



MRSI Newsletter

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

Volume B 03, Number 4

October 2003

From the Editors' Desk

The Fifteenth Annual General Meeting of MRSI will be held at Varanasi. "**Light and Smart Structural Materials**" will be the theme for the special symposium which is being organized for the occasion. This is the first time the meeting venue shifts to Varanasi, probably the oldest living city.

It is heartening to note the coverage of the fourteenth AGM held at Mumbai, in the MRS Bulletin / Facets. This has been reproduced in this issue for the benefit of our members.



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
AGM-MRSI	2
Article reproduced from MRS Bulletin/August 2003	3
New Members	4
New Book	6
Calendar of Events (Oct 03-June 04)	6
Students' Projects	7
Patron Membership	8

MRSI NEWSLETTER

Volume B 03, Number 4

October 2003

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.

P Rama Rao	Dr. Nayudamma Memorial Gold Medal for 2003 by Andhra Pradesh Academy of Sciences.
S V Suryanarayana	A.P. Scientist Award-2003 by Govt of Andhra Pradesh
K Chattopadhyay	Elected to the International Relations Committee of MRS
R Ramachandra Rao	Sir C. V. Raman Young Scientist Award for the year 2000
S Sivaram	Vishwakarma Medal by the Indian National Science Academy, New Delhi for 2003
Ashutosh Sharma	Shanti Swarup Bhatnagar Award in Engineering Sciences 2002
Atul Choksi	Shanti Swarup Bhatnagar Award in Engineering Sciences 2003

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

MRSI-AGM AT VARANASI DURING FEBRUARY 2004

The 15th AGM of MRSI will be held at Banaras Hindu University, Varanasi during February 9-11, 2004. The AGM will have a Theme Symposium on “*Light and Smart Structural Materials*” and the following Award/Prize Lectures and Medal Lectures.

Distinguished Materials Scientist of the Year Award Lecture :

Prof. T V Ramakrishnan, IISc, Bangalore / BHU, Varanasi

MRSI-ICSC Superconductivity & Materials Science Annual Prize Lectures:

Dr. Dhananjay Pandey (BHU, Varanasi)
Prof. S B Krupanidhi (MRC, IISc Bangalore)

MRSI Medal Lectures

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

The first announcement of the AGM of MRSI has been released. Members of MRSI and other scientists/technologists/students are encouraged to send abstracts of contributed papers to *15th MRSI AGM Secretariat, Department of Metallurgical Engineering, Centre for Advanced Study, Institute of Technology, Banaras Hindu University, Varanasi 221 005 Email: mrsi2004@bhu.ac.in*. The last date for the receipt of abstracts is **30th November, 2003**.

MRS-I Emphasizes Polymeric Materials and Ion-Beam Processing of Materials at 2003 Conference*

Published jointly with Facets 2 (3) (2003) p. 29.

The 14th Annual General Meeting of the Materials Research Society of India (MRS-I) was held in Mumbai (Bombay), India, February 11-13, 2003. The meeting, which took place at the Bhabha Atomic Research Centre (BARC), was convened by S. Banerjee (BARC), who chairs the Mumbai Chapter of MRS-I and Ashok Misra (Indian Institute of Technology), who chaired the organizing committee. A symposium on novel polymeric materials

and a mini-symposium on ion-beam processing of materials were special features. This event followed a scientific meeting of the Asia Pacific Academy of Materials (APAM) – India, of which MRS-I is a founding member and to which MRS-I has retained a strong connection. APAM was held February 10 at the Homi Bhabha Centre for Science Education of the Tata Institute of Fundamental Research in Mankhurd.

R. Chidambaram, principal scientific secretary to the government of India, opened the meeting. In his address, he emphasized the need to apply modern materials to the development of rural industry. He also released a compilation, titled “Materials Research in BARC: Highlights,” which was specially prepared for this occasion. In the keynote address, Anil Kakodkar, chair of the Atomic Energy Commission and secretary to the

Materials Research Society of India (MRS-I) Honors, Medals, and Awards for 2003

Distinguished Materials Scientist of the Year

A.K. Barua, Indian Association for the Cultivation of Science, Kolkata (Calcutta)

Distinguished Lectureship

S. Sivaram, National Chemical Laboratory, Pune

MRS-I-ICSC Superconductivity and Materials Science Annual Prize

S. Banerjee, Bhabha Atomic Research Centre, Mumbai (Bombay)

B.M. Arora, Tata Institute of Fundamental Research, Mumbai

MRS-I Medals

A. Bharathi, Indira Gandhi Centre for Atomic Research, Kalpakkam

Bhupendra N. Dev, Institute of Physics, Bhubaneswar, Orissa State

Devang V. Khakhar, Indian Institute of Technology, Mumbai

G.P. Kothiyal, Bhabha Atomic Research Centre, Mumbai

K. Jyothindra Kumar, Government Dental College, Thiruvananthapuram

A.N. Maitra, University of Delhi

R. Mitra, Indian Institute of Technology, Kharagpur

A. Narayanasamy, Madras University, Chennai

C.K.S. Pillai, Regional Research Laboratory, Thiruvananthapuram

Shanker Ram, Indian Institute of Technology, Kharagpur

Murali Sastry, National Chemical Laboratory, Pune

S.S. Sekhon, Guru Nanak Dev University, Amritsar

Amarnath Sen, Central Glass and Ceramic Research Institute, Kolkata

G.N. Subbanna, Materials Research Centre, Indian Institute of Science, Bangalore

Best Paper Prize (for a publication in Bulletin of Materials Science)

S. Abiraman, H.K. Varma, T.V. Kumari, P.R. Umashankar and A. John (Biomedical Technology Wing, Sree Chitra Tirunal Institute of Medical Science & Technology,



(Front row, left to right): D.V. Khakhar, A. Sen, A. Bharathi, B.M. Arora, D. Chakravorty, R. Chidambaram, A.K. Barua, S. Banerjee, and B.N. Dev; (back row, left to right): G.N. Subbanna, S. Ram, S.S. Sekhon, K.J. Kumar, G.P. Kothiyal, R. Mitra, M. Sastry, A. Narayanasamy and C.K.S. Pillai

Poojapura, Thiruvananthapuram), “Preliminary in vitro and in vivo Characterization of a Sol-Gel Derived Bioactive Glass-Ceramic System,” *Bulletin of Materials Science* 25 (5) (2002), p. 419

Best Poster Prize (presented during the Annual General Meeting)

B. Gouri, C.P. Reghunadhan, R. Ramaswamy, and K.N. Ninan (Vikram Sarabhai Space Centre, Thiruvananthapuram), “High-Temperature Adhesives Based on Alderene Thermoset”

Y. Kashyap, P.S. Karkar, R.S. Rao, A. Sinha, and B.K. Godwal (Bhabha Atomic Research Centre, Mumbai), “A Simulation Study of Atomic Resolution X-Ray Holography”

A. Mondal and S. Ram (Indian Institute of Technology, Kharagpur), “Al₂O₃ Stabilized t-ZrO₂ in Nanoparticles with Transparent Amorphous Polymeric Gel by Hydrolysis in Aqueous Solution”

S. Choudhury, G.K. Dey, and J.V. Yakhmi (Bhabha Atomic Research Centre, Mumbai), “Crystallization of Cobalt-Hexacyanoferrate under the Langmuir Monolayer”

* Reproduced by permission from MRS Bulletin, 28 No. 8 (2003) 597-8

government of India, discussed challenges and opportunities for materials research and development (R&D) in the Indian nuclear program and addressed the importance of nuclear materials. D. Chakravorty, president of MRSI-I and professor at the Indian Association for the Cultivation of Science, Kolkata (Calcutta), gave the presidential address, focusing on new nano-sized effects in glass ceramics. On the second day of the meeting, A. Windle (University of Cambridge, UK) delivered a special evening lecture titled "Carbon Nanotubes Under Stress".

An awards ceremony was held on February 11, and the nearly 360 participants were treated to award talks throughout the meeting (see sidebar). In addition, there were ~200 contributed presentations, grouped into four categories: (1) polymers; (2) thin films, surfaces and interfaces; (3) glasses and ceramics; and (4) materials processing and characterization.

The symposium on novel polymeric materials emphasized electro-optical properties, fuel cells, polymeric nanocomposites, thermoplastics, ionomers, polyolefins, conducting polymers,

polymers with embedded information and radiation processing of polymers.

Ion-beam processing of materials has become very important in recent years, not only because it affects controlled surface and bulk modifications, but also because it is a good tool for synthesis and organization of nanomaterials. Focused ion-beam processing has been widely used for producing patterns as small as ~50 nm on substrates. These aspects were discussed in the mini-symposium on ion-beam processing of materials, as part of the meeting.

New Members

Enrolled between July 1 and September 30, 2003

Life Members

Kanagaraj Subramani (LM B556)
Cryogenic Engineering Centre
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-283588, Fax: 03222-282258
Email: skanaga@hijli.iitkgp.ernet.in

Girish Suresh Galgali (LM B559)
201, Saraswati Sadan
Rambang Colony, Kothrud
Pune 411 029
Email: ggalgali@yahoo.com

Shashi Kumar Sinha (LM B562)
C/o Shri Rajkumar Narayan Sinha
AT-BARI Bazar, (Kalloo Bara)
Behind Teachers Association
P.O & District, **Munger 811 201**
Tel: 0641-2420482
Email: sinhask@lycos.com

Balram S (LM B565)
Biomedical Technology Wing
Sree Chitra Tirunal Institute of Medical
Sciences & Technology, Poojapura
Thiruvananthapuram 695 012
Tel: 0471-2340801, Fax: 0471-2341814
Email: balrams@sctimst.ac.in

Parvesh Agrawal (LM B557)
Central Glass & Ceramic Research
Institute, Naroda Centre, 168-169, G I D C,
Naroda, **Ahmedabad 382 330**
Tel: 079-2823345, Fax: 079-2822052

Tapan Kumar Nath (LM B560)
Department of Physics & Meterology
Indian Institute of Technology
Kharagpur 721 302
Tel: 03222-283862, Fax: 03222-255303
Email: tnath@phy.iitkgp.ernet.in

Purushotham Yadoji (LM B563)
Centre for Materials for Electronics
Technology
IDA Phase-II, Cherlapally, HCL (P.O)
Hyderabad 500 051
Tel: 040-27262437, Fax: 040-27261658
Email: ypurushotham@yahoo.com

Narendra Babanrao Dhokey (LM B566)
Dept. of Metallurgical Engineering
Government College of Engineering
Pune 411 005
Tel: 020-5512535 / 537, Fax: 020-5512644
Email: nbdhokey@yahoo.co.in

Bhupendra N Dev (LM B558)
Institute of Physics
Sachivalaya Marg
Bhubaneswar 751 005
Tel: 0674-2301058, Fax: 0674-2300142
Email: bhupen@iopb.res.in

Debabrata Basu (LM B561)
Oxide & Bio-Ceramics Section
Central Glass & Ceramic Research
Institute, Jadavpur, **Kolkata 700 032**
Tel: 033-2473-3469/96/76/77
Fax: 033-2473-0957
Email: dbasu@cgcri.res.in

Monjoy Sreemany (LMB 564)
SEM-ESCA Section
Central Glass & Ceramic Research Institute
196, Raja S C Mullick Road
Kolkata 700 032
Tel: 033-24733469 Ext. 3201,
Fax: 033-4730957
Email: m_sreemany@cgcri.res.in

Sandeep Prabhakar Butee (LM B567)
F-8, 18 Queen's Garden
Government Quarters, **Pune 411 001**
Tel: 020-5512535, Fax: 020-5512644
Email: sandeepbutee@yahoo.com

Ramesh Krishna Ambegaonkar (LMB568)
8, Friends Paradise, Shirale Road
Pune 411 004
Tel: 020-5512474

Sarah Pasala (LMB571)
CVR College of Engineering
Vastunagar, Mangalpalli
R R District 501510
Tel: 08414-252667, Fax: 08414-252396
Email: pasala_sarah@yahoo.com

Annual Members

Rao Chandrasekhar Inaganti (AM B044)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201757, Fax: 0487-2201347
Email: ic_rao@yahoo.com

Viswanathan Kumar (AM B047)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201156, Fax: 0487-2201347
Email: vkumar10@yahoo.com

Sankara Narayanan Potty (AM B050)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201156, Fax: 0487-2201347
Email: snpotty@yahoo.com

Pratyusha Priyambada Ravlo (AM B053)
Room No C-117, Ladies Hall of Resi-
dence, National Institute of Technology
Rourkela 769 008
Tel: 0661-2474117
Email: pratyusha_pr@rediffmail.com

Umapasrad Mohanty (AM B056)
National Institute of Technology
Rourkela 769 008
Tel: 0661-2648216
Email: umapasradmohanty@yahoo.com

Suvarna Uday Dangarikar (AM B059)
Dept. of Metallurgy
Government College of Engineering
Shivajinagar, **Pune 411 005**
Tel: 020-5512474
Email: spm@meta.coep.org.in

Vaishali Vikas Patil (AM B062)
Dept. of Applied Science
Government College of Engineering
Shivajinagar, **Pune 411 005**
Tel: 020-5512535/2402, Fax: 022-5512644

Shashikant Tukaram Vagge (LMB569)
44/4A/1A, Vidyanagar, Road # 3
Behind Shri Ram Residency Apartments
Pimple Gurav (New Sangvi), **Pune 411 027**
Tel: 020-5512474, Fax: 020-5512644
Email: stv@meta.coep.org.in

Sourav Pal (LMB572)
Physical Chemistry Division
National Chemical Laboratory
Pune 411 008
Tel: 020-5893044, Fax: 020-5893044
Email: pal@ems.ncl.res.in

Sasi Dharan P (AM B045)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201156
Email: sasipd@yahoo.com

Ratheesh Ravendran (AM B048)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201156, Fax: 0487-2201347
Email: ratheeshr@yahoo.com

Prasad L V (AM B051)
Materials Chemistry Division
National Chemical Laboratory
Pune 411 003
Tel: 020-5893300, Fax: 020-5893044
Email: blvprasad@dalton.ncl.res.in

Tapan Kumar Mishra (AM B054)
National Institute of Technology
P.O Uchapada, Dist. Cuttack
Rourkela 769 008
Tel: 0661-2471752
Email: timidtapam@epatra.com

Subhash Laxman Bapat (AM B057)
1/8 Lake View Park
Sutarwadi, Pashan, **Pune 411 001**
Tel: 020-5512535
Email: profbapat@yahoo.com

Manisha Yogesh Khaladkar (AM B060)
Dept. of Applied Science
Government College of Engineering
Shivajinagar, **Pune 411 005**
Tel: 020-5512535/2402
Email: dr_manisha@hotmail.com

Pratik Kumar Ray (LMB570)
C-6, NIT campus, **Rourkela 769 008**
Tel (Res): 0661-2473415
Email: prat_kray@yahoo.com

Prakash Lakshmaiah Tirthalli (LMB573)
Director, Centre for Materials for
Electronics Technology,
Cherapally P.O, **Hyderabad 500 051**
Tel: 040-27265673, Fax: 040-27261658
Email: cmethd@hd2.dot.net.in

Dayas K R (AM B046)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201156 to 59
Fax: 0487-2201347
Email: krdayas@hotmail.com

Dileep Kumar C J (AM B049)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-2201156-59

Raghu Natarajan (AM B052)
Centre for Materials for Electronics
Technology, P.O Athani
Thrissur 680 771
Tel: 0487-201156 to 59, Fax: 0487-201347
Email: rkg124@rediffmail.com

Paresh Chandra Patra (AM B055)
National Institute of Technology
Rourkela 769 008
Tel: 0661-2471755
Email: Paresh_2k1@yahoo.com

Neelam Raj Anand (AM B058)
104, Brahma Courts
73/76 Sahney Sujan Park, **Pune 411 040**
Tel: 020-5512535
Email: Anand_neelam@rediffmail.com

Jayant Ambadas Kher (AM B061)
Dept. of Metallurgy
Government College of Engineering,
Shivajinagar, **Pune 411 005**
Tel: 020-5512535
Email: drjakher@hotmail.com

A NEW BOOK !!

(released under the aegis of Materials Research Society of India)

MATERIALS RESEARCH:CURRENT SCENARIO AND FUTURE PROJECTIONS

Editors : R Chidambaram & S Banerjee

About the Book

- contains 31 reviews of modern materials
- covers wide range of materials like liquid crystals, aerogels, superalloys, refractory metals, rare earths, metal matrix composites and carbon based materials
- highlights developments made in India

Publishers : M/s Allied Publishers India (Pvt) Ltd, New Delhi

Number of Pages : 679

Cost of the Book

for Indian Clients : Rs. 900/- + postage charges

for Overseas Clients : US \$ 45 + US \$ 15 (registered air mail charges) = US \$ 60 Nett

CALENDAR OF EVENTS, OCT 2003-JUNE 2004

October 7-9, 2003, ISDTRD-2003, International Seminar on Downsizing Technology for Rural Development, S Khuntia, Convenor ISDTRD-2003, Regional Research Laboratory, Bhubaneswar 751 013, Orissa, Tel: 0674-2581636/638/639 Ext. 522, 307, 340, Fax: 0674-2581637/2581160, Email: khuntias@yahoo.com / skhuntia@rrlbhu.res.in, Website: www.rrlbhu.res.in/isdtrd

October 8-13, 2003, IUMRS-ICAM 2003, Prof. Atsushi SUZUKI / Ms. Rumino MURO / Ms. Kyoko YOSHIMI, C/o Prof. A Suzuki's Laboratory, Faculty of Environment and Information Sciences & Dept. of Materials Science, Yokohama National University, 79-7, Tokiwadai, Hodogaya-ku, Yokohama 240-8501, Japan, Tel: +81-45-339-4305, Email: icam2003@ynu.ac.jp, website: <http://www.mrs-j.org/ICAM2003>

October 11-12, 2003, 17th National Convention of Metallurgical and Materials Engineers and National Seminar on Emerging Materials for Wear Applications, Dr. O P Modi, The Organizing Secretary, The Institution of Engineers (India), M P State Centre, Dr. M Visvesvaraya Marg, Habibganj, Bhopal 462 024, Tel: 0755-2506387, 2784572, 2485085, Fax: 0755-2587042, 2488323, Email: ieimpsc@sancharnet.in, om_prakashmodi@hotmail.com

November 2-5, 2003, PRICM, The Fifth Pacific Rim International Conference on Advanced Materials and Processing, Conference Secretariat, The Chinese Society for Metals, 46 Dongsixi Dajie, Beijing 100711, China, Tel: +86-10-62186661, Fax: +86-10-62180161, +86-10-65124122, Email: csm@pubilc.bta.net.cn, Website: www.csm.org.cn/pricm5/

November 3-6, 2003, International Conference on Advances in Surface Treatment: Research & Applications (ASTRA-2003), Conference Secretariat-ASTRA 2003, International Advanced Research Centre for Powder Metallurgy & New Materials (ARC-I), P.O Balapur, Hyderabad 500 005, Tel: 040-24441077 / 24443167, Fax: 040-24442699 / 24443168, Email: info@astra-2003.org, Website: www.astra-2003.org

November 18-20, 2003, Second National Symposium on PLD of Thin Films (PLD-2003), Dr. Chandra Prakash, Convenor, PLD-2003, Solid State Physics Laboratory, Lucknow Road, Timarpur, Delhi 110 054, Email: pld@vsnl.com

December 1-13, 2003, Winter School on Nonlinear Optics: Theory and Applications (NLO-2003), Dr. K Porsezian, Raman School of Physics, Pondicherry University, Pondicherry 605 014, Tel: 0413-2655991 Ext. 494, Email: ponzsol@yahoo.com, website: <http://www.pondiuni.org/nlo2003>

December 12-15, 2003, 4th Asian Meeting on Ferroelectrics, Conference Secretary of AMF 2003, Materials Research Centre, Indian Institute of Science, Bangalore 560 012, INDIA. Fax: 080-3600683/3600085, Email: amf4@mrc.iisc.ernet.in

December 16-20, 2003, Twelfth International Workshop on the Physics of Semiconductor Devices, The Secretary, Twelfth IWPSD, Department of Electrical Engineering, IIT Madas, Chennai 600 036, Tel: 91-044-2578383, 2578362, Fax: 91-044-2570545, 2578383, Email: dasgupta@iwpsd.net / iwpsd@ee.iitm.ernet.in

December 17-19, 2003, International Conference on Nano Science and Technology, ICONSAT 2003, The Convener, ICONSAT, Surface Physics Division, Saha Institute of Nuclear Physics, 1/AF, Salt Lake, Kolkata 700 064, Fax: 033-23374637, Website: <http://surf.saha.ernet.in/icosat>

December 17-19, 2003, The Second Asian Particle Technology Symposium (APT 2003), The Secretariat APT-2003, Department of Chemical & Process Engineering, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, Malaysia, Email: apt@vlsi.eng.ukm.my, Web: <http://www.eng.ukm.my/apt>

December 22-23, 2003, INAE Conference on Nanotechnology (ICON-2003), Dr. M.J. Zarabi, Chairman, Organizing Committee,, ICON-2003, Central Scientific Instruments Organization (CSIO), Chandigarh

December 22-24, 2003, DAE-BRNS National Laser Symposium, Dr. A K Nath, Convener NLS-2003, Head, ICL, Section B Block, CAT, Indore 452 013, Tel: 0731-2488385, Fax: 0731-2488380, Email: aknath@cat.ernet.in and Dr. P K Datta, Co-convener, Assistant Professor, Department of Physics & Meteorology, Indian Institute of Technology, Kharagpur 721 302, Tel: 03222-283860, Fax: 03222-282286, 282700, 255303, Email: pkdatta@phy.iitkgp.ernet.in

January 8-10, 2004, XXXIII National Seminar on Crystallography, Dr. C G Suresh and Dr. Mohan M Bhadbhade, Joint Conveners, XXXIII NSC Office, Division of Biochemical Sciences, National Chemical Laboratory, Dr. Homi Bhabha Road, Pune 411 008, Tel: 020-5893034, Fax: 020-5884032, Email: nsc33@ems.ncl.res.in

January 12-16, 2004, Mechanical Behaviour of Systems at Small Length Scales, Prof. V Jayaram, Department of Metallurgy, Indian Institute of Science, Bangalore 560 012, Tel: 91-080-2932263, Email: qjayaram@metallrg.iisc.ernet.in, Website: <http://metallrg.iisc.ernet.in/~workshop/>

February 9-28, 2004, SERC School on Methods in Materials Characterization, Dr. A K Tyagi, Materials Science Division, IGCAR, Kalpakkam 603 102, Tel & Fax: 04114-280081, Email: akt@igcar.ernet.in

February 23-25, 2003, National Conference on Materials and their Applications (NCMA-2004), Prof. Nafa Singh, Convener, NCMA-2004, Department of Physics, Kurukshetra University, Kurukshetra 136 119, Haryana, Fax: 01744-238277, Email: physik@granth.kuk.ernet.in

May 30-June 4, 2004, 3rd International Conference on Computational Modeling and Simulation of Materials and Special Symposium on Modeling and Simulating Materials Nanoworld, Climtec, P O Box 174-48018 Faenza-Italy, Tel: +0546 22461, Fax: +0546 664138, website: www.technagroup.it/modeling.htm

June 14-18, 2004, International Conference on Mechanochemical Synthesis and Sintering, Prof. N Lyakhov, Institute of Solid State Chemistry & Mechanochemistry, Kutateladze 18, Novosibirsk 630 128, Russia, Tel: 7(383-2) 32 86 83, Fax:7(383-2)32 28 47, Email: conf@solid.nsc.ru, Website:<http://www.solid.nsc.ru/MSS2004>

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”

Students' Projects

MRSI will partially support upto 10 projects of students (B.Tech, M.Tech, ME, Ph.D) in the area of Materials Science & Technology under the supervision of a MRSI member. Proposals are invited before **November 15th 2003**.

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 : 3364142 / 3364682

Book Post / Newsletter

From:

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