

Solid State and Organic Lighting (SOLED)

2 November - 3 November 2011, Omni Austin Hotel Downtown, Austin,
Texas, United States

Hotel Reservations

Conference Program

Covers all aspects of solid state lighting ranging from device physics to the design of efficient luminaire optics. Reviews advances in solid state lighting in materials, devices and equipment.

This event is part of the Renewable Energy and the Environment Congress, allowing attendees to access to all meetings within the Congress for the price of one and to collaborate on topics of mutual interest.

Dynamic Program

- **Plenary Speakers**
 - **New - Pathways to Ultra-Efficient Solid-State Lighting**
Mary H. Crawford, Sandia National Laboratories, USA
 - **Applying Systems Analysis to Innovation: Solar Energy**
Kevin DeGroat, Program Director, Antares Group, Inc., USA
Joe Morabito, Director, Alcatel-Lucent, USA
 - **Theory and Practice for Nanophotonic Light Trapping**
Shanhui Fan, Stanford University, USA
 - **Sustainable Energy & Optical Methods for Monitoring Air Pollution**
Matthew Fraser, Global Institute of Sustainability, Arizona State Univ., USA
 - **Opportunities for Optical Designs in Driving Concentrating Photovoltaic Technology**
Sarah Kurtz, Interim NCPV Director, Reliability Group Manager, NREL, USA
 - **Army S&T Development: Selected Energy Solutions**
Ed Shaffer, Chief, Energy & Power Division, Army Research Laboratory, USA
 - **Promises and Challenges in Light-Emitting Diodes for High-Power Lighting Applications**
E. Fred Schubert and Jaehee Cho, Rensselaer Polytechnic Institute, USA
- 12 Expert invited speakers from academia, industry and government
- 10 Oral presentations on cutting edge research in the field
- Poster presentations
- Postdeadline paper sessions



Chairs

Bernard Kippelen, *Georgia Tech, USA*, General Chair

Jiangeng Xue, *Univ. of Florida*, General Chair

Ulrich Lemmer, *Univ. Karlsruhe, Germany*, Program Chair

Norbert Linder, *OSRAM Opto Semiconductors GmbH, Germany*, Program Chair

Joachim Wagner, *Fraunhofer Inst. for Applied Solid State Physics IAF, Germany*, Program Chair

Papers are Published in Optics InfoBase. Here Are the Top 5 Downloaded 2010 SOLED Meeting InfoBase Papers:

- Transient Characteristics of CBP:Ir(ppy)₃-Based...
- Photoluminescence and Electroluminescence in...
- UV-LED Module Design with Maximum Power Density
- Polymeric Ambipolar Hosts for Large-Area Phosphor...
- GaN on Si

Go to Optics InfoBase for a listing of all meeting paper archives.

View the 2010 Meeting Archive containing the final program (pdf).

Sponsor:



Renewable Energy and the Environment

November 2-3, 2011, Omni Austin Hotel Downtown, Austin, TX, USA

Four Collocated Meetings Cover Optics and Photonics in Energy Generation and Conservation

[NEW! Optical Instrumentation for Energy & Environmental Applications \(E2\)](#)

[Optical Nanostructures and Advanced Materials for Photovoltaics \(PV\)](#)

[Optics for Solar Energy \(SOLAR\)](#)

[Solid State and Organic Lighting \(SOLED\)](#)

***Register for one meeting and attend any session in the Congress.**

Wide Spectrum of Topics Present Optical Solutions for Renewable Energy

- Utilization of optical technologies to develop energy generation equipment
- Optical design and analysis of optics for solar and LED applications
- Instrumentation and optical sensors for energy management
- Methods to measure the impact on the environment
- Optical nanostructures and materials to improve efficiency of solar cells and solar concentrator systems
- Advances in solid state lighting in materials, devices and light management

Latest Advances in Solar and Solid-State Lighting

- [8 Plenary Speakers](#)
 - **New** - Pathways to Ultra-Efficient Solid-State Lighting
Mary H. Crawford, Sandia National Laboratories, USA



- Applying Systems Analysis to Innovation:
Solar Energy
Kevin DeGroat, Program Director, Antares Group, Inc., USA
Joe Morabito, Director, Alcatel-Lucent, USA
- Theory and Practice for Nanophotonic Light Trapping
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- Promises and Challenges in Light-Emitting Diodes for High-Power Lighting Applications
E. Fred Schubert and Jaehee Cho, Rensselaer Polytechnic Institute, USA
- **48 expert invited speakers from academia, industry and government**
- **49 oral presentations on cutting edge research in the field**
- **24 poster presentations**
- **Postdeadline paper sessions**

Sponsor:



Optics for Solar Energy (SOLAR)

2 November - 3 November 2011, Omni Austin Hotel Downtown,
Austin, Texas, United States

Program

[Agenda of Sessions, Abstracts and Key to Authors](#)

[Searchable Online Conference Program](#)

[Overview of Program](#)

[Conference at a Glance](#)  (pdf)

[Invited Speakers At-a-Glance](#)

Program Overview

The focus of this meeting is on the optical components used to collect light and efficiently convert the collected light into useable forms of energy such as electricity or thermal energy for heating. Presentations at this meeting will cover the design of optical components and systems, modeling, integration of novel materials, manufacture, testing, field deployment, economic considerations, and application and test results. All forms of solar energy generation, transmission, and storage; from thermal to photovoltaic to novel methods will be covered in this forum.

Topics covered in this meeting include;

- Methods of energy generation (thermal, photovoltaic, solar hydrogen etc.)
- Concentrator photovoltaics (Fresnel lens, micro-optical, planar, cavity PV light guide, self-tracking, holographic concentrators, etc.)
- Energy storage technologies
- Tracking technologies
- Solar Cells and Materials used in solar energy applications
- Coatings: thin films and texturing
- Flexible and Conformal Optics
- Optics for spectrum splitting and holographic optics
- Solar Simulators/models
- Free form optics designs and other design approaches used in solar energy applications
- Optical effects in solar materials
- Energy generation /system cost




Online Conference Program

[Searchable Conference Program Available Online!](#)

- Browse speakers and the [agenda of sessions](#).
- Browse sessions by type or day.
- Use Advanced Search to search the program by author, title, OCIS code and more.
- Plan and print your personal [itinerary](#) before coming to the conference.

You may search the program without creating an account; however, you will not be able to create or save a personal itinerary without first creating an account. We strongly recommend that you create a user account first.

Abstracts, Agenda of Sessions and Key to Authors

- [Agenda of Sessions](#)  (pdf)
- [Abstracts](#)  (pdf)
- [Key to Authors and Presiders](#)  (pdf)

Special Events

Welcome Reception

[Plenary Sessions](#)

Poster Session

Post Deadline Sessions