

Lester Eastman Conference on High Performance Devices*



1st Call for Abstracts

August 3 – 5, 2010 (Tues - Thurs)

Papers are solicited covering the physics and performance of devices and circuits for high speed/frequency, high or low power devices, and optoelectronics. Technical thrust areas will include: wide bandgap materials and devices; narrow bandgap, low power materials and devices; and heterogeneous integration of dissimilar materials and devices. **Papers that emphasize innovative device concepts and physical phenomena leading to new devices are particularly encouraged.** There will be invited papers in key areas. The proceedings of the conference will be published.

The topics of interest include, but are not restricted to:

“Green” Technology (Visible/UV LEDs for Lighting/Displays; LEDS & Lasers for Purification/Bioscience and Other Applications; High Quantum Efficiency Photodetectors/Avalanche Photodiodes; Visible Lasers)

Power Conversion, Switching and Transmission (High Efficiency/Flexible Photovoltaics; Power Electronics/Switching; Normally-OFF Devices; Bio-Inspired Energy Storage)

High-Speed Devices (Microwave, mm-wave and sub-mm-wave Electronics; Optoelectronics; Measurement Techniques/Integration/Packaging)

Terahertz Technology (Schottky and BWO Devices; Optoelectronics and Photomixers; Quantum Cascade Lasers; Metamaterials for THz Components)

Infrared Photonics (MWIR Quantum Cascade Lasers; MWIR and LWIR Type II Superlattice Photodetectors; QW IR Photodetectors “QWIPs”; Quantum Dot Photodetectors)

Next-Generation Devices (Graphene/Carbon-based; Nanoelectronics; Nanophotonics/Plasmonics; MEMS; Silicon Photonics)

In order to encourage student participation, limited financial assistance for travel is available to first-named student authors who are presenting papers (depending on availability of funds). This assistance **must** be requested when the abstract is submitted. Prospective authors are invited to submit a 300-word Abstract plus one page of accompanying figures (as a PDF file by electronic submission only) by **May 25, 2010** through the conference website:

<http://www.ecse.rpi.edu/conf/LEC2010/>

Please note that all necessary company and/or government approvals must be obtained before Abstract submission. Instructions on how to submit an Abstract to the conference, as well as details for on-line registration, travel and accommodations, and housing are available at the conference website listed above.

Proceedings of the Conference will be published in the International Journal of High Speed Electronics and Systems and as a hard-cover book in the series “Special Topics on Circuits and Systems” (published by World Scientific).



The Lester Eastman Conference will be held this year on the Rensselaer Polytechnic Institute campus in Troy, New York, which is conveniently located 5 miles from Albany International Airport, a 2.5-hour train or car ride from New York City (Penn Station) or Boston, MA and a 4-hour drive from Montreal, Canada (see <http://www.ecse.rpi.edu/conf/LEC2010/location.htm>). Both individual and family accommodations will be available in area hotels and motels.

**Previously known as the Biennial Cornell University Conference on High Performance Devices*