

IUMRS-ICEM-98 Will Meet in Cheju, Korea in August

The 4th International Conference on Electronic Materials (IUMRS-ICEM-98), chaired by Soon Ja Park (Seoul National University), will be held at Cheju, Korea during August 24–27, 1998. This is a continuation in the series of meetings held in Strasbourg, France (1992), Hsinchu, Taiwan (1994) and Boston, Massachusetts (1996). Since its inception in 1992, the ICEM has provided a forum focused on the areas of preparation, characterization, and application of electronic materials. IUMRS-ICEM-98 will emphasize the latest developments in research areas of various electronic materials such as Si-based materials, compound semiconductors, electroceramics, display materials, magnetic materials, packaging, conducting polymer, and energy conversion materials. The meeting is organized by the Materials Research Society of Korea (MRS-K) under the auspices of the International Union of Materials Research Societies (IUMRS). English is the official language of the conference.

IUMRS-ICEM-98 consists of ten symposia. Symposium A on Silicon Processes will provide an interactive forum for discussion of research activities on Si processes such as advanced metallization, interconnection technologies, dielectric materials, epitaxial growth, thin films, deposition technologies, diffusion processes, photolithography, and etch processes. The physical and electrical properties of Si-based materials and the evaluation and characterization of Si processes will be addressed.

Compound semiconductors have been the subject of intensive study for applications in the field of photonics and electronics. The field is expanding in response to the ever-increasing demand for high-quality information technology and it is becoming ever more important to pay closer attention to the potential capabilities of these valuable materials, both scientifically and technologically. Symposium B is designed to review and present recent advances and future prospects on the scientific and applications aspects based on compound semiconductors.

Electroceramics is expected to lead the development of electronic industries in the 21st century, and in recent years, the importance of electroceramics has grown in the solid-state science. Symposium C

on Electroceramics and Sensors will provide an interdisciplinary discussion and exchange of ideas on recent fundamental and advanced science and technology (S&T) concerning various areas in electroceramics, including dielectrics and insulators, piezoelectric and pyroelectric materials, ceramic conductors, electro-optic ceramics, chemical and biosensors, and physical sensors.

Symposium D on Display Materials will focus on advances in materials and fabrication technology related to flat-panel displays (FPD) based on field emission, plasma, liquid crystal, electroluminescence, projection, and light-emitting diode. Materials include substrate and packaging materials as well as electronic materials for FPDs. Also, development in materials to meet the demanding needs of higher performance and to improve production efficiency will be discussed.

Symposium E on Magnetics will include all basic and applied S&T related to magnetic material, including soft magnetic materials and applications, hard magnetic materials and applications, artificially structured materials, and magnetic recording.

Symposium F on Ferroelectric Thin Films will present a wide range of topics spanning from basic academic research to applied integration issues. These topics will cover fundamental materials studies, new growth methods, device and materials integration research, developments in designing and growing new materials, all involving epitaxial, polycrystalline, and nanocrystalline ferroelectric thin films. Many fast developing research areas, as well as memory technologies and very low loss electro-optical films, will also be presented.

Electronic packaging becomes very important for high performance, speed, density, and reliability of electronic systems. Packaging materials, design, interconnection, and assembly can break through the future electronics. Symposium G on Electronic Packaging will provide a forum to explore questions of materials, process, and reliability and also to promote technical exchange of advanced packaging.

Symposium H on the Surface, Interface,

and Nanostructure of Materials will provide a forum for basic and applied research on surface, interface, and nanostructures. Various areas of surface physics and chemistry will be addressed, including discoveries in the topics of surface structure, electronic structure, nucleation and growth, catalysis, surface chemical reactions, and topics in understanding atomistic progresses, as well as new application of devices in nanometer-sized systems.

Strong demands are made to develop new materials and electronic devices for handling information. Polymer materials with a very short history compared to other materials in applications for electronics have potential to be designed and synthesized to perform as needed. The aim of Symposium I on Polymers for Electronics is to review the recent progress in development of functional polymers to be used in electronics.

Symposium J on Energy Conversion & Storage Materials will focus on basic and applied research in various aspects of the development of new materials in energy conversion and storage systems. The following areas will be addressed: lithium-ion batteries, lithium-solid polymer electrolyte batteries, nickel-metal hydride batteries, metal/air batteries, solid polymer electrolyte fuel cells, solid oxide fuel cells, electrochemical capacitors, and thermoelectric materials.

The proceedings of ICEM'98 will be published in the *Journal of Korean Physical Society* (JKPS).

The registration fees are \$450 before May 31, 1998 (\$100 for students), and \$500 after May 31 (\$120 for students). The registration fee includes conference materials such as abstract books, admission to the technical sessions, welcome reception, coffee breaks, and the official excursion.

All inquiries regarding the meeting should be addressed to Prof. Shinhoo Kang, The Secretariat of IUMRS-ICEM-98, Materials Research Society of Korea, School of Materials Science and Engineering, Seoul National University, Seoul 151-742, Korea; phone 82-2-880-7167; fax 82-2-884-1413; e-mail : icem98@gong.snu.ac.kr or icem98@plaza1.snu.ac.kr. More information can also be found at website <http://gong.snu.ac.kr/~icem98>.

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FALL MEETING

98

NOV. 30 - DEC. 4

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New
Materials
Development

New
Characterization
Methods

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Process Technology

MRS

Materials
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For additional meeting information or to request a Call for Papers booklet, a detailed 1998 Fall Meeting Program, information on symposium tutorials, publications, the Exhibit, Job Center, or Symposium Assistant positions, contact:

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Abstract Deadlines:

In fairness to all potential authors, late abstracts will not be accepted.

June 8, 1998: for abstracts sent via fax or mail

June 22, 1998: for abstracts sent via the MRS Web site or e-mail

1998 Fall Meeting Symposia

- A: Polycrystalline Thin Films—
Processing-Structure-Property Relationships
- B: Growth Instabilities and Decomposition During Heteroepitaxy
- C: Surface and Interface Structure and Dynamics
- D: Integration of Dissimilar Materials in Micro- and Optoelectronics
- E: Film Growth and Processing Using Hyperthermal Beams
- F: Microcrystalline and Nanocrystalline Semiconductors
- G: GaN and Related Alloys
- H: Infrared Semiconductor Materials and Devices
- I: III-V and SiGe Group IV Device/IC Processing Challenges for Commercial Applications
- J: Multiscale Modeling of Materials
- K: Computation of Rates of Activated Processes
- L: Interaction of Phase and Defect Microstructures in Metallic Alloys
- M: Fracture and Ductile vs Brittle Behavior—
Theory, Modeling, and Experiment
- N: Microstructural Processes in Irradiated Materials
- O: Ferroelectric Thin Films VII
- P: Magnetic Oxides and Oxide Devices
- Q: High-Temperature Superconductors—Materials Challenges
- R: Organic Electronic and Photonic Materials and Devices
- S: Carbon Nanotubes, Fullerenes and Related Carbon Materials
- T: Recent Progress in Optical Data Storage and Processing
- U: Organics with Supramolecular Structure and Function
- V: Solid Freeform and Additive Fabrication
- W: Dynamics in Small Confining Systems V
- X: Frontiers of Materials Research
- Y: Plasma Deposition and Treatment of Polymers
- Z: Thermoelectric Materials—The Next Generation
Materials for Small-Scale Refrigeration and Power Generation Applications
- AA: Materials Science of Microelectromechanical System (MEMS) Devices
- BB: Nonlithographic Methods for Organizing Materials into Functional Structures
- CC: Combinatorial Chemistry and Materials Science
- DD: Solid-State Chemistry of Inorganic Materials II
- EE: Solid-State Ionics
- FF: Advanced Catalytic Materials 1998
- GG: Polymeric Materials—Drugs, Delivery and Devices
- HH: Tissue Engineering
- II: Advanced Materials, Coatings, and Biological Cues for Medical Implants
- JJ: Materials in Space—Science, Technology, and Exploration
- KK: High-Temperature-Ordered Intermetallic Alloys VIII
- LL: Quasicrystals
- MM: Bulk Metallic Glasses
- NN: Aging of Engineered Systems with Focus on Aircraft
- OO: Properties and Processing of Vapor-Deposited Coatings
- PP: Recent Advances in Ceramic Matrix Composites—
Structural Design, Fabrication, and Long-Term Use
- QQ: Scientific Basis for Nuclear Waste Management XXII
- RR: Workshop on Materials Education

MRS 1998 FALL MEETING

The MRS 1998 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, round table, forum and workshop sessions—are offered to maximize participation

SYMPOSIUM TUTORIAL PROGRAM

Available only to meeting registrants, the tutorials will concentrate on new, rapidly breaking areas of research and are designed to encourage the exchange of information by meeting attendees during the symposium.

EXHIBIT

A major exhibit encompassing the full spectrum of equipment, instrumentation, products, software, publications, and services is scheduled for December 1-3 in the Boston Marriott and Westin Hotels convenient to the technical session rooms.

PUBLICATIONS DESK

A full display of over 530 books, plus videotapes and electronic databases, will be available at the MRS Publications Desks. Available at this meeting will be the MRS Symposium Proceedings from both the 1997 Fall and 1998 Spring Meetings, as well as the highly acclaimed *Handbook of Modern Ion Beam Materials Analysis*.

SYMPOSIUM ASSISTANT OPPORTUNITIES

Graduate students who plan to attend the 1998 Fall Meeting and are willing to assist in the symposium presentations by operating audio-visual equipment are encouraged to apply for a Symposium Assistant position. The student will receive a stipend toward expenses. After assisting in four half-day sessions, he or she will also receive a waiver of the student registration fee and a complimentary one-year MRS membership commencing January 1, 1999. Application forms can be requested via e-mail: info@mrs.org; phone 724-779-3003; or fax 724-779-8313.

JOB CENTER

A Job Center for MRS meeting attendees will be open Tuesday through Thursday during the 1998 Fall Meeting (location to be announced). For information, check the MRS Web site (<http://www.mrs.org/>) or contact MRS Member Services.

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Advanced Energy Industries, Inc.
Advanced Micro Devices, Inc.
AEA Technology
Aerospace Corporation
Aetrium, Inc.
AG Associates
Air Products and Chemicals, Inc.
AIXTRON, Inc.
Aldrich Chemical Company, Inc.
AlliedSignal, Inc.
Amptek, Inc.
AMRAY, Inc.
ANVAL
APD Cryogenics, Inc.
Applied Komatsu Technology
Applied Materials
Physical Vapor Deposition
Applied Materials
RTP Product Division
Argonne National Laboratory
Asahi Glass Co., Ltd.
ASM
AST elektronik GmbH
ASTeX/Applied Science and
Technology, Inc.
Baikowski International Corporation
Balzers Process Systems
Bede Scientific Incorporated
Bell Laboratories, Lucent Technologies
Bicron, Saint-Gobain Industrial
Ceramics, Inc.
BIOMET Incorporated
Blake Industries, Inc.
Brookhaven Instruments Incorporated
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Bruker Analytical X-ray Systems, Inc.
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Burleigh Instruments, Inc.
Cameca Instruments, Inc.
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Canon, Inc.
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Chemipro Kasei Kaisha, Ltd.
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Dow Corning Corporation
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and Development
Dytech Corporation, Ltd.
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For more information about the
Corporate Participation Program contact:

Mary E. Kaufold
Materials Research Society
Telephone: 724-779-8312
Fax: 724-779-4397
E-mail: kaufold@mrs.org