

2nd Symposium on Photonics, Networking and Computing

in conjunction with the 7th Joint Conference on Information Sciences

September 26-30, 2003

Embassy Suites Hotel and Conference Center,

Cary, North Carolina, USA

www.ee.duke.edu/JCIS

Honorary Chair:

Kristina Johnson, Duke University

General Chair:

David Brady, Duke University

Program Chairs:

H. John Caulfield, Fisk University; Paul P. Wang, Duke U.

Keynote Presentations:

Emmett Leith, University of Michigan

Ulrich M. Gösele, Max-Planck-Institut, Germany

Banquet Speaker:

H. John Caulfield, Fisk University

Deadlines and Important Dates

April 14, 2003*	Paper summaries due to Conference Manager (*DEADLINE EXTENDED!!!)
May 14, 2003	Authors notified of paper acceptance based on reviews.
June 16, 2003	<i>Revised</i> camera-ready summaries due to Conference Manager.
June 16, 2003	<i>Invited</i> paper summaries due to Conference Manager
July 1, 2003	Deadline for authors with accepted and invited papers to register and submit the publication fee
September 26-30, 2003	PNC 2003 Conference (in conjunction with JCIS 2003), Embassy Suites Hotel and Conference Center, Cary, NC, USA

Conference Topics

The 2nd Symposium on Photonics, Networking and Computing will consist of both regular and invited sessions focusing on topics including, but not limited to:

Fibers and Propagation

- Optical fiber fabrication and design
- Specialty optical fibers
- Fiber measurement techniques
- Fiber-based sensors
- Nonlinear and polarization effects in fiber

Amplifiers and Lasers

- Optical fiber and waveguide amplifiers and lasers
- Rare-earth doped fiber and waveguide amplifiers
- Raman and Brillouin fiber amplifiers
- Optical parametric fiber amplifiers
- Hybrid fiber optical amplifiers

Grating, Photonic Bandgap and Signal Conditioning Devices

- Arrayed-waveguide gratings
- Fiber gratings and fiber grating based devices
- Photonic bandgap devices
- Polarization control and monitoring devices
- Acousto-optic devices

Optical Switching, Wavelength Separation and Planar Waveguide Devices

- Bufferless optical WDM switch
- Holographic optical switching
- PLC and planar waveguide devices
- Waveguide materials and theory
- Polymer waveguides

Optoelectronics Devices

- Shared tunable wavelength converters
- Laser sources
- Detectors and modulators
- Device packaging
- Wavelength conversion

Digital Transmission System

- Transmission system modeling and experiments
- WDM transmission system
- System impact of fiber nonlinearities
- System aspects of polarization effects
- Signal processing techniques

Subsystem, Network Elements and Analog Systems

- Network elements and their performance
- Transmitter and receiver subsystem
- Multiplexing and demultiplexing subsystems
- Gain equalization subsystem
- Adaptive impairment compensation system

Lightwave Communication and Networks

- WDM ring networks
- Mesh and multi-ring optical networks
- Reconfigurable WDM optical networks
- Protocols, technologies, and architectures for next generation optical internetworks
- Turbo-coded PPM CDMA

Applications

- Dense WDM applications
- Optical performance monitoring
- Power-efficient design
- Scheduling application
- Network modeling, planning and design for commercial deployment

Optical Materials, Fabrication and Characteristics

- Photonics crystals engineering and applications
- Nanofabrication techniques
- Organic light absorbers and emitters

Ultrafast Optics, Optoelectronics and Applications

- Short-pulse solid state
- Semiconductor
- Fiber and waveguide optical sources and devices

Medical and Biological Applications

Biomedical optics
Optical coherence tomography
Photochemistry and photobiology

Active Optical Sensing

Remote sensing
Point detectors
Atmospheric studies

Nanophotonics

Optical code-division multiple access
Optics with subwavelength resolution
Nanocavities and nanopertures

Program Committee:

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Weigang Zhang, Nankai University, China

Paper Submission:

Summaries may be submitted electronically in Word, PDF or postscript format to Conference Manager Anna Menzies at menzies_ap@compuserve.com or mailed (3 copies) to 1211 Courtland Dr., Raleigh, NC 27604, USA. Summaries must be received by March 14, 2003 and should not exceed 4 pages of 10-point font, double-column, single-spaced text (1 page minimum) with figures and tables included. All accepted summaries submitted in camera-ready format by June 16, 2003 and for which the authors have paid the paper publication fee will appear in the conference proceedings. The proceedings will be published and available at the conference. Author's instructions are posted on the JCIS Web site.

Contact Information:

JCIS/PNC 2003:

Pratt School of Engineering

Department of Electrical and Computer Engineering,

Duke University, Box 90291, Durham, NC 27708, USA

Telephone: (919)660-5271

Fax (919)660-5293

E-mail: jcis@ee.duke.edu or menzies_ap@compuserve.com