



2003 TMS ELECTRONIC MATERIALS CONFERENCE

University of Utah
Salt Lake City, UT

June 25–27, 2003

TMS

*Sponsored by the Electronic,
Magnetic, Photonic,
Materials Division of TMS.*

CALL FOR PAPERS With Abstract Submission Instructions

INTENDED AUDIENCE

The 45th Electronic Materials Conference (EMC) aims to provide the premier annual forum for presentations of current interest and significance to the preparation and characterization of electronic materials. Electronic materials are defined as relating to, produced, or operated by the controlled flow of electrons through a semiconductor, a gas, or free space along with those relating to devices, systems, or circuits that employ components such as vacuum tubes, integrated circuits, or transistors in their design. In practice, the field is something much broader. Individuals actively engaged or interested in electronic materials research and development are encouraged to submit papers and attend this meeting. Attendees include students, professors, scientists, engineers, researchers, technicians, R&D managers, and product managers.

GENERAL INFORMATION

The TMS (Minerals, Metals & Materials Society) Electronic Materials Committee proudly sponsors the annual Electronic Materials Conference (EMC). The 2003 conference will be located in the city of Salt Lake City, Utah at the University of Utah, from Wednesday, June 25 through Friday, June 27. The conference will involve oral presentations; both invited and contributed, an exhibition, and related activities.

Note: Registration and Housing information will be available from TMS in April 2003.

GENERAL CHAIR

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ABSTRACT SUBMISSION INSTRUCTIONS

Abstracts must be prepared according to the following directions.

All prospective authors are invited to submit a 450-word abstract by February 3, 2003, using the TMS Conference Management System (CMS) web site. Abstracts may be submitted easily— day or night— at <http://cms.tms.org>. The CMS allows anyone with a World Wide Web browser to electronically submit an abstract. Conference organizers receive electronic notification of all abstract submissions upon entry. Follow the easy instructions for electronic submission and direct communication with the conference organizers. If you have questions or need assistance while using CMS, please contact TMS Technical Programming Services at (724) 776-9000 ext. 253 or via e-mail at raabe@tms.org.

If you do not have access to the World Wide Web, please submit your abstract directly to:

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NOTE: Abstracts must reveal and demonstrate reasonable scientific content. Do not submit abstracts describing work that has not been released for public disclosure. Please denote student submissions.

NOTE TO AUTHORS

Authors are expected to present their papers in person at the conference. If an author must absolutely be absent or withdraw a paper, notify the Program Chair well in advance.

ABSTRACT DEADLINE: FEBRUARY 3, 2003

STUDENT AWARDS/ASSISTANCE

Details of the student awards are given below:

The top 5% of student papers at the Electronic Materials Conference will receive the EMC Best Student Paper Award. The award is based on both the written abstract and the oral presentation.

Details of the student assistance are given below:

The Electronic Materials Committee has allocated funds for assistance to students making oral presentations at the conference. Those wishing to be considered should submit an application no later than June 2 to:

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LATE NEWS PAPERS

Late news papers will be considered. Five copies of the abstract must be submitted to the Program Chair no later than June 2, 2003. Authors of accepted papers will be notified before the conference.

PUBLICATION OF PAPERS

Conference abstracts will be published in the *Journal of Electronic Materials*. We also strongly encourage you to submit manuscripts on your work to the *Journal of Electronic Materials*.

Details on manuscript submission will be included in the EMC Advance Program and are available on the web at <http://www.tms.org/jem.html>.

EMC/DRC

The EMC will be coordinated with the DRC (Device Research Conference) during the same week, June 23–25, 2003, at the University of Utah. The coordinated efforts are made in recognition of the strong interaction between electronic materials and device research. This coordination provides for maximum exchange of information between attendees of both conferences. Inquiries about DRC should be forwarded to:

Jeff Wesler
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Tel: (845) 892-5142 • Fax: (845) 892-2568
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Abstracts submitted to DRC may not be submitted to EMC.

FOR MORE INFORMATION, PLEASE CONTACT:

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Fax: (724) 776-3770
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EXHIBITION

The 2003 Electronic Materials Conference (EMC) will host an exhibition of electronic materials-related technology and services. Exhibiting companies will meet the world's leading international researchers and management professionals in electronic materials from corporations, universities, and government laboratories.

Industry organizations are invited to display equipment, publications, software and services relating to electronic materials applications and research.

For additional information, contact Cindy Wilson at TMS by Tel: (724)776-9000 x231; Fax: (724)776-3770; Email: wilson@tms.org.

IMPORTANT DATES

February 3, 2003—Submission deadline
April 4, 2003—Notification of acceptance
June 2, 2003—Early registration deadline
June 25, 2003—Welcoming Registration

TECHNICAL PROGRAM

45th Electronic Materials Conference

The major thrust areas of the 2003 Electronic Materials Conference in Salt Lake City include: Growth and Characterization of Wide Bandgap Materials • Nanoscale Science and Technology in Materials: Formation and Self-Assembly, Fabrication, Characterization, and Devices • Molecular Electronics and Nanotubes • Silicon Integration and Silicon-Germanium Heterojunctions • Materials Integration • Organic Optoelectronics and Transistors • Epitaxy • In-situ and Real Time Characterization • Materials for Emitters and Detectors • High Temperature/High Power Electronics • Displays • High Speed Devices • High Density Memories • Spin-Dependent Electronic Materials • Biological/Electronic Interfaces

Papers are solicited in the thrust areas listed above as well as the specific areas listed below. For more information on a particular area, please contact one of the listed session organizers.

ISSUES FOR WIDE BANDGAP MATERIALS: GROWTH, DOPING, PROCESSING, CHARACTERIZATION, AND DEVICE APPLICATIONS

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POINT DEFECTS, EXTENDED DEFECTS, AND DOPING IN WIDE BANDGAP SEMICONDUCTORS

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<http://www.tms.org/Meetings/Specialty/EMC03/EMC03.html>

NANOSCALE SCIENCE AND TECHNOLOGY IN MATERIALS

LOW-DIMENSIONAL STRUCTURES: QUANTUM DOTS, WIRES, AND WELLS

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