

PHOTONICS SOCIETY 2014 Program-At-A-Glance

SUNDAY, 12 OCTOBER 2014

Registration & Speaker Check-in Hours: 11:00 AM – 6:00 PM in the Grand Foyer

12:00 PM - 3:30 PM Short Course: Silicon Photonics Fabrication Workshop

Aventine DEF

Introduction to Silicon Photonics Device Design and Fabrication

This short course teaches participants how to design passive silicon photonic devices using analytic and advanced numerical techniques. Participant designs will be fabricated by a state-of-the-art rapid-prototyping 100 keV electron-beam lithography facility (University of Washington, USA). All designs will be tested using an automated optical probe station and the data provided to the participants. Participants will then analyze their experimental data.

Chair: Lukas Chrostowski, *University of British Columbia, Canada*

4:30 PM - 6:30 PM "Hot Papers" & "Meet the Editors"

Aventine C

Session followed by refreshments

This new event will offer the opportunity to meet and hear from Carmen Menoni (Editor of IEEE Photonics Journal) and Seb Savory (Editor of IEEE Photonics Technology Letters) about the mission and focus of their journals, and will involve presentations, by the respective authors, of recent 'highlight' papers from these journals, as selected by the journal editorial boards.

Chair: Martin Dawson, Institute of Photonics - *University of Strathclyde, Scotland*

6:30 PM – 7:30 PM Panel on Metamaterials

Aventine B

At a time when new materials, devices, applications and regimes of operation for Metamaterials are emerging rapidly, this panel discussion will allow the community to take stock of where the field is heading and discuss the challenges and opportunities ahead. This panel is organized by Alexandra Boltasseva, *Purdue University, USA*.

Panelists:

Andrea Alu, *The University of Texas at Austin, USA*

Nader Engheta, *University of Pennsylvania, USA*

Nanfang Yu, *Columbia University, USA*

Zubin Jacob, *University of Alberta, Canada*

MONDAY, 13 OCTOBER 2014

NOTE: ALL SESSIONS IN ORANGE WILL BE RECORDED AND AVAILABLE FOR VIEWING AFTER THE CONFERENCE FOR A FEE. FOR MORE INFORMATION PLEASE CONTACT: INGRID DONNELLY AT I.DONNELLY@IEEE.ORG, VISIT WWW.IPC-IEEE.ORG OR STOP BY THE REGISTRATION DESK

Registration & Speaker Check-in Hours: 7:30 AM – 5:00 PM in the Grand Foyer

*****Post-Deadline Paper Submissions Due by 9:00 AM*****

Aventine A	Aventine B	Aventine C	Aventine D	Aventine E	Aventine F	Palatine AB	Portofino AB
8:30-10:00am MA1 BIO 1 Advances in Biophotonics A. Ellerbee	8:30-10:00am MB1 DISL 1 Novel LEDs P. Servati	8:30-10:00am MC1 OI 1 Waveguides and Devices for Optical Interconnects I O. Yilmaz	8:30-10:00am MD1 ONS 1 PON and Data Networks M. Xia	8:30-10:00am ME1 SL 1 VCSEL I D. Bimberg	8:30-10:00am MF1 OMND 1 Frequency Combs and Non Linear Effects in Microresonators A. Maslov	8:30-10:00am MG1 OC 1 Visible Light & Other Systems I. White	8:30-10:00am MH1 NANO TUTORIAL Nader Engheta E. Cubukcu

COFFEE BREAK 10:00 AM - 10:30 AM Grand Foyer

10:30-11:30am MA2 BIO 2 Bioimaging and Tomography C. Yang	10:30-12:00pm MB2 OI 2 Waveguides and Devices for Optical Interconnects II R. Huang	10:30-12:00pm MC2 PIP 1 Designs for Integration Y. Akulova	10:30-12:15pm MD2 ONS 2 Optical Radio and Overlay Technologies A. Kelly	10:30-12:00pm ME2 SL 2 VCSELs, Nanolasers and Microdisks D. Bimberg	10:30-12:30pm MF2 OMND 2 Theory and Applications of Microresonators M. Sumetsky	10:30-12:00pm MG2 OC 2 Modulation & Detection I Z. Tao	10:30-12:00pm MH2 NANO 1 Nanophotonic Devices I G. Shvets
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12:00 PM – 1:30 PM LUNCH (on own)

1:30-3:00pm MA3 BIO 3 Nanobiophotonics and Optofluidics A. Vasdekis	1:30-3:00pm MB3 DISL 2 TFTs and Displays P. Servati	1:30-3:15pm MC3 PIP 2 Transceivers Integration L. Johansson	1:30-3:00pm MD3 ONS 3 Networking L. Chen	1:30-3:15pm ME3 SL TUTORIAL Volker Sorger D. Bimberg	1:30-3:00pm MF3 OMND 3 Cavity Optomechanics and Optical Forces in Microcavities A Matsko	1:30-2:45pm MG3 OC3 Fiber Nonlinearity & Modulation M. Mazurczyk	1:30-3:00pm MH3 NANO 2 Plasmonic Metamaterials I H. Giessen
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COFFEE BREAK 3:00 PM -3:30 PM Grand Foyer

3:30 PM – 5:00 PM Plenary Session I – MI 4

Vicino Ballroom

Session Chair: Susumu Noda, *Kyoto University, Japan*

3:30 PM - 4:15 PM Hybrid Silicon Photonic Integrated Circuits, John Bowers, *University of California Santa Barbara, USA*

4:15 PM – 5:00 PM Single Molecule Imaging and Nanometry, Toshio Yanagida, *Osaka University, Japan*

5:00 PM – 6:00 PM Awards Ceremony

6:00 PM-7:30 PM WELCOME RECEPTION Aventine ABCG

Session Chair: Susumu Noda, *Kyoto University, Japan*

TUESDAY, 14 OCTOBER 2014

● *Indicates a recorded session*

Registration & Speaker Check-in Hours: 8:00 AM – 5:00 PM in the Grand Foyer

Aventine A	Aventine B	Aventine C	Aventine D	Aventine E	Aventine F	Palatine AB	Portofino AB
8:30-10:00am TuA1 PSSI 1 Advancements in Avalanche Photodiodes J. Campbell	8:30-10:15am TuB1 OI 3 Systems and Architectures for Optical Interconnects M. Haney	8:30-10:00am TuC1 MWP 1 Advanced Microwave Photonics Components B. Jacobs	8:30-10:00am TuD1 SS HPDL 1 Special Symposium on High Power Diode Lasers and Systems I B. Schmidt	8:30-10:00am TuE1 SL 3 DFB, DBR and short pulses G. Eisenstein	8:30-10:00AM TuF1 ONS 4 Transmission and Related Effects O. Liboiron- Ladouceur	8:30-10:00am TuG1 OC 4 100G and Emerging Transmission Technologies L. Oxenlowe	8:30-10:15am TuH1 NANO 3 Nanophotonics Devices II A. Yanik

COFFEE BREAK 10:00 AM - 10:30 AM Grand Foyer

10:30-12:00pm TuA2 PSSI 2 3D Imaging Techniques J. David	10:30-11:45am TuB2 OI 4 Integration of Sources for Optical Interconnects E. Johnson	10:30-12:00pm TuC2 MWP 2 Photonic Microwave Signal Processing V. Urick	10:30-11:45am TuD2 SS HPDL 2 Special Symposium on High Power Diode Lasers and Systems II J. Marsh	10:30-12:00pm TuE2 SL 4 Short Pulses and Amplification TBD	10:30-11:45am TuF2 PIP 3 III-V Integration L. Verslegers	10:30-12:00pm TuG2 OC5 High Capacity Transmission Technology N. Alic	10:30-12:00pm TuH2 NANO 4 Plasmonic Metamaterials II A. Yanik
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12:00 PM – 1:30 PM LUNCH (on own)

1:30-3:00pm TuA3 PSSI TUTORIAL Elias Towe E. Duerr	1:30-3:00pm TuB3 OI 5 Modulators and Detectors for Optical Interconnects J. Rosenberg	1:30-3:00pm TuC3 MWP 3 Integrated Microwave Photonics C. Lim	1:30-3:00pm TuD3 SS HPDL 3 Special Symposium on High Power Diode Lasers and Systems III P. Leisher	1:30-3:00pm TuE3 SL 5 Si Photonics, Polariton Lasers G. Eisenstein	1:30-3:00pm TuF3 OMND 4 High Q-Factor Microcavities H. Tureci	1:30-2:45pm TuG3 OC 6 All-Optical Signal Processing B. Kuo	1:30-3:00pm TuH3 NANO 5 Nanophotonic Devices III M. Jarrahi
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COFFEE BREAK 3:00 PM -3:30 PM Grand Foyer

3:30 PM – 5:00 PM Plenary Session II - TuI4

Vicino Ballroom

Session Chair: Susumu Noda, *Kyoto University, Japan*

3:30 - 4:15pm Exploiting Quantum Coherence for New Technologies: Timing, Navigation and Sensors, Sir Peter Knight FRS, *Imperial College London, UK*

4:15 – 5:00pm Cold-Mechanics to Stable-Microwaves: the Future of Optical Microcavity Research, Kerry Vahala, *California Institute of Technology, USA*

5:30 PM – 6:30 PM WOMEN IN PHOTONICS RECEPTION

Barcino – Gallery I

Session Chair: Dalma Novak, *Pharad LLC., USA*

WEDNESDAY, 15 OCTOBER 2014

● *Indicates a recorded session*

Registration & Speaker Check-in Hours: 8:00 AM – 5:00 PM in the Grand Foyer

Aventine A	Aventine B	Aventine C	Aventine D	Aventine E	Aventine F	Palatine AB	Portofino AB
8:30-10:00am WA1 PSSI 3 Emerging Photodetector Technologies B. Onat	8:30-10:00am WB1 NLUO 1 Chaotic Photonics and Solitons R. Morandotti	8:30-10:00am WC1 MWP 4 Photonic Microwave Generation A. Wiberg	8:30-10:00am WD1 SS-Sol 1 Special Symposium: Optoelectronic Devices for Solar Energy Harvesting I M. Modestino	8:30-10:00am WE1 OFT 1 Optical Fiber Transmission K. Oh	8:30-10:00am WF1 SS OM 1 Special Symposium on Optomechanics I M. Li	8:30-10:00am WG1 HPIS 1 Ultrashort High Intensity Laser S. Kubodera	8:30-10:00am WH1 OMND 5 Micro/Nano Lasers Y. Xiao

COFFEE BREAK 10:00 AM - 10:30 AM Grand Foyer

10:30-11:45am WA2 PSSI 4 Midwave Infrared Detectors E. Duerr	10:30-11:45am WB2 NLUO 2 Parametric Conversion and Fiber Laser W. Zhang	10:30-11:45am WC2 MWP TUTORIAL Nathan Newbury F. Quinlan	10:30-12:00pm WD2 SS-Sol 2 Special Symposium: Optoelectronic Devices for Solar Energy Harvesting II C. Moser	10:30-11:30am WE2 OFT 2 Optical Fiber Lasers and Amplifiers M. Erkintalo	10:30-11:45am WF2 SS OM 2 Special Symposium on Optomechanics II M. Li	10:30-12:00pm WG2 HPIS 2 High Power Lasers & Applications L. Veisz	10:30-12:00pm WH2 NANO 6 Nanophotonic Light Sources and Detectors M. Mikkelsen
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12:00 PM – 1:30 PM LUNCH (on own)

1:30-3:00pm WA3 PSSI 5 Interferometric and Temporal Imaging S. Gunapala	1:30-3:00pm WB3 NLUO 3 The Metamaterial and Isolators Y. Ding	1:30-3:00pm WC3 PMM 1 Photonic Materials and Circuits D. Gunev	1:30-3:00pm WD3 SL 6 Narrow Linewidth and Hot Topics S. Olivier	1:30-3:00pm WE3 OFT 3 Non-Silica Based Fiber and Components S. Huang	1:30-3:00pm WF3 OMND 6 Photonic Crystal and Nanometallic Resonance Devices H. Tureci	1:30-3:00pm WG3 OC TUTORIAL Fabio Pittala C. Xie	1:30-3:00pm WH3 NANO 7 Quantum Nanophotonics E. Cubukcu
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COFFEE BREAK 3:00 PM -3:30 PM Grand Foyer

3:30-4:45pm WA4 PSSI 6 Optical Receivers and Sensors C. Tan	3:30-4:45pm WB4 NLUO 4 Magneto-Plasmonics and Nonlinear Imaging W. Shi	3:30-5:00pm WC4 PMM 2 Novel Photonic Materials Z. Jacob	3:30-5:00pm WD4 SL 7 GaN-based + High Power R. Rosales	3:30-5:15pm WE4 OFT 4 Fiber Nonlinear Effects and Applications P. Lucas	3:30-5:00pm WF4 OMND 7 Spectroscopy of Micro/Nano Devices J. Rosenberg	3:30-5:00pm WG4 OC 7 Spatial Division Multiplexing H. Batshon	3:30-4:45pm WH4 NANO 8 Nanophotonic Waveguides K. Srinivasan
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5:30 PM – 6:30 PM STUDENT POSTER COMPETITION

Vicino Ballroom

Session Chair: Thomas Clark, *JHU Applied Laboratory, USA*

THURSDAY, 16 OCTOBER 2014

● *Indicates a recorded session*

Registration & Speaker Check-in Hours: 8:00 AM – 10:00 AM in the Grand Foyer

Aventine A	Aventine B	Aventine C	Aventine D	Aventine E	Aventine F	Palatine AB	Portofino AB
8:30-10:00am ThA1 PSSI 7 Novel Optical Technologies I. Ishimaru	8:30-10:00am ThB1 NLUO 5 Graphene: Carrier Dynamics & Nonlinear Photonics A. Fratalocchi	8:30-10:00am ThC1 PMM 3 Metamaterials and Photonic Crystals N. Yu	8:30-9:45am ThD1 SL 8 Selection of Best P. Smowton	8:30-10:15am ThE1 OFT 5 Novel Optical Fibers and Components X. Chen	8:30-10:00am ThF1 OMND 8 Microcavity and Grating Devices A. Matsko	8:30-10:00am ThG1 OC 8 Modulation & Detection II B. Puttman	8:30-9:45am ThH1 NANO 9 Nanophotonic Devices IV H. Demir

COFFEE BREAK 10:00 AM - 10:30 AM Grand Foyer

10:30 AM - 12:00 PM CLOSING CEREMONY

POST-DEADLINE SESSION

BEST STUDENT PAPER AND POSTER AWARDS

Vicino Ballroom

Session Chair: Thomas Clark, *JHU Applied Laboratory, USA*

SEE YOU IN 2015!
IEEE PHOTONICS CONFERENCE
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