

68th Device Research Conference

June 21-23, 2010 • University of Notre Dame • South Bend, IN, USA

Call for Papers



www.DeviceResearchConference.org

For more than sixty years, the Device Research Conference has brought together leading scientists, researchers, and graduate students from varied disciplines in academia and industry to share their latest research and discoveries in the field. The university setting of the Device Research Conference encourages frank and open technical discussion on recent breakthroughs and advances in device research, and provides a great atmosphere for social events. The technical program will be a mix of invited, oral, and poster presentations. In addition, the conference will hold three evening rump sessions aimed at engaging the audience in a vigorous and charged discussion on the future directions of competing device technologies. The Device Research Conference has a tradition of strong graduate student participation. This is recognized by offering student travel support and a Best Student Paper Award.

The Device Research Conference is coordinated with the Electronic Materials Conference which will be held during the same week, from June 23 to 25, 2010. This coordination recognizes the close relationship between device and electronic materials research and provides for fruitful exchange of information between attendees of both conferences.

DEVICE TOPICS

The organizing committee invites you to submit your top-quality abstracts in all areas of electronic and photonic devices. Areas of particular interest include but are not limited to:

Biological Devices
Energy Scavenging Devices
Magnetic Devices
Memory Devices
Modeling and Simulation of Devices

Nanoscale Devices
Optoelectronic and Optical Devices
Organic and Molecular Devices
Power Devices
Quantum Devices

Silicon and III-V Electronic Devices
Spin-based Devices
Thin Film and Amorphous Devices
Terahertz Devices
Wide-Bandgap Devices

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IMPORTANT DATES

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| Abstract Submission Deadline | Mar. 1, 2010 |
| Author Acceptance Notification | April 12, 2010 |
| Late News Abstract Deadline | Jun. 7, 2010 |



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DEVICE RESEARCH CONFERENCE



SPIN TRANSPORT PHYSICS AND DEVICES – SHORT COURSE

Sunday, 20 June 2010

Spin-polarized carrier transport has lately become a more integral part of our field. Therefore, this year's Device Research Conference (DRC) will hold a short course on spin transport physics relevant to solid-state devices. Experts from the field will teach the physics and applications of spin in both metal- and semiconductor-based devices at the physics and engineering graduate student level. It is appropriate for industry, government, and university researchers, as well as managers seeking a concise introduction to the field.

| Agenda | Sunday, 20 June 2010 |
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| 8:30 | Registration |
| 8:55 | Course logistics and objectives |
| 9:00 | Magnetism in metals and semiconductors |
| 10:00 | Spin Torque Transfer |
| 11:00 | Non-equilibrium spin polarization and relaxation |
| 12:00 | Lunch |
| 1:00 | Spin Injection and Detection |
| 2:00 | Spin Wave Devices |
| 3:00 | Spin Logic Devices |
| 4:00 | Additional time for public Q&A |
| 4:30 | Adjourn |