

### 1988 MRS Symposium on the Scientific Basis for Nuclear Waste Management Seeks Papers

The twelfth International Symposium on the Scientific Basis for Nuclear Waste Management, of the Materials Research Society, will be held October 10–13, 1988 at the Internationales Congress Centrum, Berlin, West Germany. Cosponsored by the Hahn-Meitner-Institut and other institutions, this symposium will focus on the science underlying waste forms (vitreous, ceramic, spent fuel, cement), waste isolation (container materials, backfill, repository), and modeling and performance assessment. Contributed papers are currently being sought on spent fuel, waste form characterization (glasses, ceramics, cement), waste package characterization and backfill, leaching mechanisms, natural analogues, radonucleide migration and speciation studies, *in situ* testing of waste forms, and repositories (site validation studies, performance assessment, and safety analysis).

Abstracts are due April 15, 1988 and authors will be notified of acceptance by May 15. Full papers are due August 1, 1988. The proceedings will be published by MRS in the MRS Symposium Proceedings series. Send abstracts to the Symposium Chairman: W. Lutze, Hahn-Meitner-Institut, Berlin GmbH, Glienicke Strasse 100, D-1000 Berlin 39, West Germany. Direct other correspondence to Ms. Helga Fuchs, Hahn-Meitner-Institut, Berlin GmbH, Glienicke Strasse 100, D-1000 Berlin 39, West Germany; telephone (30) 8009-2291; facsimile (30) 8009-2999; or telex 185 763.

### International Symposium on the Reactivity of Solids Scheduled for June

The Eleventh International Symposium on the Reactivity of Solids will be held in the United States, June 19–24, 1988. This is the eleventh in a series of international symposia held every four years, and the second to be held in the United States. The scientific program includes both invited plenary lectures and poster sessions with introductory lectures and specialized discussions. Studies addressing the fundamental understanding of the underlying principles of the reactivity of solids, as well as those related to potential applications, are welcome.

Topics include materials chemistry and new synthesis routes; reactivity in mineralogical (geological) systems, and

reactions under extreme conditions; ceramics; reactions in and around thin films; amorphous and poorly crystalline materials; ultrafast processes in solids and nanoscale composites (including surface modification); the organic solid state; and theory and computation; and chemistry and reactivity of superconductors.

The meeting will be held at Princeton University, midway between New York City and Philadelphia. Accommodations for attendees will be available in the University and at the Nassau Inn which is within walking distance of the University. It is ideally located for sight-seeing and for visits to key academic, government and industrial research organizations active in studying the reactivity of solids.

For further information, contact M.S. Whittingham at P.O. Box 669, Ridgefield, CT 06877, telephone (203) 431-5419. All papers presented at the meeting will be published in a proceedings volume.

### First World Congress on Superconductivity Slated for February

The First World Congress on Superconductivity, February 20–24, 1988, at Houston's Westin Galleria Hotel, will

bring together international scientific, government, business and research leaders to discuss technological developments, international technology transfer, product applications in the materials, electrical power, space, transportation, communications, and computer industries, multinational patent and license policies, and joint research funding. The Congress will encompass the full spectrum of world research leadership, policy formulation, the academic community, and industry development. It will form a multinational, multidisciplinary organization in an open exchange of ideas, developments, plans, concerns and policies to hasten the advancement of the technology to the benefit of all mankind.

Scheduled events include three days (February 22–24) of presentations and panel discussions, a Sunday evening reception (February 20), a Tuesday evening banquet (February 23), and four pre-conference short courses (February 20–21). The Materials Research Society will conduct these specially selected short courses relevant to the new superconductivity materials.

For registration or information, contact C.G. Burnham, World Congress on Superconductivity, P.O. Box 1700, 5 GWP 15th Floor, Houston, TX 77001; telephone (713) 623-3357. □

### Frontiers of Electron Microscopy in Materials Science: Surfaces and Interfaces

May 16-19, 1988 ■ Oak Brook, Illinois

International forum on the applications of advanced electron microscopy will focus on problems in surface and interface science. A special evening session on the electron microscopy of high  $T_c$  superconductors will be held at Argonne National Laboratory.

Contributed papers are solicited on: Metals (clusters, phase transformations, grain boundaries, multilayers); HREM (interface studies, defects); AEM (interface and surface chemistry); ceramics (structure and grain boundaries); electronic materials (semiconductors, superconductors, multilayers); HVEM (*in situ*, corrosion); surfaces (profile imaging, reflection electron microscopy, surface reactions); STM (microscopy, spectroscopy); novel techniques (transverse sectioning, sample preparation); interfaces (homophase, heterophase).

Abstracts are due February 15, 1988. The proceedings will be published as a regular issue of the journal *Ultramicroscopy*. Contact Wayne E. King, L-356, Chemistry and Materials Science Department, Lawrence Livermore National Laboratory, Livermore, CA 93550; telephone (415) 423-6547.

# Materials Research Society 1988 Fall Meeting

November 28–December 3, 1988  
Boston Marriott Hotel and Westin Hotel/Copley Place

## MEETING CHAIRS

### G. Slade Cargill

IBM T.J. Watson Research Center  
P.O. Box 218  
Yorktown Heights, NY 10598  
(914) 945-1958

### D. Wayne Goodman

Sandia National Laboratories  
Division 1134  
Albuquerque, NM 87185  
(505) 844-5435

### J. Francis Young

University of Illinois  
3209 Newmark Laboratory  
208 North Romine  
Urbana, IL 61801  
(217) 244-6210

### Symposium A

Processing and Characterization of Materials Using  
Ion Beams

Lynn E. Rehn, Argonne Ntl. Laboratory, Materials  
Science Division, (312) 972-5021

Joe E. Green, University of Illinois, Coordinated Science  
Laboratory, (217) 333-0747

Fred Smidt, Naval Research Laboratory, (202) 767-4800

### Symposium B

Laser and Particle Beam Chemical Processes on  
Surfaces

A. Wayne Johnson, Sandia National Laboratories, (505)  
844-8782

Gary Loper, Aerospace Corporation, (213) 336-7418

### Symposium C

Thin Films: Stress and Mechanical Behavior

J. C. Bravman, D. M. Barnett, and W. D. Nix, Stanford  
University, Department of Materials Science &  
Engineering, (415) 723-3698

David Smith, IBM T.J. Watson Research Center, (914)  
945-1245

### Symposium D

Advanced Methods for Characterizing the Surfaces of  
Materials

A. Madhukar, University of Southern California,  
Department of Materials Science, (213) 743-6929

I. E. Wachs, Lehigh University, Department of Chemical  
Engineering, (215) 758-4274

R. Nuzzo, AT&T Bell Laboratories, Materials Science  
Research & Engineering, (201) 582-5486

### Symposium E

Chemistry of Materials for Electronics

Mihal E. Gross, AT&T Bell Laboratories, (201) 582-4504  
Dr. Joseph Jasinski, IBM T.J. Watson Research Center,  
(914) 945-1245

John T. Yates, University of Pittsburgh, Department of  
Chemistry, (412) 624-8320

### Symposium F

High Temperature Superconducting Materials for  
Applications

Roger H. Koch, IBM T.J. Watson Research Center,  
(914) 945-2393

Simon Foner, Massachusetts Institute of Technology,  
National Magnet Laboratory, (617) 253-5572

John Clarke, University of California, Department of  
Physics, (415) 642-3069

### Symposium G

Multicomponent Ultrafine Microstructures

Bernard H. Kear, Rutgers University, College of  
Engineering, (201) 932-2245

Richard W. Siegel, Argonne National Laboratories,  
(312) 972-4963

Donald E. Polk, Office of Naval Research,  
(202) 696-4401

### Symposium H

High Temperature Ordered Intermetallic Alloys

C. T. Liu, Oak Ridge Ntl. Laboratory, Metals & Ceramics  
Division, (615) 574-4459

N. S. Stoloff, Rensselaer Polytechnic Institute,  
(518) 276-6436

Carl Koch, North Carolina State University,  
(919) 737-2377

A. I. Taub, General Electric Corporation, Research &  
Development Center, (518) 387-6234

### Symposium I

Liquid Crystals Polymers

S. I. Stupp, University of Illinois, Department of Materials  
Science & Engineering, (217) 333-4436

Claudine Noel, Ecole Supérieur de Physique et Chimie  
Industrielle, France

Robert W. Lenz, University of Massachusetts,  
Department of Polymer Science & Engineering,  
(413) 545-1375

### **Symposium J**

#### **Rigid Rod Polymers**

W. W. Adams, AFWAL/MLBP, Wright-Patterson AFB, (513) 255-9148

Donald McLemore, Dow Chemical, Central Research, Polymer Materials

Ronald Eby, Johns Hopkins University, Department of Materials Science & Engineering, (301) 338-7142

### **Symposium K**

#### **Materials Science of Calcified Tissues**

Wendell S. Williams, University of Illinois, Department of Physics, (217) 333-3524

George Van B. Cochran, Helen Hayes Hospital, (914) 947-3000

### **Symposium L**

#### **Graphite Intercalation Compounds; Science and Applications**

M. S. Dresselhaus, Massachusetts Institute of Technology, (617) 253-6864

G. Dresselhaus, Massachusetts Institute of Technology, (617) 253-6867

M. Endo, Faculty of Engineering, Shinshu University, (81)0262-26-4101

### **Symposium M**

#### **Solid State Ionics**

Gholam-abbas Nazri, GM Res. Laboratories, Physical Chemistry Department, (313) 986-0737

Duward Shriver, Northwestern University, Department of Chemistry

Robert Huggins, Stanford University, Department of Materials Science & Engineering, (415) 723-4110

### **Symposium N**

#### **Fractals Aspects of Materials: Disordered Systems**

David A. Weitz, Exxon Res. & Engineering Co., (201) 730-3536

Benoit Mandelbrot, Yale University, Department of Mathematics, (617) 495-4757

and IBM T.J. Watson Research Center, (914) 945-1712

Len Sander, University of Michigan, Department of Physics, (313) 764-4471

### **Symposium O**

#### **Fly Ash and Coal Conversion By-Products**

E. E. Berry and R. T. Hemmings, Ontario Research Foundation, (416) 822-4111

### **Symposium P**

#### **Pore Structure and Permeability of Cementitious Materials**

Jan P. Skalny, W. R. Grace & Co., Washington Research Center, (301) 531-4597

L. J. Roberts, W. R. Grace & Co., Construction Products Division

### **Symposium Q**

#### **Characterization of Defects in Materials**

Bennett C. Larson, Oak Ridge Ntl. Laboratory, Solid State Division, (615) 574-5506

David N. Seidman, Northwestern University, Materials Science & Engineering Department, (312) 491-4391

Manfred Ruhle, University of California, Department of Materials Science, (805) 961-8275

### **Symposium R**

#### **High Resolution Microscopy of Materials**

William Krakow, IBM T.J. Watson Research Center, (914) 945-1759

Fernando A. Ponce, Xerox, Palo Alto Research Center, (415) 494-4199

David J. Smith, Arizona State University, Center for Solid State Science, (602) 965-4540

### **Symposium S**

#### **New Approaches to Tribology: Theory and Application**

Larry E. Pope, Sandia National Laboratories, (505) 844-5041

Ward Winer, Georgia Institute of Technology

Larry Fehrenbacher, Technology Assessment & Transfer, Inc., (301) 721-9228

### **Symposium T**

#### **Atomic Scale Calculations in Materials Science**

Jerry D. Tersoff, IBM T.J. Watson Research Center, (914) 945-3138

David H. Vanderbilt, Harvard University, Department of Physics, (617) 495-7977

### **Symposium U**

#### **Nondestructive Methods for Determining Mechanical Properties of Materials**

John H. Holbrook, Battelle-Columbus Division, Physical Metallurgy Section, (614) 424-4357

Jean Bussiere, Industrial Materials Research Institute, Canada

### **Symposium V**

#### **Synchrotron Radiation in Materials Research**

John Weaver, University of Minnesota, Department of Physics, (612) 625-6548

Roy Clarke, University of Michigan, Department of Physics

John Gland, Exxon Research & Engineering, (201) 730-2748

### **Symposium X**

#### **Frontiers in Materials Science (Symposium X)**

Rustum Roy, Penn State, Materials Research Laboratory, (814) 865-3421

**Abstract deadline: June 10, 1988**

Details in upcoming Call for Papers.