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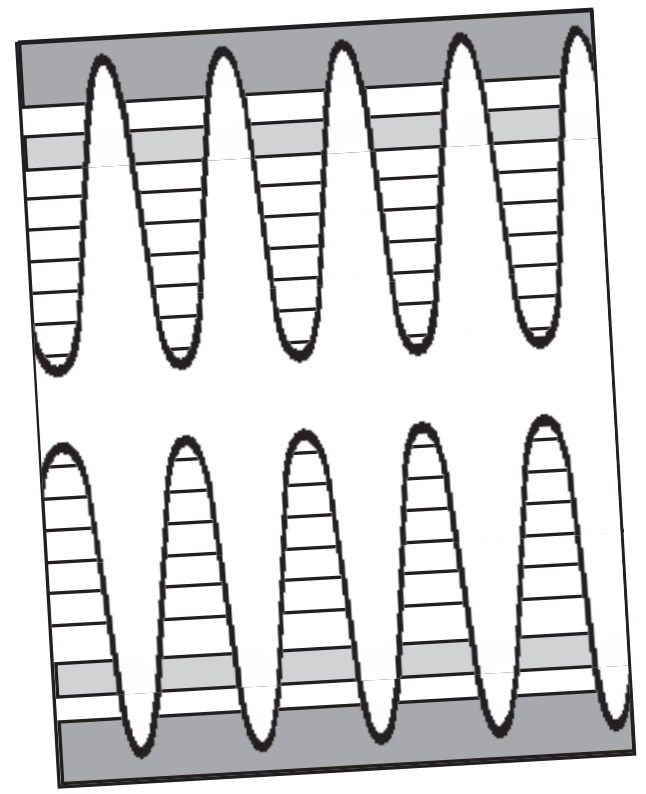
TMS

46th

2004 TMS ELECTRONIC MATERIALS CONFERENCE

University of Notre Dame
Notre Dame, Indiana

June 23–25, 2004



<http://www.tms.org/EMC.html>

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

**CALL FOR PAPERS
With Abstract Submission Instructions**

2004

46th Electronic Materials Conference

INTENDED AUDIENCE

The Electronic Materials Conference (EMC) aims to provide the premier annual forum for presentations of current interest and significance to the preparation, characterization and application of electronic materials. Research on semiconductors, dielectrics, metals, and molecular materials is included within the conference scope. Individuals actively engaged or interested in electronic materials research and development are encouraged to submit papers and attend the conference. The attended audience includes students, professors, scientists, engineers, researchers, technicians, R&D managers, and product managers.

GENERAL INFORMATION

The TMS (The Minerals, Metals & Materials Society) Electronic Materials Committee proudly sponsors the annual Electronic Materials Conference (EMC). The 2004 conference will be located in the city of Notre Dame, Indiana at the University of Notre Dame, from Wednesday, June 23 through Friday, June 25. The conference will include oral presentations; both invited and contributed, an exhibition, and related activities.

Note: Registration and Housing information will be available from TMS in April 2004.

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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, 2004, 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 submit an abstract electronically. 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. 212 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 indicate student submissions as such.

ABSTRACT DEADLINE:
FEBRUARY 3, 2004

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.

STUDENT AWARDS/ASSISTANCE

Details of 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:

April S. Brown
Duke University
130 Hudson Hall
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Tel: (919)660-5442
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STUDENTS SHOULD CLEARLY MARK THEIR ABSTRACT AS STUDENT PAPER. The abstract must also satisfy the format guidelines.

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, 2004. 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 Device Research Conference held during the same week, June 21–23, 2004, at the University of Notre Dame. 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. Inquires about DRC should be forwarded to:

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Abstracts submitted to DRC may not be submitted to EMC.

FOR MORE INFORMATION, PLEASE CONTACT:

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TECHNOLOGICAL EXHIBIT

The 2004 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 relative to electronic materials applications and research.

For additional information,
contact Cindy Wilson at TMS no later than Friday, June 4, 2004.
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IMPORTANT DATES

February 3, 2004 – Submission deadline
April 5, 2004 – Notification of acceptance
June 1, 2004 – Early registration deadline
June 23, 2004 – Welcoming Registration

TMS
184 THORN HILL ROAD
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<http://www.tms.org/EMC.html>

TECHNICAL PROGRAM

The major thrust areas of the 2004 Electronic Materials Conference in Notre Dame, Indiana include the following: Wide bandgap semiconductor materials and device applications • Nanoscale science and technology in materials • Organic, molecular and nanotube-based materials and devices • Epitaxial growth • Contacts • Materials integration • Materials issues in advanced silicon technology • Narrow-bandgap semiconductors • Spin-dependent electronic materials • Materials issues for sensors.

Papers are solicited in the thrust areas listed above as well as the specifics listed below.

For more information on a particular area, please contact one of the listed session organizers.

ISSUES FOR WIDE BANDGAP MATERIALS

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Silicon Carbide: Growth, Processing, Characterization, Theory, and Devices

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Point Defects, Extended Defects, and Doping in Wide Bandgap Materials

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NANOSCALE SCIENCE AND TECHNOLOGY IN MATERIALS

Low-Dimensional Structures: Quantum Dots, Wires, and Wells

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Nanoscale Characterization

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Molecular Electronics: Devices, Materials and Contacts

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Flexible Thin-Film Electronics

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Organic Thin Film and Crystalline Transistors: Devices, Materials, and Processing

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Nanotubes and Nanowires

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Chemical and Biological Sensors: Materials, Interfaces, and Integration

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Point and Extended Defects in Mismatched Materials

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Semiconductors: Processing and Oxidation

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Materials Integration: Wafer Bonding and Alternative Substrates

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TECHNICAL PROGRAM

Silicon Integration: Alternative Dielectrics, Thin Oxides, Metal Gates, Ferroelectrics, and Epitaxial Oxides

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Si-Based Heterojunctions and Strained Si: Growth, Characterization, and Applications

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Narrow Bandgap Semiconductors: Antimonides and Other Materials

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Spin-Dependent (or Spintronic) Electronic Materials

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