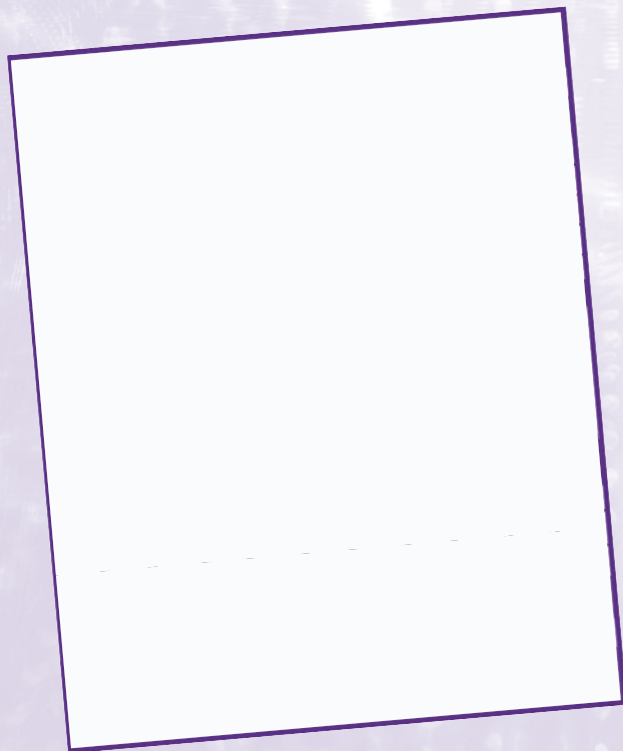


47th TMS 2005 ELECTRONIC MATERIALS CONFERENCE

CALL FOR PAPERS
With Abstract Submission Instructions

University of California • Santa Barbara, CA
June 22-24, 2005



TMS

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

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

INTENDED AUDIENCE

The 47th 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 (The Minerals, Metals & Materials Society) Electronic Materials Committee proudly sponsors the annual Electronic Materials Conference (EMC). The 2005 conference will be located in the city of Santa Barbara, California at the University of California, from Wednesday, June 22 through Friday, June 24. 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 2005.

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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, 2005 using CMS-Plus, the TMS conference management system. Abstracts may be submitted easily – day or night – at <http://cmsplus.tms.org/>. The system 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. All abstracts MUST be submitted electronically as described above. If you have questions or need assistance while using CMS-Plus, please contact TMS Technical Programming Services at (724) 776-9000 ext. 212 or e-mail raabe@tms.org.

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.*

ABSTRACT DEADLINE: FEBRUARY 3, 2005

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.

FOR MORE INFORMATION, PLEASE CONTACT:

TMS Meeting Services
184 Thorn Hill Rd • Warrendale, PA 15086 USA
Tel: (724)776-9000 ext. 243 • Fax: (724)776-3770
Email: mtgserv@tms.org

Important Dates

February 3, 2005 – Abstract submission deadline • April 4, 2005 – Notification of acceptance
June 3, 2005 – Late news submission deadline • June 6, 2005 – Early registration deadline • June 22, 2005 – Welcoming Reception

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 Friday, June 3, 2005 to:

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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 between February 3-June 3, 2005. To submit a Late News Paper, visit the EMC Conference in CMS-Plus and select *Late News*. The same formatting instructions noted in the abstraction submission information will apply.

PUBLICATION OF PAPERS

Conference abstracts will be published in the *Journal of Electronic Materials*. We also strongly encourage you to submit full-length 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 during the same week, June 20-22, 2005, at the University of California. 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:

Alan Seabaugh
University of Notre Dame • Notre Dame, IN 46556
Tel: (574) 631-4473 • Fax: (574) 631-4393
Email: seabaugh.1@nd.edu

Abstracts submitted to DRC may not be submitted to EMC.

THE EMC 2005 EXHIBITION

The EMC event is a unique showcase for suppliers of technology related to the preparation and characterization of electronic materials. The program, the audience and the exhibition combine for an unsurpassed annual event in electronic materials, and you can be a part by reserving your space for the EMC 2005 Exhibition!

Exhibiting companies will meet more than 500 professionals from industry, universities and government laboratories.

Here is just a sampling of the products and services on display in the EMC Exhibition:

- Advanced thin-film characterization
- Chemical Vapor Deposition (CVD)
- Compound semiconductor materials
- Failure analysis
- GaAs and InP based epitaxial wafers; substrates
- High performance purification
- High purity metalorganics
- III-V materials
- Materials characterization
- MOCVD
- Optoelectronics
- Sapphire substrates
- Scanning probe & electron microscopes
- Silicon heterostructures
- Ultra High Purity (UHP) metals, gas & chemical
- Wafer processing equipment
- Wide bandgap semiconductors

To reserve space for the Exhibition contact: Cindy A. Wilson
Tel: 724/776-9000 x231 • E-mail: wilson@tms.org
or visit: <http://www.tms.org/EMC.html>

TECHNICAL PROGRAM

Papers are solicited in the specific areas listed below.

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Zinc Oxide: Growth, Doping, Defects, Nanostructures, and Devices

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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: Scanned Probes, Electron Microscopy, and Other Techniques

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Molecular Electronics: Devices, Materials and Contacts

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Nanotubes and Nanowires

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Chemical and Biological Sensors: Materials, Interfaces, and Integration

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Materials Integration: Wafer Bonding and Alternative Substrates

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Oxide Thin Film Integration: Alternative Dielectrics, Epitaxial Oxides, and Metal Gates

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

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