



- ◆ **New Materials Development**
- ◆ **New Characterization Methods**
- ◆ **New Process Technology**

#### ◆ **Equipment Exhibit**

A major exhibit of the latest analytical and processing equipment which closely parallels the nature of the technical symposia will be located in the Boston Marriott Hotel convenient to the technical session rooms. For show booth information, contact: Bob Finnegan, MRS Equipment Exhibit Manager, American Institute of Physics, 335 East 45th Street, New York, NY 10017; Telephone (212) 661-9404; FAX (212) 661-2036.

#### ◆ **Short Course Program**

Courses on advanced materials characterization, preparation, and processing/diagnostic techniques have been designed for scientists, engineers, managers, and technical staff who wish to update their knowledge and skills in the research, development and processing of materials. These up-to-date courses are at the forefront of science and technology and complement Fall Meeting symposia. Class sizes are limited. Early preregistration is encouraged.

#### ◆ **Proceedings**

Many of the MRS symposia will be publishing proceedings. For a complete list of MRS publications and prices, contact Materials Research Society, Publications Department, 9800 McKnight Road, Pittsburgh, PA 15237; Telephone (412) 367-3012; FAX (412) 367-4373.

#### ◆ **Preregistration**

Preregister by telephone, (412) 367-3003, or FAX (412) 367-4373, with your VISA, MasterCard, or Diners Club card. Ask for Meeting Registration and your preregistration will be completed for you. Telephone preregistrations are accepted between 8:00 a.m. and 5:00 p.m. EST, Monday through Friday. Confirmations will be mailed within 10 working days.

To request detailed 1992 Fall program, short course, or symposium aide information, contact:



**Materials Research Society**  
9800 McKnight Road, Pittsburgh, PA 15237  
Telephone (412) 367-3003, FAX (412) 367-4373

The 1992 MRS Fall Meeting will serve as a key forum for discussion of interdisciplinary leading-edge materials research from around the world. Various meeting formats (oral, poster, roundtable, forum and workshop sessions) are offered to maximize participation.

#### ◆ **Technical Program**

- AA: Science and Technology of Fullerene Materials
- A: Beam-Solid Interactions: Fundamentals & Applications
- B: Evolution of Surface and Thin Film Microstructure
- C: Stability of Microstructures
- D: Semiconductor Heterostructures for Photonic and Electronic Applications
- E: Chemical Perspectives of Microelectronic Materials III
- F: Microcrystalline Semiconductors: Materials Science & Devices
- G: Amorphous Insulating Thin Films
- H: Superconductivity - Materials and Properties
- I: Laser Ablation in Materials Processing: Fundamentals and Applications
- J: Nanophase and Nanocomposite Materials
- K: Silicon Nitride Ceramics - Scientific and Technological Advances
- L: High-Temperature Ordered Intermetallic Alloys - V
- M: Flow and Microstructure of Dense Suspensions
- N: Dynamics in Small Confining Systems
- O: Materials Theory and Modelling
- P: Disordered Materials: Fractals, Scaling, and Dynamics
- Q: Polymer Blends
- R: Ordered Materials by Design
- S: Biomolecular Materials
- T: Textiles in Composites
- U: Solid State Ionics
- V: Scientific Basis for Nuclear Waste Management XVI
- W: Atomic-Scale Imaging of Surfaces and Interfaces
- X: Frontiers of Materials Research
- Y: Structure and Properties of Energetic Materials

#### ◆ **Job Placement Center**

A Job Placement Center for MRS meeting and short course attendees will be open Tuesday through Thursday during the meeting adjacent to the Equipment Exhibit.

#### ◆ **Symposium Aide Opportunities**

Graduate students who plan to attend the Fall Meeting and are willing to assist in the symposium presentations to earn a waiver of entry fees and MRS student membership are encouraged to apply for Symposium Aide positions.



# TRAVEL ARRANGEMENTS

The official travel management company for the Materials Research Society's 1992 Fall Meeting is the Travel Bureau of Sacramento. **They will guarantee the lowest fares on any airline at time of booking. Call and ask for MRS Group 001:**

1-800-331-1338 (CA) • 1-800-523-0100 (U.S.)  
Monday - Friday, 8:00 a.m. - 5:30 p.m. PDT

or

1-800-343-0309 (ID# P3EB)  
After hours or weekends

FAX: (916) 961-0561 or 1-800-TRVLFAX

### MRS meeting attendees receive the following travel benefits and services:

- Lowest fares on any airline guaranteed
- Free flight insurance of \$500,000
- Computerized driving instructions from Boston-Logan International Airport to your hotel
- Monthly drawings for free hotel stays and car rentals
- Car rental savings
- Vouchers for discounts on vacation packages

**ONE MRS MEETING ATTENDEE WILL WIN TWO (2) FREE AIRLINE TICKETS TO ANYWHERE IN THE 50 UNITED STATES. To be eligible: You, your travel agent or your in-house travel department must make your reservations through the Travel Bureau of Sacramento by calling any of the above phone numbers.**

## MATERIALS RESEARCH SOCIETY'S 1992 FALL MEETING HOTEL RESERVATION INFORMATION

When making your reservation, you must mention the Materials Research Society Meeting to receive the special rates.

### DEADLINE FOR HOTEL RESERVATIONS: OCTOBER 30, 1992

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Phone: .....(617) 236-5800 (Direct)  
Fax: .....(617) 424-9378

#### Westin Hotel/Copley Place

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#### Sheraton Boston Hotel & Towers

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## 1992 MRS FALL MEETING SHORT COURSE PROGRAM



### New Tutorials on Fullerenes and Transfer of Technology from R&D to Manufacturing

#### Eight New Short Courses

Three new half-day tutorials and eight new short courses covering the latest developments in materials science and technology will be among the offerings in the fall meeting Continuing Education Program. MRS tutorials and courses are designed to inform individuals about subjects that are outside their immediate interest or to bring individuals "up to speed" in an area that they have recently entered.

- **Fullerenes:** Mildred Dresselhaus, Massachusetts Institute of Technology, and Peter C. Eklund, University of Kentucky
- **Transfer of Technology from R&D to Manufacturing:** Donald M. Mattox, IP Industries, and Alton D. Romig Jr., Sandia National Laboratories
- **Fractals in Materials Science:** James E. Martin, Sandia National Laboratories

Eight new short courses:

- **Diamond Films: Growth and Properties:** Robert J. Nemanich and Jeffrey T. Glass, North Carolina State University, and Jesko Von Windheim, Kobe Steel USA, Inc.
- **Scanning Tunneling Microscopy and Atom Force Microscopy:** Dawn A. Bonnell, University of Pennsylvania
- **Science and Technology of Nanostructured Materials:** Horst W. Hahn, Rutgers, The State University of New Jersey
- **Excimer Laser Ablation and Etching of Materials:** James H. Brannon, IBM Almaden Research Center
- **Contamination Control in PVD Systems:** Donald M. Mattox, IP Industries
- **Biological Processes for Materials Synthesis:** Mark Alper, University of California at Berkeley
- **Ferroelectric Thin Films:** Angus I. Kingon, North Carolina State University, and James F. Scott, University of Colorado at Boulder
- **Crystallographic Databases for Chemical and Materials Analyses:** Alan D. Mighell, National Institutes of Standards and Technology; Ronald M. Anderson, IBM Corporation; John R. Rodgers, NRC Canada; and Mark Holomany, International Center for Diffraction Data; Coordinator: Winnie Wong-Ng, National Institutes of Standards and Technology

920154



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**PREREGISTRATION DEADLINE: NOVEMBER 20, 1992**

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## A MEETING PREREGISTRATION

Please check category and enter amount in payment section below.

\$250 Member/Nonmember  \$70 Student Member/Nonmember\*

\$95 Short Course attendee registered for at least two course days

Meeting registration includes complimentary 1993 MRS membership beginning January 1, 1993.

\* Student must provide proof of full-time student status at time of registration.

Symposium interest (please check all that apply):

AA  B  D  F  H  J  L  N  P  R  T  V  Y  
 A  C  E  G  I  K  M  O  Q  S  U  W

**TOTAL \$**

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If you have already registered and paid and find that you are unable to attend, you must notify MRS in writing of your request for a refund. Refunds will be made upon receipt of this written notice, less a \$25 service charge. This service charge will be waived if you apply \$25 or more of this refund to any other MRS product or service. MRS will not honor requests made more than one calendar month after the close of the meeting.

Register early to take advantage of pre-meeting fees. Registrations received after November 20, 1992, will be charged at meeting rates (\$50 higher for regular and \$10 higher for students).

## B JOURNAL OF MATERIALS RESEARCH 1993

Subscription at Member Rate (one per registrant) . . . . .  \$45 = TOTAL \$ \_\_\_\_\_  
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## C PROCEEDINGS (published after this meeting)

These rates apply only to meeting and short course attendees, and MRS members. Nonmembers must contact MRS headquarters for prices.

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## D SHORT COURSES

To preregister, check each course for which you wish to enroll. If you register for two or more course days, you may attend the technical meeting for only \$95; just complete the Meeting Preregistration section at left.

Facilities registering three or more persons at the same time in one MRS Short Course receive a 20% discount for the third and all additional persons.

At-meeting short course registrations will be \$25 higher for each course. Cancellations received by November 20, 1992, will be refunded less a service charge of \$25. There is no charge if you wish to transfer to another course.

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