

2010 | OSA Optics & Photonics Congress

CALL for PAPERS

**RENEWABLE ENERGY:
OSA OPTICS & PHOTONICS CONGRESS**

**Optical Nanostructures for
Photovoltaics (PV)**

**Solid-State and Organic Lighting
(SOLELED)**

COLLOCATED WITH THE ADVANCED PHOTONICS
OPTICS & PHOTONICS CONGRESS

June 21-24, 2010

**Karlsruhe-Messe und Kongress
(Conference Center)
KARLSRUHE, GERMANY**

SUBMISSION DEADLINE:

JANUARY 20, 2010

12:00 PM NOON EST (17:00 GMT)

Extended through February 9, 2010

12:00 p.m. noon EST (17:00 GMT)

www.osa.org/congresses

OSA[®]

SOLID-STATE AND ORGANIC LIGHTING (SOLED)

June 21-24 | 2010

SOLED will cover all aspects of solid state lighting ranging from device physics to the design of efficient luminaire optics. Within the next 25 years general lighting and illumination will undergo a revolution. Incandescent as well as gas discharge lamps will be gradually replaced by highly efficient organic and inorganic semiconductor devices. With both light sources, efficiencies of more than 100 lm/W for white light generation have recently been demonstrated. While inorganic LEDs are expected to be the dominating point light sources, organic devices (OLEDs) will play a major role as area light sources. The tremendous and ongoing progress relies on advances in material science, device packaging and light management.

PAPER TOPICS

LEDs

- LED growth, internal efficiency, droop
- Light extraction (incl. nanostructures, photonic crystals, surface plasmons)
- Novel device designs, modeling of LEDs
- Novel substrates and materials
- Phosphors, white LEDs, new concepts for high-quality white
- Color metrics for white LEDs
- Thermal management
- Manufacturing technologies
- Standardization
- LED applications

OLEDs

- New organic materials for high efficiency
- Light extraction
- Hybrid organic/inorganic approaches
- New device architectures
- Patterning, processing, and manufacturing technologies
- Large-area devices
- Lifetime and stability
- New transparent electrodes
- Thermal management
- Mechanical properties
- Modeling of electroluminescence and device physics
- Encapsulation technologies
- Photometric characterization techniques

Solid-State Lighting Systems

- Optical Design
- Color management
- Thermal management
- Metrology and standardization
- Drivers, Adaptive Control systems
- Applications (General, Automotive, Road/Street Lighting, Displays, etc.)

INVITED SPEAKERS

(As of November 2009)

PLENARY SPEAKERS

Progress in Conventional Lighting Technologies, **Klaus Streubel**; OSRAM, Germany

SSL: Innovation and Driver for Growth in the Lighting Market, **Bernhard Stapp**; OSRAM, Germany

LEDs INVITED SPEAKERS

GaN on Si, **Armin Dadgar**; Univ. of Magdeburg, Germany

AllnGaN Micro-Pixel Light Emitting Diodes: Novel Sources for Displays, Instrumentation, Communications and Hybrid Inorganic/Organic Optoelectronics, **Martin Dawson**; Univ. of Strathclyde, UK

OLEDs INVITED SPEAKERS

Title to Be Announced, **Dietrich Bertram**; Philips, Netherlands

Title to Be Announced, **Steve Forrest**, Univ. of Michigan, USA

Title to Be Announced, **Junji Kido**; Yamagata Univ., Japan

Title to Be Announced, **Karl Leo**; Technische Univ. Dresden, Germany

SOLID-STATE LIGHTING SYSTEMS INVITED SPEAKERS

LED Retrofits, **Moritz Engl**; OSRAM, Germany

Title to Be Announced, **Liisa Halonen**; Helsinki Univ. of Technology, Finland

OLEDs and LEDs for General Lighting Applications, **Paul Hartmann**; Tridonic, Austria

LED Headlamps, **Michael Kleinkes**; Hella KGaA, Germany

Title to Be Announced, **Andreas Timinger**; OEC AG, Germany

GENERAL CHAIR

Norbert Linder, OSRAM Opto Semiconductors GmbH, Germany

PROGRAM CHAIRS

Bernard Kippelen, Georgia Inst. of Technology, USA

Ulrich Lemmer, Univ. Karlsruhe, Germany

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

VISIT WWW.OSA.ORG/SOLED FOR MORE INFORMATION AND TO SUBMIT YOUR PAPER.

2010 | OSA Optics & Photonics Congress

ATTEND THE ADVANCED PHOTONICS CONGRESS IN KARLSRUHE, GERMANY, JUNE 21–24, 2010

- Collocated with the **Renewable Energy** OSA Optics & Photonics Congress
- Joint sessions
- Poster sessions
- Joint plenary sessions
- **Celebrating 50 Years of the Laser Special Plenary:**
Featuring Keynote Speaker, Theodor W. Hänsch, Max Planck Inst. for Quantum Optics, Germany, 2005 Nobel Prize Laureate
- Networking, information sharing and discussion

The Advanced Photonics: OSA Optics & Photonics Congress is collocated with the Renewable Energy: OSA Optics & Photonics Congress. Combined the congress features 7 meetings with a broad range of topics including:

- FTTx architectures
- Grating Properties
- Nonlinear Effects in Fibers
- Slow and Fast Light in Sensors
- Solid-State Lighting Systems

Registered attendees of any of the featured meetings will enjoy more opportunities for cross-networking and information sharing. One registration fee will allow access to any session held at both the Advanced Photonics and Renewable Energy congresses.

JOIN OSA TODAY!

By signing up to become an official OSA member, among many other valuable benefits, you'll be able to register for OSA's Fall Congress at the member discount price – that's a \$160 difference! To become an OSA member, visit www.osa.org/membership.

OSA FOUNDATION STUDENT TRAVEL GRANTS

The OSA Foundation is pleased to offer travel grants of up to \$1,000 USD to students from developing countries who are attending Advanced Photonics 2010.

Please visit www.osa.org/aboutosa/grants/foundationgrant/ to find out more information about how to apply for a grant. All applications for Advanced Photonics must be received by April 15, 2010.