

8:15 am – 8:30 am (EDT)

Welcome Remarks, President, IEEE Photonics Society | Carmen Menoni, *Colorado State University, USA*
Welcome Remarks, IPC 2020 General Chair | Zetian Mi, *University of Michigan, Ann Arbor, USA*

8:30 am – 10:00 am (EDT)

8:30am-9:45am MA1 Machine Learning in Photonics Systems I Session Chairs: K. Kojima & A. Lau	MB1 Computational Imaging and Simulation Session Chairs: M. Villiger & P. Munro	8:30am-9:30am MC1 Metasurfaces and Plasmonic Nanostructures Session Chairs: J. Rho & Q. Gu	MD1 Integrated Microwave Photonics Session Chairs: R. DeSalvo & A. Nirmalathas	ME1 SS OFC I Session Chairs: M. Ebrahim-Zadeh & C. Suddapalli	MF1 Novel and Nonlinear Devices Session Chairs: A. Hurtado & W. Loh	MG1 High-speed Transport Networks Session Chairs: T. Tsuritani & H. Lu	MH1 Optical Interconnect Solutions I Session Chair: J. Cardenas	8:30am-9:45am MI1 QPIT Tutorial & Quantum Computation Session Chairs: X. Ma & M. Brodsky
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30 Minute Break

10:30 am – 12:00 pm (EDT)

MA2 Machine Learning in Photonics Systems II Session Chairs: A. Lau & D. Zibar	MB2 Microscopy Session Chairs: D. Kang & J. Park	MC2 Detection and Sensing Session Chairs: P. Deotare & N. Giebink	MD2 Microwave Photonics Links and Signal Processing Session Chairs: D. Nickel & E. Ackerman	ME2 SS OFC 2 Session Chairs: P. Schunemann & M. Ebrahim-Zadeh	MF2 Microresonator Lasers Session Chairs: X. Yi & W. Loh	MG2 High-performance Optical Systems and Networks Session Chairs: F. Gunning & X. Jiang	MH2 Optical Interconnect Solutions II Session Chair: J. Ryckman	MI2 Entanglement Creation, Manipulation, Characterization Session Chairs: S. Polyakov & M. Brodsky
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90 Minute Break

1:30 pm – 3:00 pm (EDT)

MA3 Machine Learning in Photonics Systems III Session Chairs: D. Zibar & K. Kojima	MB3 BIO Tutorial & Sensing Session Chairs: H. Schimdt & Y. Sun	1:30pm-2:45pm MC3 Quantum Nanophotonics Session Chairs: M. Khajavikha & P. Barclay	1:30pm-2:30pm MD3 Microwave Photonic Radars and Beamforming Session Chairs: C. Middleton & P. Matthews	1:30pm-3:30pm ME3 Industry Forum - Recipes for Successful Entrepreneurship Session Chair: D. Novak	MF3 Waveguides and Resonators Session Chairs: A. Matsko & K. Yang	MG3 Multi-band Optical Transmission Session Chairs: Y. Akasaka & L. Galdino	MH3 Integrated Actives and Hybrid Modulators Session Chair: T. Gu	
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30 Minute Break

3:30 pm – 5:00 pm (EDT)

MA4 Awards I Session Chairs: C. Lim & W. Zhou	MB4 Deep Learning Session Chairs: M. Sarunic & L. Tian	3:30pm-4:45pm MC4 Laser Processing and Optical Manipulation Session Chairs: R. Menon & P. Deotare	3:30pm-4:30pm MD4 Millimeter Wave and TeraHertz Microwave Photonics Session Chairs: J. Kalkavage & T. Klee		3:30pm-4:45pm MF4 Nanophotonics and Metamaterials Session Chairs: K. Yang & W. Loh		MH4 OI Tutorial & Interconnects for High Performance Systems Session Chair: T. Gu	MI4 Atomic Physics Based Approaches to Quantum Technologies Session Chairs: M. Hosseini & M. Brodsky
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8:30 am – 10:00 am (EDT)

Plenary I – TuA1

Session Chair | **Zetian Mi**, *University of Michigan, Ann Arbor, USA*

8:30 am – 9:15 am | **Plenary Speaker, Connie Chang-Hasnain**, *University of California, Berkeley, USA*

9:15 am – 10:00 am | **Plenary Speaker, Chris Koeppen**, *II-VI Incorporated, USA*

30 Minute Break

10:30 am – 12:00 pm (EDT)

<p>TuA2 Machine Learning in Photonics Systems IV Session Chairs: A. Lau & D. Zibar</p>	<p>TuB2 Smart System Engineering Session Chairs: P. Munro & D. Kang</p>	<p>10:30am-11:45am TuC2 Integrated Nanophotonics Session Chairs: Q. Gu & R. Menon</p>	<p>TuD2 Nanostructure and Quantum-Based Lasers Session Chairs: J. Bowers & H. Zimer</p>	<p>10:30am-11:15am TuE2 Detectors for Photonic Integrated Circuits Session Chair: A. Sarangan</p>	<p>TuF2 Infrared Fiber- based and Nonlinear Sources Session Chairs: M. Bernier & P. Schunemann</p>	<p>10:30am-11:45am TuG2 Display Futures Session Chairs: C. Lin & J. Herrnsdorf</p>	<p>TuH2 OI Keynote Session Chair: A. Seyedi</p>	
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90 Minute Break

1:30 pm – 3:00 pm (EDT)

<p>TuA3 Machine Learning in Photonics Systems V Session Chairs: K. Kojima & D. Zibar</p>	<p>1:30pm-2:30pm TuB3 Optical Coherence Tomography Session Chairs: B. Applegate & M. Sarunic</p>	<p>TuC3 Nonlinear Nanophotonic Devices Session Chairs: P. Barclay, V. Menon & L. Yang</p>	<p>TuD3 III-Nitride and Short-Wavelength Lasers Session Chairs: C. Tan & J. Zhang</p>	<p>1:30pm – 2:45pm TuE3 Integrated Photodetection Systems Session Chair: G. Balakrishnan</p>	<p>1:30pm-2:30pm TuF3 OMND Tutorial & Programmable Integrated Photonics Session Chairs: W. Loh & K. Yang</p>	<p>1:30pm-2:45pm TuG3 Display & Lighting Devices Session Chairs: P. Schuele & L. Lin</p>	<p>1:30pm-2:45pm TuH3 TuH3 - VCSEL Part II Session Chair: C. Xiong</p>	<p>TuI3 Active Silicon Photonics Part I Session Chair: J. Bovington</p>
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30 Minute Break

3:30 pm – 5:00 pm (EDT)

	<p>3:30pm-4:45pm TuB4 Microfluids Session Chairs: Y. Sun & H. Schmidt</p>	<p>3:30pm-4:30pm TuC4 Nanostructures for Light Coupling Session Chairs: N. Giebink & L. Yang</p>	<p>3:30pm-4:30pm TuD4 Tutorial on Semiconductor Lasers Session Chairs: N. Tansu & E. Tournié</p>	<p>TuE4 High-intensity Ultrafast Sources Session Chairs: M. Hemmer & H. Fattahi</p>	<p>3:30pm-4:45pm TuF4 Microresonator Assisted Sensing and Spectroscopy Session Chairs: S. Huang & W. Loh</p>	<p>TuG4 LED Materials and Processes Session Chairs: S. Pimputkar & P. Schuele</p>	<p>TuH4 OI Workshop: The Future of VCSELS, 100G and Beyond? Session Chair: D. Kutcha</p>	<p>TuI4 Active Silicon Photonics Part II Session Chair: A. Melikyan</p>
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8:30 am – 10:00 am (EDT)

Plenary II – WA1

Session Chair | Zetian Mi, University of Michigan, Ann Arbor, USA

8:30 am-9:15 am | Mordechai (Moti) Segev, Technion – Israel Institute of Technology, Israel

9:15 am – 10:00 am | Paul B. Corkum, University of Ottawa, Canada

30 Minute Break

10:30 am – 12:00 pm (EDT)

<p>10:30am-11:45am WB2 Dynamical Properties in Lasers Session Chairs: J. Reithmaier & S. Hoefling</p>	<p>WC2 Semiconductor Optoelectronic Devices Session Chairs: S. Law & A. Muhowski</p>	<p>10:30am-11:45am WD2 OLED Lighting Session Chair: J. Hensdorf</p>	<p>10:30am-11:45am WE2 Fiber Optic Design Session Chairs: K. Chen & N. Fontaine</p>	<p>WF2 Imaging and Spectroscopy Session Chairs: T. Ideguchi & S. Kurimura</p>	<p>WG2 Optical Transceivers and DSP Session Chairs: D. Venkitesh & F. Gunning</p>	<p>WH2 OI Keynote & New Architectures and AI Session Chair: L. Gantz</p>
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90 Minute Break

1:30 pm – 3:00 pm (EDT)

<p>WB3 Surface Emitting Lasers Session Chair: C. Tan</p>	<p>1:30pm-2:45pm WC3 Design of Nanophotonic Devices Session Chairs: J. Valentine & D. Debu</p>	<p>WD3 Quantum Dot Materials and Devices Session Chairs: L. Lin & S. Garner</p>	<p>WE3 Fiber Optic Imaging and Optical Signal Processing Session Chairs: O. Sinkin & K. Chen</p>	<p>WF3 Novel Sources and Techniques Session Chairs: G. Samanta & S. Popov</p>	<p>WG3 Optical Subsystems Session Chairs: F. Karinou & Y. Akasaka</p>	<p>WH3 Optical Switching Session Chair: S. Hu</p>
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30 Minute Break

3:30 pm – 5:00 pm (EDT)

<p>WB4 Novel Processing and Materials for Lasers Session Chairs: H. Zhao & J. Klamkin</p>	<p>WC4 Nanophotonic Emitters, Detectors, and Filters Session Chairs: D. Wasserman & A. Hoffman</p>	<p>3:30pm-5:15pm WD4 Silicon Photonics, Components and Integration Session Chairs: D. Liang & S. Dwivedi</p>	<p>3:30pm-5:15pm WE4 Awards II Session Chairs: C. Lim & W. Zhou</p>	<p>WF4 Integrated Nonlinear Photonics Session Chairs: A. Marandi & C. Suddapalli</p>	<p>WG4 Data Center Infrastructure Session Chairs: D. Van Veen & F. Karinou</p>	<p>WH4 OI Workshop: Optics and Networking for Artificial Intelligence and Machine Learning Session Chair: J. Bovington</p>
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8:30 am – 10:00 am (EDT)

ThA1 Towards On-chip Quantum Information Processing Session Chairs: J. Lukens & M. Brodsky	ThB1 Integrated Lasers on Silicon Session Chairs: M. Belkin & D. Hall	8:30am-9:45am ThC1 Metamaterial and Metasurface Devices Session Chairs: R. Unnithan & M. Palei	ThD1 PIP Tutorial & Silicon Photonics Integration Session Chairs: O. Moutanabbir & D. Liang	8:30am-9:45am ThE1 Avalanche Photodetectors Session Chair: M. Hayat	ThF1 Space Division Multiplexing Technologies Session Chairs: N. Fontaine & O. Sinkin		ThH1 On Board Optics and Transceivers Session Chair: J. Stewart	ThI1 Integrated Passives and Couplers Session Chair: A. Yurt
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30 Minute Break

10:30 am – 12:00 pm (EDT)

ThA2 QKD Session Chairs: D. Jones & M. Brodsky	ThB2 Mid Infrared and Resonator Laser Physics Session Chairs: L. Mawst & J. Faist	10:30am-11:15am ThC2 Photonic Materials Session Chairs: E. Ahmadi & P. Simmonds	ThD2 Emerging PIC Technologies Session Chairs: R. Halir & S. Dwivedi	ThE2 Advances in IR Detectors Session Chair: S. Gunapala	ThF2 Optical Fiber Sensors I: Novel Methods Session Chairs: G. Milione & N. Fontaine	ThG2 Optical Wireless Communications I Session Chairs: D. O'Brien & D. Venkitesh	ThH2 OI Keynote & Coherent in the Data Center Session Chair: J. Stewart	
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90 Minute Break

1:30 pm – 3:00 pm (EDT)

ThA3 Quantum Communications and Networking Session Chairs: B. Bash & M. Brodsky			1:30pm-2:45pm ThD3 Phosphide and Silicon Photonic Platforms Session Chairs: S. Arafin & T. Hiraki	1:30pm-2:15pm ThE3 High Power Detectors for Microwave Applications Session Chair: S. Addamane	1:30pm-2:45pm ThF3 Optical Fiber Sensors II: Fiber Bragg Gratings Session Chairs: R. Correa & G. Milione	ThG3 Optical Wireless Communications II Session Chairs: V. Jungnickel & G. Bosco	ThH3 OI Workshop: Coherent Optics in the Data Center Session Chair: J. Stewart	ThI3 Integrated Metamaterials and Passives Session Chair: J. Ryckman
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30 Minute Break

3:30 pm – 5:00 pm (EDT)

Post-Deadline Session & Closing Ceremony – ThA4
Session Chairs | Christina Lim, *The University of Melbourne, Australia*
Weidong Zhou, *University of Texas, Arlington, USA*