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ABSTRACT DEADLINE: NOVEMBER 1, 2005

REMINDER: *In fairness to all potential authors, late abstracts will not be accepted.*

MRS Symposium DD: Solid-State Lighting Materials and Devices

Although solid-state light sources are already providing energy savings and environmental benefits in numerous applications, these sources are far from reaching their ultimate potential. Numerous technical challenges need to be overcome to demonstrate solid-state light sources with high efficiency and luminous flux at an affordable price. Materials and device research is particularly relevant in achieving this goal. This symposium is dedicated to the materials science and technology of solid-state lighting devices. The scope of the conference includes current-injected organic and inorganic light-emitting materials, wavelength conversion materials, nanomaterials, and encapsulants. The objective of the symposium is to bring together those working on material and device aspects of solid-state lighting and to review the current state of the art in internal efficiency, external efficiency, device scaling, packaging, reliability, theoretical modeling, and other relevant factors in solid-state lighting. Brought to maturity, such devices would likely see widespread use in applications as diverse as lighting, imaging, sensing, communications, and biotechnology. Internationally recognized experts will discuss recent progress in the field.

Topics of particular interest include, but will not be limited to:

- Light-emitting devices based on compound semiconductors
- Light-emitting devices based on organic materials
- Phosphors, nanophosphors, and other wavelength conversion materials
- Photonic crystal materials
- Encapsulants
- Physics of light-emitting devices
- Packaging for light-emitting devices
- Thermal management and optics of power packages
- Reliability of light-emitting devices
- Reflectors for light-emitting devices

Invited speakers include: **Paul Burrows** (Pacific Northwest National Lab), **Alex Cartwright** (SUNY-Buffalo), **Anil Duggal** (General Electric), **Suchi Guha** (Univ. of Missouri-Columbia), **Steve Hersee** (Univ. of New Mexico), **Robert Karlicek** (Luminous Devices), **Jong Kyu Kim** (Rensselaer Polytechnic Inst.), **Jong-Tae Lim** (Samsung, Korea), **Joe Mazzochette** (Laminar Ceramics), and **Franky So** (Osram).

Symposium Organizers

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