# **MATERIALS CALENDAR**

The Complete Guide To Technical Meetings Of Interest To The Materials Science Community

Exclusively in the MRS BULLETIN, notices of all major technical meetings of interest to the materials community have been brought together into a single, comprehensive calendar by the Materials Research Society. Prepared by Julia Phillips of AT & T Bell Laboratories, the calendar is continuously updated and appears in every issue of the BULLETIN.

Meetings sponsored by or affiliated with the Materials Research Society appear in boldface type.

#### AUGUST 1984

- 1-3 The Physics of VLSI Palo Alto, CA
  K. Saraswat, McCullough 118, Stanford Univ., Stanford, CA
  94305 (415) 497-2956
- 1-3 3rd International Conference on MBE San Francisco, CA
- 1-4 Topical Conference on Optical Effects in Amorphous Semiconductors Salt Lake City, UT W. W. Havens, Jr., 335 E 45 St., New York, NY 10017 (212) 661-9404
- 2-3 Spectroscopy of Shallow Centers in Semiconductors UC Berkeley, CA
- 4-14 27th International Geological Congress Moscow, USSR
   Sec., 27th Int. Geological Cong., Inst. of Lithosphere, Academy of Sciences, 22 Staromonetry, Moscow 109180, USSR
- 6-10 International Conference on the Physics of Semiconductors San Francisco, CA
  R. Z. Bachrach, Xerox Palo Alto Res. Ctr., 3333 Coyote Hill Road, Palo Alto, CA 94304
- 12-17 Meeting of the Electron Microscopy Society of America Detroit, MI
  C. E. Lyman, Central Research & Development Dept.,
  E. I. DuPont, Experimental Sta., Wlimington, DE 19898 (302) 772-4887
- 13-16 1st International Conference on the Structure of Surfaces Berkeley, CA
  M. A. VanHove, Dept. of Chem., Univ. of CA, Berkeley, CA
  94720
- 13-16 International Conference on Superlattices, Microstructures and Microdevices Champaign-Urbana, IL
   J. D. Dow, Dept. of Phys., Univ. of Notre Dame, Notre Dame, IN 46556 (219) 239-6407

- 13-17 13th International Conference on Defects in Semiconductors Coronado, CA
- 13-17 6th International Conference on Thin Films Stockholm, Sweden
  S. Berg, ICTF-6, Inst. of Tech., Uppsala Univ., Box 534, 751 21 Uppsala, Sweden
- 13-17 International Conference on Luminescence Madison, WI
   W. H. Yen, Dept. of Physics, 1150 Univ. Av., Madison, WI 53706
- 13-18 8th European Conference on Electron Microscopy Budapest, Hungary Congress Bureau, MOTESZ, Budapest, POB32, H-1361, Budapest, Hungary
- 15-17 International Conference on Progress in Optical Physics ICO-Australian Acad. of Science Melbourne, Australia
  I. J. Wilson, CSIRO Div. of Chem. Phys., PO Box 160, Clayton, Vic., Australia 3168
- 15-22 17th International Conference on Low Temperature Physics Karlsruhe, FRG
  H. Hinsch, LT-17 Conf. Sec., Kernforschungszentrum, Postfach 3640, 7500 Karlsruhe, FRG
- 19-22 AIChE Summer National Meeting Philadelphia, PA AIChE, Meetings Dept., 345 E. 47 St., New York, NY 10017 (212) 705-7320
- 20-24 International Conference on Defects in Insulating Crystals Salt Lake City, UT
  F. Luty, Dept. of Phys., Univ. of Utah, Salt Lake City, UT 84112 (801) 581-7446
- 26-29 International Topical Meeting on Fuel Reprocessing and Waste Management Jackson Hole, WY
   W. McClure, PO Box 3807, Idaho Falls, ID 83401
- 26-31 188th National Meeting of the American Chemical Society Philadelphia, PA American Chem. Soc., 1155 16th St., NW, Washington, DC 20036
- 27-31 3rd International Conference on Solid Films and Surfaces Sydney, Australia
  D. J. Miller, Sch. of Phys., Univ. of New South Wales, POB 1, Kensington, NSW 2033 Australia
- 27-31 6th General Conference of the European Physical Society Prague, Czechoslovakia Phys. Sec., Union of Czech. Mathematicians & Physicists, Na Slovance 2, 182 00, Prague 8, Czech.
- 29-31 3rd International Symposium on Physical Metallurgy of Cast Iron Stockholm, Sweden Secretariat, Symposium on Cast Iron CI 3, Materials Research Center, Royal Institute of Technology S-100 44 Stockholm, Sweden

 29-31 Conference on the Mechanical Characterization of Load Bearing Fiber Composite Laminates Brussels, Belgium Prof. A. Cardon, Faculty of Applied Science Telephone: 32-2-641-2923

#### SEPTEMBER 1984

- 3-7 Sth International Conference on Rapidly Quenched Metals Wurzburg, FRG RQ 5, Postfach 2253, D-6450 Hanau, FRG
- 4-7 International Conference on Fatigue Birmingham, England
- 10-13 8th International Symposium on Chemical Reaction Engineering Edinburgh, Scotland Dept. ISCRE, Conference Section, The Institution of Chemical Engineers, 165-171 Railway Terrace, Rugby, Warwickshire CV21 3HQ, England
- 10-14 5th International Titanium Conference Munich, West Germany
- 12-13 Symposium on Solidification Fundamentals Cleveland, OH
   J.F. Wallace, Dept. of Metallurgy & Materials Science Case Western Reserve University Cleveland, OH 44106
- 13-14 Kinetics and Mass Transport of Silicate & Oxide Systems London, UK
   R. Freer, Dept. Electrical & Electronic Eng., North Staffordshire Polytech., Beaconside, Stafford ST18 OAD
- 17-20 TMS-AIME Conference Detroit, MI
- 17-21 International Conference on Surface Modification of Metals by Ion Beams Heidelberg, West Germany
- 17-21 9th European Conference on Thermophysical Properties Manchester, UK
   Mtg. Officer, IOP, 47 Belgrave Sq., London SW1X 8QX, UK
- 17-21 7th International Conference on Textures of Materials The Netherlands Conf. Sec., PO Box 390, NL 3330 AJ Zwijndrecht, The Netherlands
- 23-28 International Conference on the Science of Hard Materials Rhodes, Greece
- 25-28 Energy Pulse Modification of Semiconductors & Related Materials Dresden, GDR
   H. U. Jager, Centralinstitut fur Dernforschung, Rossendorf, 8051 Dresden, Postfach 19, GDR

#### **OCTOBER 1984**

- 7-12 Fall Meeting of the Electrochemical Society New Orleans, LA The Electrochemical Society 10 S. Main St, Pennington, NJ 08534-2896
- 9-11 Conference on Advances in Materials Technology for the Process Industries Atlanta, GA Dale Miller, Deputy Executive Dir. for Public Affairs, Natl. Assoc. of Corrosion Engineers, PO Box 218340, Houston, TX 77218

- 9-12 37th Gaseous Electronics Conference Boulder, CO
  W. W. Havens, Jr., 335 E. 45 St., New York, NY 10017 (212) 661-9404
- 21-26 5th International Meeting on Radiation Processing San Diego, CA
   J. Silverman, PO Box 3060, Woburn, MA 01888
- 29-2 Optical Society of America Annual Meeting San Diego, Ca
   Optical Society of America, 1816 Jefferson Pl., NW, Washington, DC 20036
- 29-2 Meeting of the Division of Plasma Physics of the American Physical Society Boston, MA
  W.W. Havens, 335 E. 45th St., New York, NY 10017
- 31-2 4th International Conference on Ferrites San Francisco, CA

A dozen meetings added Since the last BULLETIN issue

#### NOVEMBER 1984

- 12-14 8th Conference on the Application of Accelerators in Research and Industry Denton, TX
  J. L. Duggan Physics Dept., North Texas State Univ., NT Box 5368, Denton, TX 76203 (817) 565-3252
- 13-15 International Conference on the Applications of Lasers and Electro-Optics Boston, MA Laser Institute of America 5151 Monroe St., Ste. 118W, Toledo, OH 43623
- 25-30 AIChE Annual Meeting San Francisco, CA
  AIChE, Meetings, Dept., 345 E. 47 St., New York, NY 10017 (212) 705-7320
- 26-30 MATERIALS RESEARCH SOCIETY ANNUAL MEETING Boston Marriott Hotel/Copley Place Boston, MA J.B. Ballance, Executive Director Materials Research Society 9800 McKnight Road, Suite 327 Pittsburgh, PA 15237 (412) 367-3003
- 27-30 30th Annual Conference on Magnetism and Magnetic Materials San Diego, CA J.T. Scott, AIP, 335 E. 45th St., New York, NY 10017

#### DECEMBER 1984

4-7 31st National Vacuum Symposium Reno, NV
N. Hammond, 335 E. 45 St., New York, NY 10017

#### JANUARY 1985

20-24 American Physical Society/AAPT General Meeting Toronto, ONT

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# **DEFECTS IN INSULATORS**

An MRS-Europe Symposium Report

The symposium on "Induced Defects in Insulators" covered many aspects of the interaction of radiation with insulating materials, with contributions from a broad scientific community. In all, 42 papers were presented, treating topics in an interdisciplinary manner.

A new field with an increasing interest is the study of the distribution of light ions and foil destruction after implantation of organic polymers. The research appears particularly important for lithography in the fabrication of semiconductor devices, where the lateral dimensions are pushed down to several Angstroms. The processes related to plasma erosion of non-metal first wall materials in fusion devices were reviewed and their relative importance was assessed, particularly for the problems connected with plasma contamination and mechanical or thermal stresses. It was also clear that radiation damage investigations in insulators assume a central role in nuclear waste management, because glass is a serious candidate material for waste disposal. A number of papers demonstrated the growing interest in optoelectronic materials for data processing, radiation effects in glass fiber cables, and electron-beam irradiation of electronic devices.

Several contributions were given on analysis techniques in insulators, such as nuclear techniques for hydrogen detection, ESR, AES, ESCA, and optical spectroscopy, emphasizing potential applications for defect characterization. Ions or atoms with energies ranging from a few eV to MeV are formed in radiation belts, stellar winds, and cosmic

secondary ravs. and as particles from sputtering or knock-on processes. Their may induce hot collisions chemical reactions. Papers presented showed how laboratory simulations provide information on organic molecules in intersteller solids and on the potential abiotic formation of biomolecules in space.

It is worth remarking that many of the contributions on topics described above arose



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from the pursuit of the interdisciplinary approach required to connect technological applications to the basic interactions of energetic ions with insulators.

This meeting was an ideal bridge between the second (Albuquerque 1983) and the planned Third International Conference on Radiation Effects in Insulators (REI '85), which will be held in July 1985 at Guildford, Surrey.

## P. Mazzoldi Padova, Italy

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**MARCH 1985** 

- AIChE Spring National Meeting Houston, TX
   AIChE, Meetings Dept., 345 E. 47th St., New York, NY 10017 (212) 705-7320
- 25-29 American Physical Society General Meeting Baltimore, MD
  W. Havens, Jr., 335 E. 45 St., New York, NY 10017

## **APRIL** 1985

15-18 MATERIALS RESEARCH SOCIETY SPRING CONFERENCE San Francisco, CA J.B. Ballance, Executive Director Materials Research Society 9800 McKnight Road, Suite 327 Pittsburgh, PA 15237 (412) 367-3003

25-27	American Physical Society Spring Meeting Washington, DC

W. Havens, Jr., 335 E. 45th St., New York, NY 10017

#### MAY 1985

12-17	Electrochemical Society Spring Meeting Toronto, Ontario, Canada		
	The Electrochemical Society 10 S. Main St., Pennington, NJ 08534-2896		
13-17	International Conference on Nuclear Data		

for Basic and Applied Science Santa Fe, NM Phillip G. Young, Conference Chairman, Mail Stop B243, Los Alamos National Laboratory, Los Alamos, NM 87545

#### **JULY 1985**

23-25 Physical Interactions and Energy Exchange at the Gas-Solid Interface Hamilton, Ontario, Canada Prof. J.A. Morrison Institute for Materials Research McMaster Univ., Hamilton, Ontario, Canada L85 4M1