2010 OSA Optics & Photonics Congress

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 OSA®

ACCESS NETWORKS AND IN-HOUSE **COMMUNICATIONS** (ANIC)

June 21-24 2010

The worldwide FTTx users are increasing exponentially and soon massive deployments across the globe will be initiated. Europe is expected to be one of the high growth areas and many leading vendors and operators are investing heavily on the related optical access network technologies. EU also supports actively major research projects oriented to solutions for enhanced broadband connectivity through the use of optics and photonics. An OSA event organized in Europe on the relevant topics is expected to attract significant attention and have high impact.

The technical topics of this meeting will address all relevant research challenges and open research issues for FTTx technologies.

PAPER TOPICS

- FTTx architectures
- Tradeoffs of passive vs. active network implementation
- Enhancements in passive optical networks
- WDM in the access network
- Single fiber transmission limitations
- Techniques supporting enhanced network scalability
- Techniques supporting 10G per channel solutions
- Optical amplification in the access network
- Colorless ONUs designs
- Monitoring techniques
- Impairment compensation techniques
- Modulation formats suited for reflective ONUs
- Free-space optics

- Radio over fiber
- POF and MMF transmission issues and performance
- for access networks
- switching in access networks
- for WDM-PONs
- performance support

- access networks deployments

INVITED SPEAKERS (As of November 2009)

Hennin Buelow, ALU, Germany

Olaf Ziemann, Fachhochschule Nürnberg, Germany

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

GENERAL CHAIR

Ioannis Tomkos, AIT, Greece

PROGRAM CHAIRS

ACCESS NETWORKS

Thomas Pfeiffer, Alcatel-Lucent, Germany Josep Prat, Univ. Politecnica de Catalunya, Spain

IN-HOUSE COMMUNICATIONS

Philippe Chanclou, France Telecom, France Olaf Ziemann, Fachhochschule Nürnberg, Germany

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

- Wireless-wireline convergence
- Packet/burst switching techniques suitable
- Applications of wavelength and fiber
- Dynamic wavelength assignment and control
- MAC optimization for QoS and enhanced
- Resiliency issues
- Optical access-core networks convergence
- Techno-economic optimization of optical
- Network demonstrations and field trials

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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.