

2010 | OSA Optics & Photonics Congress

# 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](http://www.osa.org/congresses)

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# NONLINEAR PHOTONICS (NP)

June 21-24 | 2010

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

- Active device modelling
- System 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**, INFN – CRS SOFT; Univ. La Sapienza, Italy

Quantum Aspects of Ultrashort Laser Pulse Filamentation – Hawking Radiation and the Dynamical Casimir Effect, **Danielle Faccio**, Univ. dell' Insubria, 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](http://WWW.OSA.ORG/NP) 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](http://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/](http://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.