CALL for PAPERS

ADVANCED PHOTONICS:
OSA OPTICS & PHOTONICS CONGRESS

Access Networks and In-house Communications (ANIC)
Bragg Gratings, Photosensitivity and Poling in Glass Waveguides (BGPP)
Nonlinear Photonics (NP)
Optical Sensors (Sensors)
Signal Processing in Photonic Communications (SPPCom)

COLLOCATED WITH THE RENEWABLE ENERGY
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
The Nonlinear Photonics meeting is a venue for researchers interested in nonlinear optical processes in structures, devices and systems. The meeting covers all aspects of nonlinear photonics and is devoted to both temporal and spatial nonlinear effects. It covers computational as well as experimental aspects and discusses nonlinear material aspects as well as nonlinear systems.

PAPER TOPICS

Temporal and Spatiotemporal Effects
- Spatiotemporal effects
- Nonlinear effects in fibers
- Nonlinear pulse propagation in fiber
- Temporal solitons in fibers
- Cascaded and second order nonlinearities

Computational Analysis, Design and Modeling of Dissipative and Conservative Systems
- FDTD
- Dissipative solitons and ultra-short pulse modelling

Poling, Spatial and Periodic Nonlinear Effects
- Spatial optical solitons, self-trapping, and self-guiding effects
- Nonlinear effects in periodic structures
- Active and dissipative effects

All-Optical Devices and Applications
- Nonlinear Devices and Systems
- Novel Nonlinear Materials and Structures

INVITED SPEAKERS (As of November 2009)

Special Session on Silicon Nanophotonics
Applications of Four-wave Mixing in Silicon Nanostructures, Alex Gaeta, Cornell Univ., USA
Silicon-Organic Hybrid Nonlinear Nanophotonics, Michael Hochberg, Univ. of Washington, USA

Invited Speakers
Mirrorless Optical Parametric Oscillators, Carlota Canalias, KTH Royal Institute of Technology, Sweden
Phase Diagram and Condensation in Random Lasers, Claudio Conti, INFM – CRS SOFT, Univ. La Sapienza, Italy
Quantum Aspects of Ultrashort Laser Pulse Filamentation – Hawking Radiation and the Dynamical Casimir Effect, Danielle Faccio, Univ. dell’ Insurbia, Italy

Monolithic Frequency Comb on a Chip, Tobias Kippenberg, Max-Planck Inst., Germany
Use of Semiconductor Optical Amplifiers in Signal Processing Applications, Bob Manning, Tyndall Natl. Inst., Ireland
Progress on High Power Supercontinuum Generation in Optical Fibers, Jeff Nicholson, OFS Labs, USA
Super Molecular Photonics, Devanand Shenoy, DARPA, USA
Rogue Waves in Optics, Majid Taki, Univ. de Lille 1, France

Please check the website for updates as speaker names will continue to be added as they are confirmed.

GENERAL CHAIRS

Michael Cada, Dalhousie Univ., Canada
Jonathan Knight, Univ. of Bath, UK

PROGRAM CHAIRS

Wieslaw Krolikowski, Australian Natl. Univ., Australia
Karsten Rottwitt, Danmarks Tekniske Univ., Denmark
Frank Wise, Cornell Univ., USA

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