science and Technology.” A special session was held on “Materials for Rural Technology,” chaired by E.S. Raja Gopal (Bangalore). D. Bhatnagar (Technology, Information, Forecasting & Assessment Council) initiated the discussion by indicating the prospects and importance of the area. S.K. Tripathy (Varanasi) addressed the importance of herbal medicines and patent protection in the GATT era. S. Ghosh (National Metallurgical Laboratory, NML) and Yegneswaran (Regional Research Laboratory, RRL) gave glimpses of the activities being pursued in their respective laboratories concerning rural technology.

Two special sessions were devoted to poster presentations in the areas of biomaterials, building materials, ceramics and glasses, composites, electronic materials, thin films, magnetic materials, materials characterization, metals and alloys, nanomaterials, polymer/rubber and processing techniques. The following were selected for the Best Poster Award: M.M. Kulkarni and A. Venkateswara Rao (Shivaji University), “MTMS-Based Superhydrophobic Silica Aerogels”; A.K. Singh, D. Pandey, and O. Zaharko (BHU), “Modifications to the Phase Diagram of $(1-x)\text{Pb}[(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3]_x\text{PbTiO}_3$ Ceramics”; G.G. Umarji, S.A. Ketkar, R. Marimuthu, G.J. Phatak, T. Seth, D.P. Amalnerkar, and U.P. Mulik (CMET), “Photoimageable Conductor Composition for High-Density Electronic Packaging of Smart Devices and Allied Subsystems”; and S.N. Bhat, A. Sharma, S. Srinivas Rao, and S.V. Bhat (IISc), “Spin Probe ESR Studies of $\text{PEG}_x\text{LiClO}_4$ Solid Polymer Electrolyte System.”

S.V. SUBRAMANYAM, Vice President-General Secretary, MRS-I

Reproduced by permission from MRS Bulletin, Vol 29, No.7, July 2004

MEMBERSHIP DIRECTORY



All the members of MRSI who have not sent their updated information required for the membership directory may do so without fail at the earliest. We also would like you to indicate your fields of interest in the directory based on the following subject groups of MRSI. Kindly let us know the same latest by November 30, 2004.

- | | | |
|------------------------------------|------------------------------------|-----------------------------------|
| 1. Building Materials | 2. Biomaterials | 3. Ceramics and Glasses |
| 4. Composites | 5. Computational Materials Science | 6. Electronic Materials |
| 7. Fracture | 8. Magnetic Materials | 9. Materials Characterization |
| 10. Metals | 11. Polymers | 12. Processing Technologies |
| 13. Surfaces & Interfaces | 14. Thin Films | 15. Materials under High Pressure |
| 16. Materials for Rural Technology | 17. Others, (please specify) | |

G C JAIN MEMORIAL PRIZE FOR THE BEST Ph.D THESIS IN MATERIALS SCIENCE

The Council of MRSI decided to award an annual prize one in each calendar year for the best Ph.D. thesis in the area of Materials Science. The funds for this prize have been raised by the Pune Chapter of MRSI. The Guidelines and the Application form are furnished hereunder:

Guidelines

1. The prize will be given each year for the best Ph.D thesis in the broad multi disciplinary field of Materials Science, in disciplines such as Condensed Matter Physics, Chemistry, Biology, Metallurgy, Ceramics and Chemical Engineering.
2. Criteria for Selection:
 - Completion of Ph.D thesis from any recognized Indian University/Research Institute/National Laboratory within the last two calendar years (2003, 2004 for the current prize)
 - Three recommendation letters should be enclosed including one from the thesis supervisor along with a one-page write-up highlighting the prime results of the thesis.
 - Quality of the work will be judged in the first stage by the Publications, Reports and Patents resulting from the thesis work.
 - The shortlisted theses will be selected after peer reviewing during November/December. Such shortlisted theses work must be presented by the students concerned in poster/ oral format at the next AGM of MRSI. The final selection will be done at the AGM by a suitably constituted committee.
- 3) The award will have a cash prize of Rs. 6000/- and a certificate from MRSI.
- 4) Application in the prescribed format reproduced alongside should be sent to the Secretary, MRSI so as to reach him on or before **November 15th, 2004**.

APPLICATION FORM

Photo

G C Jain Memorial Prize for the Best Ph.D Thesis in Materials Science

1. **Name of the Applicant** :
2. **Address** :
 - Office :
 - Residence :
 - Telephone :
 - Fax :
 - Email :
3. **Academic Record**
(in brief) (Degree/year of passing/University) :
4. **Title of the Ph.D Thesis:**
 - a) The discipline or subject in which the Ph.D degree was awarded :
 - b) Name of the University/Laboratory/Institute where the Ph.D work was carried out :
 - c) Name of the Research Supervisor :
 - d) Date of submission of the thesis :
 - e) Date of Award of Ph.D :
 - f) One page write-up of the thesis highlighting the prime results (to be enclosed) Yes/No
5. **Recommendation Letters**
(from the thesis supervisor and 2 other experts) (to be enclosed) Yes/No
6. **List of Publications based on the thesis work**
in Journals, Reports, Conferences, Patents (to be enclosed)
Give Title of the Paper, Authors, Journal, Vol / Page/ Year for Journal Publications Yes/No
7. **Any additional information**
Date : Signature

IUMRS-ICAM 2007

“International Conference on Advanced Materials” will be held in Bangalore, India during 2007

The International Union of Materials Research Societies (IUMRS) was established in 1991 as an international association of technical groups or societies, which have an interest in promoting interdisciplinary materials research. The IUMRS has adhering Bodies and Institutional Affiliates around the world. MRSI is a founding Adhering Body of (IUMRS) and participates in all its activities.

Current membership of IUMRS includes the following;

Materials Research Society of Argentina (MRS-A)	Materials Research Society of Australia (A-MRS)
Brazil Materials Research Society (B-MRS)	Chinese Material Research Society (C-MRS)
European Materials Research Society (E-MRS)	Materials Research Society of India (MRS-I)
Materials Research Society of Japan (MRS-J)	Materials Research Society of Korea (MRS-K)
Materials Research Society of Mexico (MRS-M)	Materials Research Society of Russia (MRS-R)
Materials Research Society of Singapore (MRS-S)	Material Research Society of Taiwan (MRS-T)
Materials Research Society (MRS)	

The objectives of the Union are to

- * Facilitate international cooperation among materials research organizations
- * Contribute to the advancement of materials research in all its aspects
- * Advance the multidisciplinary nature of materials research internationally.
- * Promote information exchange among national or regional societies with interests in interdisciplinary materials research and work to coordinate their activities.
- * Promote communication of international materials research activities through appropriate media.
- * Encourage well established materials research symposia to rotate through available meeting sites of materials research societies.

The conferences conducted by IUMRS regularly are (i) International Conference on Advanced Materials (ICAM), (ii) International Conference on Electronic Materials (ICEM), (iii) International Conference on Materials for Advanced Technologies (ICMAT) and (iv) International Conference in Asia (ICA). MRSI organized the IUMRS-ICA in the year 1998.

The other activities of IUMRS include a quarterly publication of the Newsletter ‘Facets’ launched in January 2002 and the presentation of the Somiya Award named in honour of Dr. Shigeyuki Somiya, Emeritus Professor of the Tokyo Institute of Technology as a recognition of international collaboration.

The IUMRS-ICAM is the most prestigious of all the conferences under the banner of IUMRS. It is held once in two years. E-MRS organized the IUMRS-ICAM during 1997 in Strasbourg, France. Later it was organized by MRS-China in 1999 (Beijing), MRS-Mexico in 2001 (Cancun), MRS-Japan in 2003 (Yokohama). MRS-Singapore will be organizing the IUMRS-ICAM in the year 2005. **We are extremely pleased to announce that the MRSI will be organizing the IUMRS-ICAM 2007 in Bangalore, India during 2007.** The possible venue would be Indian Institute of Science. The following symposia and forums are tentatively proposed.

Symposia (Partial & Tentative):

♣ Intelligent Materials	♣ MEMS	♣ Functional Materials
♣ Self Assembly & Nanomaterials	♣ Magnetic & Spintronics Materials	♣ Hybrid Materials
♣ Biomaterials	♣ Soft Materials	♣ High Strength Materials
♣ Polymer Materials	♣ Energy Materials	♣ Computational Materials Science
♣ Characterization of Materials	♣ Photonic Materials	

Forums (Tentative):

♣ Materials for Rural Technology	♣ Materials Education	♣ Novel Materials	♣ Eco-friendly Materials
----------------------------------	-----------------------	-------------------	--------------------------

The programme will consist of (i) Plenary Lectures (ii) Invited Lectures (iii) Oral Presentations (iv) Poster Presentations and (v) Public Lectures.

The dates for the conference are being worked out in consultation with IUMRS and other professional societies of IUMRS. It will be a five day conference with more than ten parallel sessions. Preliminary discussions are going on about the dates, the structure of the conference, the constitution of committees, the theme symposia and related activities. I request every member of MRSI to shoulder the responsibility and contribute to the success of the conference. Suggestions from the members and others are most welcome. Suggestions may kindly be sent to Prof. CNR Rao, Founder President, MRSI, Dr. R.A. Mashelkar, President, MRSI or to the General Secretary, MRSI. Let us all work together and make this a memorable event.

S V Subramanyam
Vice President-General Secretary, MRSI

New Members

Enrolled between July 1 and Sept. 30, 2004

Life Members

Pramod Shankararao Patil
(LM B631)
Thin Film Materials Laboratory
Dept. of Physics, Shivaji University
Kolhapur 416 004
Tel: 0231-2690571 Ext. 5229
Fax: 0231-2692333
Email: psp_phy@unishivaji.ac.in,
Patilps_2000@yahoo.com

Balakrishna Palanki (LM B635)
17-1-391/44 Subramanya Nagar
Saidabad P.O
Hyderabad 500 059
Tel: 040-27184968/27184236
Fax: 040-27121271
Email: bpalanki@rediffmail.com
Pbk@nfc.ernet.in

Kishore Madhukar Paknikar
(LM B638)
Microbial Sciences Division
Agharkar Research Institute
Pune 411 004
Tel: 022-5653680, Fax: 022-25651542
Email: paknikar@vsnl.com

Ravi Kumar Naga Venkata Majeti
(LM B641)
Department of Pharmaceutics
Sector 67, SAS Nagar
Chandigarh 160 062
Punjab
Tel: 0172-2214683-87 Ext. 2055
Fax: 0172-2214692
Email: mnvrkumar@niper.ac.in
mnvrkumar@yahoo.com

Basumajumdar A (LM B644)
Dept. of Chemical Technology
University College of Science &
Technology
University of Calcutta
92, Acharya Prafulla Chandra Road
Kolkata 700 009
Tel: 033-23508386 Ext. 204
Fax: 033-23519755
Email: chemtech@cucc.ernet.in

Kulvir Singh (LM B632)
Metallurgy Department
Corporate R & D
Bharat Heavy Electricals Limited
Vikasnagar
Hyderabad 500 093
Tel: 040-23882271
Fax: 040-23776320
Email: kulvir@bhelrmd.co.in

Anjali Pal (LM B636)
Department of Civil Engineering
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281920
Fax: 03222-282254
Email: anjalipal@civil.iitkgp.ernet.in

Anil Kumar P S (LM B639)
Department of Physics
Indian Institute of Science
Bangalore 560 012
Tel: 080-22933281
Fax: 080-23602602
Email: anil@physics.iisc.ernet.in

Akhilesh Krishnakumar Gaharwar
(LM B642)
Dept. of Metallurgical Engineering &
Materials Science
Indian Institute of Technology,
Powai
Mumbai 400 076
Tel: 09819195797
Email: a_gaharwar@iitb.ac.in

Sudhindra Rayaprol (LM B633)
AB-94, Dept. of Condensed Matter
Physics & Materials Science
Tata Institute of Fundamental Re-
search, Near Navy Nagar
Colaba
Mumbai 400 005
Tel: 022-22804545 Ext. 2439
Fax: 022-22804610/11
Email: sudhindra@tifr.res.in

Tarasankar Pal (LM B637)
Department of Chemistry
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-283320
Fax: 03222-282252
Email: tpal@chem.iitkgp.ernet.in

Virendra Raghav Savalia
(LM B640)
Plot No. 330, G E S, Vashi Village
Vashi
Navi Mumbai 400 703
Tel: 022-27811184
Email: savalia@apsara.barc.ernet.in
arvirendra@yahoo.co.in

Debasis Dhak (LM B643)
Dept. of Chemistry
Indian Institute of Technology
Kharagpur 721 302
Email:
debasis_d@chem.iitkgp.ernet.in

Annual Members

Sunil Pal Singh Rawat (AM B088)
Institute of Wood Science &
Technology
18th Cross, Malleswaram
Bangalore 560 003
Tel: 080-23346811
Email: spsrawat@iwst.res.in

Krishnamoorthi S (AM B091)
No. B-339, V S Hall
Indian Institute of Technology
Kharagpur 721 302
Email: kitchavs03@iitian.iitkgp.ernet.in

Dileep Kumar Agrahari (AM B094)
B-315 V S Hall
Indian Institute of Technology
Kharagpur 721 302
Tel (R): 03222-281168
Email: dkagrahari@yahoo.co.in

Manvendra Singh Khatri (AM B097)
A-223 V S Hall
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281630
Fax: 03222-281168
Email: manvendrakhatri@yahoo.co.in

Ravindra Rajaram Malewar
(AMB100)
Dept. of Metallurgical & Materials
Engineering
Indian Institute of Technology
Kharagpur 721 302
Email: ravi_malewar@yahoo.co.in

Animesh Mandal (AM B103)
Dept. of Metallurgical & Materials
Engineering
Indian Institute of Technology
Kharagpur 721 302
Email: animesh@metal.iitkgp.ernet.in

Prasada Rao K Ayyagari
(AMB106)
Dept. of Metallurgical & Materials
Engineering
Indian Institute of Technology
Kharagpur 721 302
Email: prasad@metal.iitkgp.ernet.in

Avinash Kumar Lohia (AM B089)
WZ-140/152, Second Floor
Rishi Nagar, Capt. Sharma Marg,
Rani Bagh, Pitampura
Delhi 110 034
Tel: 9810670584
Email: aklohia83@yahoo.co.in

Akbar Ali S K (AM B092)
Suraward Mahalla
Mirzabazar P.O, Midnapore
Dist. Paschim
Medinipur 721 101
Tel: 03222-281655
Email: ali_akbar13@yahoo.co.in

Suvra Prakash Mondal (AM B095)
VIII-Dakshimirjapur
P.O Joy Balarampur
Dist-Purba
Medinipore 721 137
Email: suvraphy@yahoo.co.uk

Abdul Basar (AM B098)
V S Hall Room # C305
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281630
Fax: 03222-281168
Email: a_basar1@yahoo.co.in

Manoj Kumar Chopkar (AM B101)
Dept. of Metallurgical & Materials
Engineering
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281710
Email: chopkar_m@yahoo.com

Bharat Bhooshan Panigrahi(AM B104)
Dept. of Metallurgical & Materials
Engineering
Indian Institute of Technology
Kharagpur 721 302
Email: bpani2k@yahoo.com

Kaustuv Das (AM B107)
Dept. of Physics
Indian Institute of Technology
Kharagpur 721 302
Email: kaustuv@phy.iitkgp.ernet.in

Sagar Pal (AMB 90)
Materials Science Centre
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281655
Email: pal_sagar2001@yahoo.com
spal19@yahoo.co.in

Pubali Adhikary (AM B093)
Materials Science Centre
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-181655
Email: pubaliadhikary@indiatimes.com

Rajat Mahapatra (AM B096)
Dept. of Physics & Meteorology
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281630
Fax: 03222-255303
Email: rajat@phy.iitkgp.ernet.in

Syed Nasimul Alam (AM B099)
C-128
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281710
Fax: 03222-277451
Email: nasimulalam@yahoo.com

Supriya Bera (AMB102)
Dept. of Metallurgical & Materials
Engineering
Phase Transformation Laboratory
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281710
Email: supriya@metal.iitkgp.ernet.in

Samik Pal (AM B105)
Materials Science Centre
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-281653
Fax: 033-24310546
Email: contact_samik@yahoo.com

Rajan TDP (AM B109)
Regional Research Laboratory
Industrial Estate P.O
Thiruvananthapuram 695 019
Tel: 0471-2515327
Fax: 0471-2491712

Chiranjeevi Thota (AMB 112)
Corporate R&D
Bharat Petroleum Corporation Ltd
Plot No. 2A, Udyokendra
Surajapur
Noida 201 306
Tel: 0120-2350249 Ext. 127
Fax: 0120-2350252
Email:
chiranjeevit@bharatpetroleum.com

Ranabrata Mazumder (AM B110)
3/4/1 Mathur Babu Lane
P.O Tangra
Kolkata 700 015
Tel: 033-22512807
Email: ranabrata@cgcri.res.in
ranabrata_m@rediffmail.com

Vaishnavi Sathyavendan Thumati
(AM B108)
P-56, 7th Main, 10th Sector
LIC Colony, Jeevan Bhima Nagar
HAL III Stage
Bangalore 560 075
Tel (R) : 080-25287366
Email: tsvaish@yahoo.com

Shirshendu Chakraborty
(AMB111)
13/1/1/ Andul 2nd By-Lane
Post B. Garden
Howrah 711 103
Tel: 033-26684525
Email: shirshenduyahoo.com

CALENDAR OF EVENTS OCT 2004 - AUG 2005

October 11-15, 2004, National Workshop on Advanced Methods for Materials Characterization (NWMC), Dr S K Kulshreshtha, Convenor, NWMC, head, NMSCD, Bhabha Atomic Research Centre, Mumbai 400 085, Tel: 022-25505148/25593829, Fax: 022-25505151, Email: kulshres@magnum.barc.ernet.in, **or** Dr. A K Tyagi, Secretary, NWMC, Head, Solid State Chemistry Section, Applied Chemistry Division, Bhabha Atomic Research Centre, Mumbai 400 085, Tel: 022-25595330, Fax: 022-25505151, Email: mrsi04@apsara.brc.ernet.in

October 18-23, 2004, Eleventh APAM Topical Seminar on The Processes in Functional Materials, Prof. G T Fei, Institute of Solid State Physics, Chinese Academy of Sciences, 230031 Hefei, China, email: gtfai@issp.ac.cn **or** Dr. Marina Kosinova, Institute of Inorganic Chemistry SB RAS, 3, Acad, Lavrentjev Pr. Novosibirsk 630090, Russia, Email: marina@che.nsk.su

November 8-10, 2004, International Exhibition & Conference, TRANSMAT EXPO-2004, The Secretariat, FICCI Trade Fair, Federation House, Tansen Marg, New Delhi 110 001, Tel: 011-23378760-70/23357082/30939542, Fax: 011-23320714/23721504, Email: ficciexhibition@vsnl.net, Website: www.ficci.com

November 16-18, 2004, IUMRS-ICA 2004, Mr. Jong-Pyng Chen and Ms. Grace Lee, Secretaries, Materials Research Laboratories, ITRI, Email: ica2004@itri.org.tw

November 22-23, 2004, International Symposium on Ultrapure Materials: Processing, Characterization and Applications (ISUPM), The Convenor, International Symposium on Ultrapure Materials: Processing, Characterization and Applications, C-MET, IDA Phase-II, Cherlapally, HCL (PO), Hyderabad 500 051

November 22-25, 2004, Asia Pacific EPR/ESR Symposium, Prof. S V Bhat, Department of Physics, Indian Institute of Science, Bangalore 560 012, India, Tel: 080-22932727 / 23600880, Fax: 080-23602602, Email: apes04@physics.iisc.ernet.in, svbhat@physics.iisc.ernet.in, Website: www.physics.iisc.ernet.in/~apes04

November 25-26, 2004, Workshop on Carbon Materials for Energy Applications, Dr. O P Bahl, Emeritus Scientist, National Physical Laboratory, Dr. K S Krishnan Road, New Delhi 110 012, Tel: 9811251200, Email: opbahl@mail.nplindia.ernet.in

<p>December 6-8, 2004, International Symposium on Advanced Materials & Processing, Prof. A K Banthia, Convenor, Materials Science Centre, Indian Institute of Technology, Kharagpur 721 302, Tel: 0322-282273, Fax: 03222-255303, Email: isamap2K4@matsc.iitkgp.ernet.in, Website: www.isamap2K4.iitkgp.ernet.in</p>
<p>December 17-19, 2004, International Conference on Recent Advances in Composite Materials, Dr. V K Srivastava, Convenor, ICRACM 2004, Department of Mechanical Engineering, Institute of Technology, Banaras Hindu University, Varanasi 221 005, Tel: 0542-2368157, Fax: 0542-2368174, Email: vijayks@banaras.ernet.in, vijayks@bhu.ac.in, Website: www.bhu.ac.in/notification/icracm1.htm</p>
<p>December 20-21, 2004, International Conference on Electrochemical Power Systems, ICEPS-2, M Jayachandran, Secretary, Society for Advancement of Electrochemical Science and Technology (SAEST), CECRI Campus, Karaikudi 630 006, Tel: 04565-224198/227550-559, Fax: 04565-227713/227779, Email: saestkkd@yahoo.com/saest_india@rediffmail.com, Website: http://saest_ind.tripod.com</p>
<p>January 21-22, 2005, XV National Conference on Medical Devices & Biomaterials, Quality Assurance, Ethics and Regulatory Issues, D S Nagesh, Organizing Secretary, XVNCSBAOI, BMT Wing, SCTIMST, Poojappura, Thiruvananthapuram 695 012, Tel: 0471-2340801, Fax: 0471-2341814, Email: dsnagesh@rediffmail.com, nagesh@sctimst.ac.in</p>
<p>February 2-4, 2005, National Conference on Luminiscence and its Applications, Dr. B N Lakshmi Narsappa, Convenor, NCLA-2005, Department of Physics, Bangalore University, Bangalore 560 056, Tel: 080-23214001 Ext. 332, p448116281, Fax: 080-23219295, Email: ncla2005bnla@rediffmail.com</p>
<p>February 9, 2005, APAM India Chapter Meeting, Dr. B K Das, Executive Director, Centre for Materials Electronics Technology (C-MET), Panchawati, Off Pashan Road, Pune 411 008, Tel: 020-25898724, Fax: 020-2589 8085/2589 8180, Email: bkdas@cmetindia.org</p>
<p>February 10-12, 2005 16th AGM of MRSI, The Convener, 16th AGM of MRSI Secretariat, Physical & Materials Chemistry Section, National Chemical Laboratory, Pune 411 008, Tel: 020-25893300 Ext. 2002/2276, Fax: 020-25893044, Email: mrsi2005@dalton.ncl.res.in</p>
<p>February 23-25, 2005, 5th International conference on Advances in Metrology, Dr. Ashok Kumar, Head, Ultrasonics Standard & Convenor, AdMet 2005, National Physical Laboratory, Dr. K S Krishnan Road, New Delhi 110 012, Tel: 011-30950398, 25863139, Fax: 011-25732965, 25726938, Email: admet@nplindia.ernet.in</p>
<p>May 31-June 3, 2005, E-MRS Spring Meeting 2005, Strasbourg, France, Secretariat: European Materials Research Society, BP 20, F-67037 Strasbourg, France, Tel: +33 (0) 3 88 10 65 43, Fax: +33 (0) 3 88 10 63 43, Email: emrs@phase.c-strasbourg.fr, Website: http://www-emrs.c-strasbourg.fr</p>
<p>July 3-8, 2005, IUMRS-ICMAT 2005 and IUMRS-ICAM 2005, ICMAT Secretariat, Materials Research Society of Singapore, c/o Institute of Materials Research and Engineering, 3 Research Link, Singapore 117 602, Tel: (65) 6874 1975, Fax: (65) 6777 2393, Email: icmat@mrs.org.sg</p>
<p>July 18-22, 2005, Powders & Grains 2005, for details visit website http://www.ical.uni-stuttgart.de/~pg2005</p>
<p>August 23-31, 2005, XX International Union of Crystallography, Scientific Secretariat-Andrea Lenco & Patrizia Rossi, Email: iucr@iucr2005.it</p>

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

AN UPDATE OF MRSI ACTIVITIES

The MRSI Update is a consolidated statement of the major activities and achievements of MRSI. The MRSI has completed 15 years of activity and in this update, the following information is given.

- ❖ Membership status
- ❖ Awards & Honours
- ❖ Information Collection & Dissemination System
- ❖ Publications
- ❖ International Cooperation
- ❖ Annual General Meetings

Membership Status

MRSI has the following classes of membership. The status as on September 30, 2004 is:

Life Members	: 1750
Annual Members	: 106
Honorary Members	: 145
Patron Members	: 61

Awards and Honours

Distinguished Materials Scientist of the Year Award:

DISTINGUISHED MATERIALS SCIENTIST OF THE YEAR AWARD is the highest MRSI award. The chosen scientist delivers special Honour Lecture on the occasion of the MRSI Annual Meeting.

Prof. S Ramaseshan	(1990)
Prof. E C Subba Rao	(1991)
Prof. T R Anantharaman	(1992)
Prof. C N R Rao	(1993)
Dr. M S Valiathan	(1994)
Prof. K L Chopra	(1995)
Dr. R Chidambaram	(1996)
Dr. Paul Ratnasamy	(1997)
Dr. P Rama Rao	(1998)
Prof C V Sundaram	(1999)
Dr. R A Mashelkar	(2000)
Prof. S Ranganathan	(2001)
Prof. K J Rao	(2002)
Prof. A K Barua	(2003)
Prof. T V Ramakrishnan	(2004)
Prof. K T Jacob*	(2005)

MRSI-ICSC Superconductivity and Materials Science Award (Senior)

Prof. CNR Rao, (JNCASR, Bangalore)	(1993)
Dr. P Rama Rao, (UOH, Hyderabad)	(1996)
Dr. S K Joshi, (NPL, New Delhi)	(1999)
Dr. M S Valiathan (MAHE, Manipal)	(2002)
Prof. P Ramachandra Rao (BHU, Varanasi)*	(2005)

This prize is awarded once in three years.

MRSI Distinguished Lectureship

Dr. M.S. Valiathan (SCTIMST, TRV)	(1993-1994)
Prof. S. Ranganathan (IISc, Bangalore)	(1995-1996)
Prof. G.V. Subba Rao (CECRI, Karaikudi)	(1997-1998)
Dr. P. Ramachandra Rao (NML, Jamshedpur)	(1999-2000)
Dr. P. Rodriguez (IGCAR, Kalpakkam)	(2001-2002)
Dr. S. Sivaram (NCL, Pune)	(2003-2004)
Prof. S. Dattagupta (SNBNCBS, Kolkata)*	(2005-2006)

MRSI-ICSC Super Conductivity and Materials Science Annual Prize Winners : These prizes are awarded annually to two scientists.

Dr. A V Narlikar, NPL, New Delhi	(1991)
Prof. G V Subba Rao, IIT, Madras	(1991)
Prof. S B Ogale, UOP, Pune	(1992)
Prof. J Gopalakrishnan, IISc, Bangalore	(1992)
Dr. P Chaddah, CAT, Indore	(1993)
Dr. A K Gupta, NPL, New Delhi	(1993)
Prof. S K Malik, TIFR, Mumbai	(1994)
Dr. P Ganguly, NCL, Pune	(1994)
Prof. L C Gupta, TIFR, Mumbai	(1995)
Dr. D Chakravorty, IACS, Kolkata	(1995)
Prof. K J Rao, IISc, Bangalore	(1996)
Dr. J V Yakhmi, BARC, Mumbai	(1996)
Prof. A K Barua, IACS, Kolkata	(1997)
Dr. Anil Kakodkar, BARC, Mumbai	(1997)
Dr. P Rodriguez, IGCAR, Kalpakkam	(1998)
Prof. R Vijayaraghavan, TIFR, Bombay	(1998)
Dr. Y R Mahajan, ARC-I, Hyderabad	(1999)
Dr. T S Radhakrishnan, IGCAR, Kalpakkam	(1999)
Dr. N V Madhusudana, RRI, Bangalore	(2000)
Dr. C K Gupta, BARC, Mumbai	(2000)
Dr. S K Sikka, BARC, Mumbai	(2001)
Dr. D Banerjee, DMRL, Hyderabad	(2001)
Prof. P Ramachandra Rao, NML, Jamshedpur	(2002)
Prof. A K Raychaudhuri, IISc, Bangalore	(2002)
Dr. S Banerjee, BARC, Mumbai	(2003)
Dr. B M Arora, TIFR, Mumbai	(2003)
Prof. Dhananjai Pandey, BHU, Varanasi	(2004)
Prof. S B Krupanidhi, IISc, Bangalore	(2004)
Dr. Baldev Raj, IGCAR, Kalpakkam*	(2005)
Prof. G. Ananthakrishna, IISc, Bangalore*	(2005)

* to be awarded at 16th AGM at Pune

MRSI Medal Lectures

MRSI Medals are awarded in recognition of excellence in a particular field of expertise within the domain of materials and processes. Recipients of these medals are invited to deliver lectures at the MRSI Annual Meeting. So far 241 Medals have been awarded.

The MRSI Medal winners for the years 1990 to 2005 are listed below:

1990

Prof. S. B. Ogale, University of Poona, Pune
Dr. P. Muralidharan, SSPL, Delhi
Prof. S. V. Subramanyam, IISc, Bangalore
Prof. K. Chattopadhyay, IISc, Bangalore
Dr. V. Chandrasekharan, DMRL, Hyderabad
Prof. D. D. Sarma, IISc, Bangalore
Prof. Manu Multani, TIFR, Mumbai
Dr. A. M. Varaprasad, DMSRDE, Kanpur
Prof. G. V. Subba Rao, IIT, Madras
Dr. D. Pandey, BHU, Varanasi
Dr. S. Sivaram, NCL, Pune
Dr. M. K. Sridhar, NAL, Bangalore
Prof. C. Lakkad, IIT, Mumbai
Prof. K. A. Padmanabhan, IIT, Madras
Dr. N. C. Birla, DMRL, Hyderabad
Dr. S. Banerjee, BARC, Mumbai

1991

Prof. S. Ranganathan, IISc, Bangalore
Dr. A. H. Sequeria, BARC, Mumbai
Dr. A. K. Sreedhar, SSPL, New Delhi
Prof. A. K. Barua, IACS, Kolkata
Dr. H. S. Maiti, CGCRI, Kolkata
Prof. R. Srinivasan, IIT, Madras
Prof. B. K. Sadashiva, RRI, Bangalore
Dr. O. P. Bahl, NPL, New Delhi
Dr. D. Banerjee, DMRL, Hyderabad
Dr. J. Mukherji, CGCRI, Kolkata
Prof. D. N. Bose, IIT, Kharagpur
Dr. A. K. Singh, NAL, Bangalore
Dr. S. K. Sikka, BARC, Mumbai
Prof. J. Gopalakrishnan, IISc, Bangalore
Dr. C. K. Gupta, BARC, Mumbai
Dr. P. Rodriguez, IGCAR, Kalpakkam
Dr. V. M. Nadkarni, NCL, Pune

1992

Dr. B. K. Das, NPL, New Delhi
Prof. Vikram Kumar, IISc, Bangalore
Prof. S. Mohan, IISc Bangalore
Prof. G. Ananthakrishna, IISc, Bangalore
Dr. R. Thyagarajan, SSPL, Delhi
Prof. D. Chakravorty, IACS, Kolkata
Dr. Baldev Raj, IGCAR, Kalpakkam
Dr. A. D. Damodaran, RRL, Thiruvananthapuram
Dr. S. R. Rajagopalan, NAL, Bangalore

Dr. Pradip, TRDDC, Pune
Prof. P. Pramanik, IIT, Kharagpur
Dr. Y. R. Mahajan, DMRL, Hyderabad
Dr. G. Sundararajan, DMRL, Hyderabad
Prof. K. T. Jacob, IISc, Bangalore
Prof. P. Ramasamy, Anna Univ. Chennai
Dr. S. P. Garg, BARC, Mumbai
Prof. P. Ganguly, NCL, Pune
Prof. S. Banerjee, NML, Jamshedpur
Dr. R. Sivakumar, SCTIMST, TRV
Dr. N. Balasubramanian, Everest Ltd., Bng
Dr. C. G. Krishnadas Nair, HAL, Bangalore

1993

Dr. D. Ganguli, CGCRI, Kolkata
Prof. G. S. Upadhyaya, IIT, Kanpur
Dr. K. C. Patil, IISc, Bangalore
Dr. S. K. Date, NCL, Pune
Dr. L. Madhav Rao, BARC, Mumbai
Dr. Sanak Mishra, SAIL (R & D) Ranchi
Dr. Krishan Lal, NPL, New Delhi
Dr. A. K. Chatterjee, ACC Ltd, Thane
Prof. O. Prabhakar, IIT, Chennai
Dr. S. L. Mannan, IGCAR, Kalpakkam
Prof. K. V. S. Rama Rao, IIT, Chennai
Dr. C. Ganguly, BARC, Mumbai
Dr. R. B. Subramanyam, DMRL, Hyderabad
Prof. K. A. Natarajan, IISc, Bangalore
Dr. A. K. Shukla, IISc, Bangalore
Dr. C. K. Mathews, IGCAR, Kalpakkam

1994

Dr. K. Balakrishnan, CECRI, Karaikudi
Prof. S. V. Bhat, IISc, Bangalore
Prof. S. K. Biswas, IISc, Bangalore
Dr. R. N. Ghosh, NML, Jamshedpur
Prof. V. V. P. Kutumba Rao, BHU, Varanasi
Dr. S. K. Mitra, Tata Steel, Jamshedpur
Dr. T. S. Radhakrishnan, IGCAR, Kalpakkam
Dr. (Mrs) G. Rohini Devi, DRDL, Hyderabad
Dr. C. S. Sundar, IGCAR, Kalpakkam
Prof. M. S. Hegde, IISc, Bangalore
Prof. H. L. Bhat, IISc, Bangalore
Dr. D. Bhattacharya, IIT, Kharagpur
Dr. Sudhir S. Kulkarni, NCL, Pune
Dr. C. Manohar, BARC, Mumbai
Prof. A. K. Pal, IACS, Kolkata
Dr. (Mrs) Indira Rajgopal, NAL, Bangalore
Dr. C. P. Sharma, SCTIMST, Thiruvananthapuram
Prof. S. V. Suryanarayana, OU, Hyderabad

1995

Prof. S. C. Agarawal, IIT, Kanpur
Dr. A. K. Gupta, NPL, New Delhi
Prof. T. R. N. Kutty, IISc, Bangalore

Prof. L.M.Manocha, S.P.University Vallabh Vidyanagar
Dr.T.K.Mukherjee, BARC,Mumbai
Dr.B.K.Sarkar, CGCRI, Kolkata
Prof.Subrata Ray,Univ. of Roorkee, Roorkee
Prof.Pushpa Bajaj, New Delhi
Dr.Pran Kishan,SSPL, Delhi
Prof.L.K.Malhotra,IIT, New Delhi
Dr.O.N.Mohanty, TISCO,Jamshedpur
Dr.V.S.Raghunathan, IGCAR, Kalpakkam
Prof.S.P.Sengupta,IACS, Kolkata
Prof.Shamsuddin,BHU,Varanasi

1996

Dr.B.M.Arora,TIFR, Mumbai
Prof. A K Raychaudhuri,IISc,Bangalore
Dr.A.K.Grover, TIFR, Mumbai
Dr. E.V.Sampath Kumar, TIFR,Mumbai
Dr. S. A. Shivashankar, IISc, Bangalore
Dr. Subhash Chandra, NPL, Pune
Dr. Vikram Jayaram, IISc, Bangalore
Dr. Vijay Kumar, IGCAR, Kalpakkam
Dr.Arun Umarji, IISc,Bangalore
Dr.D.Bahadur, IIT, Mumbai
Prof.T.Nagarajan, Madras University, Chennai
Prof. R G Sharma, NPL, New Delhi
Prof. R. P. Singh, IIT, Kharagpur
Dr. K. Vijayamohanan, NCL, Pune
Prof. U. V. Varadaraju, IIT, Chennai

1997

Dr. G. Banerjee, CGCRI, Kolkata
Dr.K.Bhanu Sankara Rao, IGCAR, Kalpakkam
Dr.A.Jayakrishna, SCTIMST, Thiruvananthapuram
Dr. V. N. Krishnamurthy, VSSC, Thiruvananthapuram
Dr. N. G. Nair, IIT, Chennai
Dr. M. C. Pandey, DMRL, Hyderabad
Dr. Rameshwar Jha, TISCO, Jamshedpur
Prof. M. K. Surappa, IISc, Bangalore
Dr. B P Sharma, BARC, Mumbai
Dr. B. K. Godwal, BARC, Mumbai
Prof. T. N. Guru Row, IISc., Bangalore
Prof. S. B. Krupanidhi, IISc., Bangalore
Dr. B. M. Mandal, IACS, Kolkata
Dr. K. S. Narayan, JNCASR, Bangalore
Prof. R. Pinto, TIFR, Mumbai
Prof. V. D. Vankar, IIT,New Delhi
Prof. V. N. Rajasekharan Pillai, M G University Kottayam

1998

Dr. A.K.Jha, RRL, Bhopal
Prof. B. Viswanathan, IIT, Chennai
Dr. Neeraj Khare, NPL, Delhi
Dr.(Ms) Prabha R Chatterjee, ICT,Hyderabad
Dr. P.R. Vasudeva Rao, IGCAR, Kalpakkam
Prof. S.N. Kaul, Central University, Hyderabad

Dr. G.Malakondaiah, DMRL, Hyderabad
Dr. Om Prakash, BHU, Varanasi
Dr. Prabha D Nair, SCTIMST, Thiruvananthapuram
Dr. P.S.Goyal, BARC,Mumbai
Mr. K.S.Ghosh, TISCO, Jamshedpur
Dr. K.B.R.Varma, IISc, Bangalore
Dr.T.Bandyopadhyaya,CGCRI, Kolkata

1999

Dr. R Balasubramanian, IIT Kanpur
Dr. G V Kulkarni, JNCASR, Bangalore
Dr. Navin Chand, RRL, Bhopal
Dr. S K Ray, IGCAR, Kalpakkam
Dr. K Sreenivas, SCTIMST, Thiruvananthapuram
Dr. A Venkateswara Rao, Shivaji University, Kolhapur
Dr. Santanu Bhattacharya, IISc, Bangalore
Dr. M K Banerjee, BEC, Bengal
Dr. S Natarajan, JNCASR, Bangalore
Dr. T Rajasekharan, DMRL, Hyderabad
Dr. S M Sharma, BARC, Mumbai
Dr. Swati Ray, IACS, Kolkata
Dr. GVS Sastry, BHU, Varanasi

2000

Dr. R Bhattacharya, NPL, New Delhi
Prof. Atul Choksi, IISc, Bangalore
Dr. G P Das, BARC, Mumbai
Dr. S C Gupta, BARC, Mumbai
Dr. Y Hariharan, IGCAR, Kalpakkam
Prof. I Manna, IIT, Kharagpur
Prof. S N Ojha, BHU, Varanasi
Dr. A R Raju, JNCASR, Bangalore
Dr. T G Ramesh, NAL, Bangalore
Prof. M K Sanyal, SINP, Kolkata
Prof. Ajay Sood, IISc, Bangalore
Dr. A K Suri, BARC, Mumbai
Dr. V K Wadhawan, CAT, Indore

2001

Shri. Chintamani, NFC, Hyderabad
Dr. A Ghosh, IACS, Kolkata
Dr. Gurnam Singh, CAT, Indore
Prof. R Nagarajan, TIFR, Mumbai
Dr. G J Prasad, BARC, Mumbai
Dr. K Sheela Ramasesha, NAL, Bangalore
Dr. B Viswanathan, IGCAR, Kalpakkam
Dr. G K Dey, BARC, Mumbai
Dr. A Govindaraj, SSCU, IISc, Bangalore
Dr. M Jayabalan, SCTIMST, Thiruvananthapuram
Dr. S K Pabi, IIT, Kharagpur
Dr.N Ramakrishnan, DMRL, Hyderabad
Dr. T Ramasami, CLRI, Chennai
Dr. K G Satyanarayana, RRL, Thiruvananthapuram
Dr. O M Sreedharan, IGCAR, Kalpakkam

2002

Prof. Ashok Misra, IIT, Madras, Chennai
Dr. Bhuvaneshwar G S, SCTIMST, Thiruvananthapuram
Dr. Chaplot S L, BARC, Mumbai
Prof. Damodara Das V, IIT, Madras, Chennai
Prof. Devendra Kumar, BHU, Varanasi
Kumar A N, IIT, Delhi
Majumdar S D, ACC, Thane
Pawar S H, Shivaji University, Kolhapur
Prof. Pradeep T, IIT, Madras, Chennai
Prof. Ramakrishnan S, IISc, Bangalore
Dr. Shobhana Narasimhan, JNCASR, Bangalore
Prof. Shrikant V Joshi, ARC-I, Hyderabad
Dr. Subramanian P N, VSSC, Thiruvananthapuram

2003

Dr. Amarnath Sen, CGCRI, Kolkata
Dr. Bharathi A, IGCAR, Kalpakkam
Prof. Bhupendra N Dev, Institute of Physics, Bhubaneswar
Prof. Devang V Khakhar, IIT, Mumbai
Prof. Jyothindra Kumar K, Govt. Dental College, Thiruvananthapuram
Dr. Kothiyal G P, BARC, Mumbai
Dr. Maitra A N, Univ. of Delhi, Delhi
Dr. Mitra R, IIT, Kharagpur
Dr. Murali Sastry, NCL, Pune
Prof. Narayanasamy A, Univ. of Madras, Chennai
Dr. Pillai C K S, RRL, Thiruvananthapuram
Prof. Sekhon S S, Guru Nanak Dev Univ, Amritsar
Prof. Shanker Ram, IIT, Kharagpur
Dr. Subbanna G N, MRC, IISc, Bangalore

2004

Dr. B.C. Pai, RRL, Thiruvananthapuram
Dr. Debabrata Basu, CGCRI, Kolkata
Prof. A.K. Nandi, IACS, Kolkata
Prof. B.S. Murty, IIT, Kharagpur
Dr. Suman Kumari Mishra, NML, Jamshedpur
Prof. B.R. Mehta, IIT, Delhi
Dr. Pushan Ayyub, TIFR, Mumbai
Dr. V. Venugopal, BARC, Mumbai
Dr. M. Vijayalakshmi, IGCAR, Kalpakkam
Dr. S.C. Jain, NFC, Hyderabad
Dr. R.M.V. Gopalakrishna Rao, NAL, Bangalore
Dr. B.D. Malhotra, NPL, Delhi
Dr. T.L. Prakash, C-MET, Hyderabad

2005 *

Dr. Arvind Sinha (NML, Jamshedpur)
Dr. Balasubramanian S (JNCASR, Bangalore)
Dr. Budhani R C (IIT, Kanpur)
Prof. Byrappa K (Mysore University, Mysore)
Prof. Chandrasekaran S (IISc, Bangalore)

Dr. Goutam De (CGCRI, Kolkata)
Dr. Kulshreshtha S K (BARC, Mumbai)
Dr. Radhakrishnan S (NCL, Pune)
Dr. Sulabha Kulkarni (Pune University, Pune)
Prof. Subhadra Chaudhuri (IACS, Kolkata)
Dr. Tyagi A K (BARC, Mumbai)
Dr. Umesh Waghmare (JNCASR, Bangalore)

BEST PAPER PRIZE (For publication in the Bulletin of Materials Science)

1990:

“A cold model study of mass transfer in Q-BOP” by Prof. S L Malhotra, Dr. S Singh and Dr. N Prasad, BHU, Varanasi, Bulletin of Materials Science, Vol. 12 (1989), p 369

1991:

“Thermodynamic properties of Pt₅La, Pt₅Ce, Pt₅Pr, Pt₅Tb and Pt₅Tm, intermetallics” by Prof. K T Jacob, IISc, Bangalore and Prof. Y Waseda, Tohoku University, Sendai, Japan, Bulletin of Materials Science, Vol. 13, (1990), p 235

1992:

“Ordered structures in ternary hcp alloys” by Prof. S Lele and Dr. A K Singh, BHU, Varanasi, Bulletin of Materials Science, Vol. 14 (1991), p 11

1993:

“Dynamic Fracture Mechanics-A scientific tool for the prevention of catastrophic Failure” by Dr. R Krishna Kumar, Dept. of Mechanical Engineering, Indian Institute of Technology, Madras, Bulletin of Materials Science, Vol. 15 (1992), p 55

1994:

“EXAFS: Determination of Cation Distribution in Spinel” by Dr. G M Bhongale, Dr. D K Kulkarni, Dept. of Physics, Institute of Science, Nagpur and Dr. V B Sapre, Dept. of Physics, Nagpur University, Nagpur, Bulletin of Materials Science, Vol. 16 (1993), p. 243

1995:

“The role of additives in a complex lithium silicate glass ceramic” by Prof. R N Das, Prof. B K Chandrashekar, Ceramic Technological Institute, Bharat Heavy Electrical Ltd, Bangalore & Prof. K J Rao, Materials Research Centre, Indian Institute of Science, Bangalore, Bulletin of Materials Science, Vol. 17 (1994), p 59

1996: No prize was given in 1996.

1997:

“Crystallization of glass in Fireclay Refractories” by Dr. S P Choudhury and Dr. T Dutta, CGCRI, Kolkata, Part II and Part III, Bulletin of Materials Science, Vol. 19 (1996), p 373.

* to be awarded at 16th AGM at Pune

1998:

'A New inexpensive method for the preparation of acicular precursors for magnetic recording media' by MR Anantharaman, K V Joseph and H V Keer, Dept. of chemistry, IIT, Mumbai, Bulletin of Materials Science, Vol. 20, (1997), p 975.

1999:

'Short term tissue response to carbon fibre : A preliminary *in vitro* and *in vivo* study' by Mira Mohanty, T V Kumary, Division of Pathophysiology, SCTIMST, Thiruvananthapuram, Arthur V Lal, Vivarium & Materials Group, SCTIMST, Thiruvananthapuram and R Sivakumar, Biomedical Technology Wing, SCTIMST, Thiruvananthapura, Bulletin of Materials Science, Vol. 21 (6) (1998), p 439.

2000:

'Transmission Electron Microscopy and X-ray diffraction studies of Quantum Wells', by D V Sridhara Rao, L Muraleedharan, Electron Microscopy Group, DMRL, Hyderabad, G K Dey, Materials Science Division, BARC, Mumbai, S K Halder, G Bhagavannarayan, Materials Characterization Division, NPL, New Delhi, P Banerji, D Pal and D N Bose, Advanced Technology Centre, IIT, Kharagpur, Bulletin of Materials Science, Vol 22, No. 6, October (1999), pp. 947.

2001:

'Helium implanted AlHf as studied by ¹⁸¹Ta TDPAC' by R Govindaraj, Materials Science Division, IGCAR, Kalpakkam, K P Gopinathan, Dept. of Physics, Cochin University of Science & Technology, Cochin and B Viswanathan, Materials Science Division, IGCAR, Kalpakkam, Bulletin of Materials Science, Vol. 23, No. 3, June (2000), p 201

2002:

'Non Equilibrium Solidification of undercooled droplets during Atomization Process' by Prasanth Shukla, R K Mandal and S N Ojha, Centre for Advanced Study, Dept. of Metallurgical Engineering, Banaras Hindu University, Varanasi 221 005, Bulletin of Materials Science, Vol 24 (2001) p. 547.

2003:

'Preliminary *in vitro* and *in vivo* characterizations of a sol-gel derived bio-active glass ceramic system' by S Abhiraman, H K Varma, T V Kumari, P R Umashankar and Annie John, Biomedical Technology Wing, Sree Chitra Tirunal Institute of Medical Sciences & Technology, Thiruvananthapuram, Bulletin of Materials Science, Vol 25 (5) (2002), p 419.

2004:

'Development of fully Injectable Calcium Phosphate Cement for Orthopedic and Dental Applications' by Manoj Komath and H K Varma, Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Thiruvananthapuram, Bulletin of Materials Science, Vol 26 (4), (2003), p 415.

MRSI also awards prizes to the authors of the best posters displayed at the Annual Meeting.

BEST POSTER PRIZES**2004:**

'MTMS based Superhydrophobic Silica Aerogels' by Manish M Kulkarni and A Venkateswara Rao, Dept. of Physics, Shivaji University, Kolhapur.

'Modifications to the Phase Diagram of (1-x)Pb[(Mg_{1/3}Nb_{2/3})O₃]-xPbTiO₃ Ceramics' by Akhilesh Kumar Singh, Dhananjai Pandey and Oksana Zaharko, Banaras Hindu University, Varanasi.

'Photoimageable conductor Composition for high Density Electronic Packaging of Smart Devices & Allied Subsystems' by Govind G Umarji, Supriya A Ketkar, R Marimuthu, G J Phatak, T Seth, D P Amalnerkar and U P Mulik, C-MET, Pune.

'Spin Probe ESR Studies of PEG_xLiClO₄ Solid Polymer Electrolyte Systems' by Shrivalli N Bhat, Ajay Sharma, S Srinivas Rao and S V Bhat, Dept. of Physics, Indian Institute of Science, Bangalore.

INFORMATION COLLECTION AND DISSEMINATION SYSTEM

The Technology Information Forecasting and Assessment Council (TIFAC) has identified MRSI as a nodal agency for developing a data base for non-ferrous materials. In this connection, TIFAC has provided financial support to create a data bank on non-ferrous materials at MRSI headquarters, DMRL, Hyderabad dedicated for the purpose of data acquisition and storage pertaining to non-ferrous materials, technologies for their processing and areas of their application. A group of professionals with diverse background in Metallurgy, Computer Science and Library / Information science are working with this project. Presently the data bank consists of 1325 technology records on Non-ferrous Materials and it has published many value-added reports in the area of Non-ferrous Materials.

It has been decided to shift the MRSI/TIFACLINE Unit to ARC-International, Hyderabad. Its scope will be widened to cover the areas of ceramics, powder metallurgy and surface engineering.

PUBLICATIONS

MRSI co-sponsors the publication of Bulletin of Materials Science (BMS) published by the Indian Academy of Sciences. In addition, several special issues of BMS have been brought out. The BMS published 774 pages of scientific articles in 2003. The BMS is available on the internet (<http://www.ias.ac.in/matcersci/>). Two special issues of Materials Awareness Bulletin on "Application of Rare Earths" and "Processing Technologies for Advanced Ceramics and Composites" were brought out as a joint publication of Materials Research Society of India and Defence Metallurgical Research Laboratory.

MRSI is also bringing out the MRSI Newsletter which includes the 'Calendar of Events' where the forthcoming conferences/symposia/workshops related to Materials Science are listed along with the name and address of the contact persons. The MRSI Newsletter is being edited by Prof. H L Bhat and Dr. R V Krishnan.

The MRSI has also brought out its updated version of membership directory in 2001. The next edition of this directory is due now. It has an interactive website (www.igcar.ernet.in/mrsi) for interactions amongst its members interested in science and technology of materials.

MRSI has now brought out an edited volume of the 'Materials Research-Current Scenario and Future Projections' edited by R Chidambaram and S Banerjee with special emphasis on the Indian scenario. This book was released recently.

INTERNATIONAL COOPERATION

MRSI is a founding Adhering Body of the International Union of Materials Research Societies (IUMRS).

IUMRS together with C-MRS, MRS-INDIA, MRS-JAPAN, MRS-KOREA and MRS-TAIWAN reached an important decision in October 1992 to launch a new series of MRS Conference in Asia. The series is titled "The IUMRS International Conference

in Asia" or IUMRS-ICA. The first conference of this series, IUMRS-ICA 1993, was organized by C-MRS. Later it was organized by MRS-TAIWAN in 1994, MRS-Korea in 1995, MRS-Japan in 1997, MRS India in 1998, MRS China in 1999, MRS Hong Kong in 2000, 2001, 2002

MRSI hosted the IUMRS-ICA-98 conference in Bangalore during October 13-16, 1998 which was highly successful.

One of the prestigious conferences IUMRS-ICAM is scheduled to be held in Bangalore, India during 2007. The dates are being worked out. Some details are in the MRSI Newsletter October 2004, p. 5.

MRSI is a founding member of Asia Pacific Academy of Materials (APAM). It has continued its strong links with APAM. Prof. CNR Rao was its Founder President. Currently Prof. Kuznetsov is its President. Prof. S V Subramanyam, Hon-Secretary of MRSI has been elected as the *Secretary-General* of APAM. APAM has members from India, Russia, Japan, China, Uzbekistan, Korea, Taiwan and Australia.

The Chapter holds its annual meeting in conjunction with the AGM of MRSI. APAM-India Chapter has been formed with 55 members. There is significant contingent of materials scientists from India at the MRS-USA meetings held at Boston each year.

HONORARY MEMBERS

(elected during the period 1990-2004)

(year in the bracket indicates the year of election)

Alario-Franco M A, Ciudad Universitaria, Spain, (1992)
Aleksandrov Kirill S, L V Kirensky Institute of Physics Russia (1992)
Amelinckx S, RUCA, Belgium (1991)
Andrade Joseph D, USA (1996)
Angell C A, University of Arizona, USA (1999)
Armstrong R W, University of Maryland, USA, (1995)
Arsenault R J, University of Maryland at College Park USA (1995)
Ashby M F, FRS, Cambridge University, UK (1990)
Baglin John E E, IBM Almaden Research Centre USA (1990)
Bentini G C, CNR-Via GOBETTI, Italy (1992)
Blinic R, J. Stefan Institute, Slovenia (1992)
Bonfield William, University of Cambridge, UK, (1993)
Brandon D G, Lehigh University, USA (1993)
Cahn John W, National Institute of Standards and Technology, USA (1993)
Cahn R W, FRS, University of Cambridge, UK, (1990)
Cantor Brain, University of Oxford, UK (1996)
Catlow C R A, The Royal Institution, UK (1996)
Chakravorthy B K, CNRS Lepes, France (1991)

Chang R P H, Northwestern University, USA (1990)
Chaudhari Praveen, Watson Research Centre of Physical Sciences, USA (1990)
Cheetham A K, University of California, USA (1994)
Chon Min Che, South Korea (1992)
Chowdari BVR, National University of Singapore, Singapore (2001)
Clearfield A, Texas A & M University, USA (1996)
Cottrell Alan, F.R.S, University of Cambridge, UK (1992)
Cross Leslie Eric, The Pennsylvania State University USA (1994)
Cyrot-Lackman Francis, IEPES-CNRSC, France, (1991)
Day P, FRS, The Royal University of Great Britain, UK (1994)
Dayananda M A, Purdue University, USA (1997)
Disalvo F J, Cornell University, USA (1996)
Dongsheng Yan, The Chinese Academy of Sciences, China (1990)
Doyama M, Teikyo University of Science & Technology Japan (1990)
Dresselhaus Mildred S, Massachusetts Institute of Technology, USA (1991)

Edwards P P, The University of Birmingham, UK , (1995)
Embury J D, McMaster University, Canada (1993)
Esaki Leo, Shibaura Institute of Technology, Japan, (1995)
Etourneau J, Institut de Chimie de la Matiere Condensee de France (1994)
Ferey Gerard, University of Versailles, France , (1998)
Fernando Lund, CIMAT, Chile (2004)
Fortes M A, Instituto Superior Tecnico, Portugal, 1994)
Frolov K V, Russian Academy of Sciences, Russia, (1990)
Fujihara K, Yokohama National University, Japan, (1996)
Fujshima A, University of Tokyo, Japan (1995)
Gennes P G De, France (1996)
Glasow Peter A, Siemens AG, Germany (1994)
Gleiter H, Institute of Nanotechnology Research Center Germany (1994)
Gonzalez Calbet, Universidad Complutense Spain (1997)
Goodenough John B, University of Texas at Austin USA (1990)
Gotos Harry C, Massachusetts Institute of Technology USA (1991)
Granquist C G, Uppsala Universitat, Sweden (2001)
Greenblatt Martha, The State University of New Jersey, USA (1995)
Greenwood G W, University of Sheffield, UK, (1997)
Greer A L, University of Cambridge, UK (2002)
Gschneidner K A, Iowa State University, USA, (1993)
Hagenmuller P, University of Bordeaux, France, (1990)
Heeger A J, University of California, USA (1998)
Hirsch Peter, FRS, Oxford University, UK (1990)
Hiroaki Yanagida, University of Tokyo, Japan (1991)
Honeycombe Robert, Cambridge University, UK, (1992)
Honig Jurgen M, Purdue University, USA (1990)
Ilschner R Bernhard, Swiss Federal Institute of Technology, Switzerland (1990)
Inokuchi H, National Space Development Agency of Japan, Japan (1999)
Inoue Akihisa, Tohoku University, Japan (2001)
Interante L V, Rensselaer Polytechnic, USA (1994)
Jagdish Narayan, North Carolina State University, USA (2000)
Jain S C, IMEC, Belgium (2001)
Jansen Martin, Max-Planck Institut Fur Festkoerperforschung, Germany (2002)
Jayaraman A, Carnegie Institution of Washington, USA (1990)
Kaldis E, Laborotium Fur Festkoerperphysic, Switzerland (1992)
Karasz Frank, University of Massachusetts, USA (2003)
Kawazoe Yoshiyuki, Tohoku University, Japan , (2002)
Kenneth H Jack, FRS, Cookson Group PLC, UK,(1991)
Khabibullaev P K, Uzbek Academy of Sciences, Uzbekistan (1992)
Kitazawa Koichi, University of Tokyo, Japan, (1991)
Kiyotaka Wasa, Japan (1991)
Knut Urban, am Institut fur Festkorperforschung, Germany (2000)
Koinuma H, Tokyo Institute of Technology, Japan (1996)
Kolster B H, Netherlands (1992)
Kroening M, Frankfurt Institute of Non-Destructive Testing, Germany (2000)
Kroto H W, University of Sussex, UK (1992)
Kuo K H, Chinese Academy of Sciences, China, (1991)
Kuznetsov F A, Institute of Inorganic Chemistry, Russia (1990)
Li Heng-De, Tsinghua University, China (1990)
Lange Fred, University of California, USA (2000)
Livage J, Universite Pierre et Marie Curie , France (1995)
Luecke Kurt, Netherlands (1993)
Mackay A L, University of London, UK (1993)
Mahajan Subash, Carnegie Mellon University, USA (1991)
Margolin Harold, Brooklyn Polytechnic University, USA (1995)
Masahiro Yoshimura, Tokyo Institute of Technology, Japan (2003)
Masumoto T, The Research Institute for Electric and Magnetic Materials, Japan (1995)
Matthew Tirrell, University of California, USA (2004)
McHenry Michael E, Carnegie Mellon University, USA (1998)
Merzhanov A G, Institute of Structure Macrokinetics & Materials Science, Russia (1997)
Metzner Arthur B, University of Delaware, USA (1991)
Mordike Barry L, University of Malta, Europe, (1991)
Mukherjee Amiya, University of California, USA (1997)
Narayanamurthy V, Harvard University, USA, (1995)
Newnham R E, The Pennsylvania State University, USA (1993)
Niihara Koichi, Osaka University, Japan (2001)
Nishijawa J I, Semiconductor Research Institute, Japan (1992)
Ossipiyan Yu A, Russian Academy of Sciences, Russia (1991)
Parrinello M, Max-Planck-Institut fur Festkoerperforschung, Germany (1999)
Patel C K N, Pranalytical Inc, USA (1991)
Pouchard M, Institut Universitaire de, France, (1994)
Ramdas A K, Purdue University, USA (1990)
Rao Tummala R, Georgia Institute of Technology, USA (1992)
Rath Bhakta B, Naval Research Laboratory, USA (1990)
Raveau Benard, University De Caen, France (1991)
Roberts M W, Cardiff University, UK (1994)
Roesky H W, Universitat Gottingen, Germany, (1997)

Rousset A, Universite Paul Sabatier, France (1993)
Roy Rustum, The Pennsylvania State University, USA (1990)
Ruehle M, Max-Plank Institut fur Metallforschung, Germany (1995)
Sellars C M, The University of Sheffield, UK, (1994)
Shechtman D, Technion, Israel (1997)
Shichang Zou, Chinese Academy of Sciences, China (1992)
Siegel R W, Rensselaer Polytechnic Institute, USA (1992)
Siffert Paul, University of Strasbourg, France (1990)
Sinha Sunil K, Argonne National Laboratory, USA (2001)
Sleight A W, Oregon State University, USA (1995)
Smalley R E, Rice University, USA (1992)
Somasundaran P, Columbia University, USA (1991)
Somiya Shigeyuki, Nishi Tokyo University, Japan (1990)
Subramanian M A, Dupont Company, USA (2002)
Subra Suresh, MIT, USA (1996)
Tanaka K, Joint Research Center for Atom Technology (JRCAT), Japan (1993)
Taplin D M R, University of Plymouth, UK (1993)
Tarascon J M, Universitat Picardie, France (1996)

Thomas G, University of California, USA (1994)
Thomas J M, The Royal Institute of Great Britain, UK (1993)
Tokura Y, University of Tokyo, Japan (1997)
Tsechiang Hsiao, Northeast University, China, (1995)
Underhill A E, University College of North Wales, UK (1995)
Vallet Regi, Universidad Complutense De Madrid, Spain (1997)
Vijh Ashok K, Institute De Recherche, d' Hydro-Quebec, Canada (1991)
Vincenzini P, National Research Council, Italy (1992)
West A R, The University of Sheffield, UK (1994)
Whitesides George M, Harvard University, USA (1999)
Williams David F, University of Liverpool, UK, (1990)
Williams J S, Royal Melbourne Institute of Technology Australia (1992)
Windle Alan, University of Cambridge, UK (2003)
Wu Ping-Tien, Asia Chemical Corporation, Taiwan (1992)
Yacaman M J, Institute De Fisica, Mexico (1992)
Zhao Z X, National Lab for Superconductivity, China (1991)

ANNUAL GENERAL MEETINGS

Sl. No.	AGM	Venue	Organizers
1.	1990	National Chemical Laboratory, Pune	<i>Chairman:</i> R A Mashelkar
2.	1991	National Physical Laboratory, New Delhi	<i>Chairman:</i> S K Joshi <i>Secretary :</i> B K Das
3.	1992	Indian Institute of Science, Bangalore	<i>Chairman:</i> Ranganathan S <i>Convenor:</i> A M Umarji
4.	1993	Regional Research Laboratory, Thiruvananthapuram	<i>Chairman:</i> A D Damodaran
5.	1994	Research Centre, Imarat, Hyderabad	<i>Chairman:</i> S L N Acharyulu
6.	1995	Indian Institute of Technology, Kharagpur	<i>Chairman:</i> K L Chopra <i>Convenor:</i> H D Banerjee
7.	1996	Indian Institute of Science, Bangalore	<i>Chairman :</i> A K Singh
8.	1997	Bhabha Atomic Research Centre, Mumbai	<i>Chairman :</i> C K Gupta <i>Secretary :</i> G E Prasad
9.	1998	Indian Institute of Technology, Chennai	<i>Chairman :</i> R Natarajan
10.	1999	Regional Research Laboratory, Bhopal	<i>Convenor :</i> T C Rao
11.	2000	Sardar Patel University, Vallabh Vidyanagar	<i>Chairman :</i> V S Patel <i>Convenor :</i> L M Manocha
12.	2001	Saha Institute of Nuclear Physics, Kolkata	<i>Convenor :</i> M K Sanyal
13.	2002	Defence Metallurgical Research Laboratory, Hyderabad	<i>Convenor :</i> D Banerjee
14.	2003	Bhabha Atomic Research Centre, Mumbai	<i>Chairman :</i> Ashok Misra
15.	2004	Banaras Hindu University, Varanasi	<i>Convenor :</i> S Lele
16.	2005	National Chemical Laboratory, Pune (to be held)	<i>Convenor :</i> S Sivaram

Patron Membership

Professional Societies, Research bodies, Laboratories and Companies willing to support activities of MRSI (through a one-time contribution of Rs. 25,000/- are enrolled as Patron members by the Council of the MRSI.

Privileges of Patron Members

- Publication of their names in MRSI Newsletter
- Free supply of all periodicals published by MRSI such as:
 - Bulletin of Materials Science
 - MRSI Newsletter / MRSI Update
- 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 V Subramanyam
Vice President - General Secretary
Dept. of Physics, IISc
Bangalore 560 012

Email : svsmrsi@physics.iisc.ernet.in
svs@physics.iisc.ernet.in

Printed at Navbharath Enterprises, Seshadripuram, Bangalore - 560 020, India. Ph : 2336 4142 / 2336 4682

Book Post / Newsletter

From:

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