

APOS 2019 - DRAFT PROGRAM

Tuesday, 19 November	
8:45 AM - 9:30 AM	Registration
9:30 AM - 9:45 AM	Conference Opening
9:45 AM - 10:30 AM	Plenary Speaker: Measurements and functional devices - <i>Kentaro Nakamura</i>
10:30 AM - 11:00 AM	Morning Tea & Poster Session
11:00 AM - 11:30 AM	Invited Speaker: <i>Kyunghwan Oh</i>
11:30 AM - 11:45 AM	87. Characterisation of FDM filament compression with FBGs - <i>Asmâ Ziyani, Polytech Paris Sud</i>
11:45 AM - 12:00 PM	131. Investigation of Doppler shift in optical fiber frequency scanning interferometry ranging system for dynamic measurement - <i>Bin Shao, Chongqing University</i>
12:00 PM - 1:30 PM	Lunch & Poster Session
1:30 PM - 2:00 PM	Invited Speaker: Fluorescence detection of pulmonary tuberculosis - <i>Kirsten Maitland</i>
2:00 PM - 2:15 PM	34. Photoacoustic computed tomography (PACT) with a multi-angle scanning fiber-optic ultrasound sensor - <i>Lingxuan Li, Jinan University</i>
2:15 PM - 2:30 PM	26. Fiber-optic surface plasmon resonance interferometer for multi-parameter measurements - <i>Yi Duo, Shenzhen University</i>
2:30 PM - 2:45 PM	54. Fast, sensitive and wash-free optofluidic laser biosensor - <i>Yuan Gong, University Of Electronic Science And Technology Of China</i>
2:45 PM - 3:00 PM	15. Non-invasive Assessment of Meat Freshness Using Mueller Matrix Imaging Polarimetry - <i>Motahareh Peyvasteh, University of Oulu</i>
3:00 PM - 3:15 PM	38. Ultrasensitive hemoglobin detection based on a graphene oxide functionalized microfiber probe - <i>Fang Fang, Huazhong University Of Science And Technology</i>
3:15 PM - 3:45 PM	Afternoon Tea & Poster Session
3:45 PM - 4:15 PM	Invited Speaker: <i>Il Bum Kwon</i>
4:15 PM - 4:30 PM	100. Extending the dynamic strain sensing rang of phase-OTDR with frequency modulation pulse - <i>Jingdong Zhang, Chongqing University</i>
4:30 PM - 4:45 PM	152. From seismology to laser ultrasonics: an overview - <i>Kasper Van Wijk, The University of Auckland</i>
4:45 PM - 5:00 PM	83. Increasing the maximum input power of the phase-sensitive optical time domain reflectometry by exciting induced modulation instability - <i>Xiaoyang Hu, National University Of Defense Technology</i>
5:00 PM - 5:15 PM	8. Improvements of resonant fiber optic gyroscopes using a reciprocal modulation-demodulation technique - <i>Hanzhao Li, Zhejiang University</i>
5:15 PM - 5:30 PM	149. Simultaneous multi-point sensing in multicore fiber using Brillouin optical correlation domain analysis - <i>Bhargav Somepalli, The Hong Kong Polytechnic University</i>
5:30 PM - 6:30 PM	Welcome Function
Wednesday, 20 November	
9:00 AM - 9:30 AM	Registration
9:30 AM - 10:15 AM	Plenary Speaker: Remote sensing of subsurface water temperature using Raman spectroscopy: a LIDAR-compatible approach - <i>Helen Pask</i>
10:15 AM - 10:45 AM	Morning Tea & Poster Session
10:45 AM - 11:15 AM	Invited Speaker: Harnessing integrated photonics and optical nonlinearities for light generation, amplification and optical sensing - <i>Dawn Tan</i>
11:15 AM - 11:30 AM	2. Fluorine-passivation effect in Ge-doped optical fiber - <i>Xiaoning Guan, Beijing University of Posts and Telecommunications</i>
11:30 AM - 11:45 AM	64. The refractive index sensing by seven-core MCF structures - <i>Wenbin Hu, Wuhan University of Technology</i>
11:45 AM - 12:00 PM	155. Development of Bragg gratings in nanostructured core fibers - <i>Ryszard Buczynski, Institute of Electronic Materials Technology</i>
12:00 PM - 1:30 PM	Lunch & Poster Session
1:30 PM - 2:00 PM	Invited Speaker: <i>Rafael Piestun</i>
2:00 PM - 2:15 PM	78. Visible Light Communication-based Indoor Positioning for Moving Vehicles - <i>Junbin Fang, Guangdong Provincial Engineering Technology Research Center on VLC</i>
2:15 PM - 2:30 PM	140. Research on Distributed Optical Fiber Vibration Sensing System Based on Dual-Interference - <i>Yu Wang, Taiyuan University of Technology</i>
2:30 PM - 2:45 PM	125. Simulation On Lossy-mode Resonance Sensors Based On Side-polished Fiber - <i>Yan Feng, Jinan University</i>
2:45 PM - 3:00 PM	137. Raman spectroscopy and chemometrics for identifying graphene treated textiles - <i>Piumika Samanali Garagoda Arachchige, University of Otago</i>
3:00 PM - 3:30 PM	Afternoon Tea & Poster Session
3:30 PM - 4:00 PM	Invited Speaker: Monitoring Malaria: Infection, Detection and the Immune Response - <i>Alison Hobro</i>

4:00 PM - 4:15 PM	7. Fiber optic SERS probes using plasmonic gold nanostars for biochemical sensing - <i>Yang Ran, Duke University</i>
4:15 PM - 4:30 PM	48. Photoacoustic imaging beyond soft-tissues - <i>Jami Shephard, The University of Auckland</i>
4:30 PM - 4:45 PM	107. Simultaneous optical and electrochemical monitoring of biotene electropolymerization on indium-tin-oxide-coated optical fiber sensors- <i>Mateusz Smietana, Warsaw University Of Technology</i>
4:45 PM - 5:00 PM	127. Simulation for high performance plasmonic sensor based on hyperbolic metamaterials - <i>Shiqi Hu, Jinan University</i>
5:00 PM - 6:30 PM	Equity Workshop
Thursday, 21 November	
9:00 AM - 9:30 AM	Registration
9:30 AM - 10:15 AM	Plenary Speaker: Chemical and physical functionalization of optical fibers at the nano/micron-scale: Pathway to novel and improved sensors - <i>Heike Ebendorff-Heidepriem</i>
10:15 AM - 10:45 AM	Morning Tea & Poster Session
10:45 AM - 11:15 AM	Invited Speaker: One-shot 3D imaging using ultrafast all-optical Hilbert transform with chirped optical frequency comb - <i>Takashi Kato</i>
11:15 AM - 11:30 AM	25. Dual-wavelength Brillouin/erbium fiber laser with over 50-GHz frequency spacing - <i>Mo Chen, National University of Defense Technology</i>
11:30 AM - 11:45 AM	67. Label-free optofluidic sensor for in-vitro cell-microenvironment pH monitoring - <i>Cesar Sanchez Huertas, Integrated Photonics And Applications Centre</i>
11:45 AM - 12:00 PM	104. High-quality optical whispering-gallery mode resonators for dielectric tuning and sensing applications - <i>Farhan Azeem, University of Otago</i>
12:00 PM - 1:30 PM	Lunch & Poster Session
1:30 PM - 2:00 PM	Invited Speaker: Rotation measurements with a passive resonant optical gyroscope - <i>Hulian Ma</i>
2:00 PM - 2:15 PM	18. Optical and Plasmonic Tuning of Water-Based Lenses - <i>John Canning, UTS</i>
2:15 PM - 2:30 PM	16. High-Q and High-Sensitivity Refractive Index Sensor Based on Photonic Crystal Double-Slot Microring Resonator - <i>Li Xia, Huazhong University of Science and Technology</i>
2:30 PM - 2:45 PM	68. Continuous tunability of magnesium fluoride microresonator parametric oscillations - <i>Toby Bi, The University of Auckland</i>
2:45 PM - 3:00 PM	109. Microcavity in-line Mach-Zehnder interferometer for small volume label-free biosensing: concept verification by thin Al ₂ O ₃ film deposition - <i>Monika Janik, Warsaw University Of Technology</i>
3:00 PM - 3:15 PM	21. Quasi-distributed gas sensing by coherent FMCW interferometry - <i>Xiutao Lou, Harbin Institute Of Technology</i>
3:15 PM - 3:45 PM	Afternoon Tea & Poster Session
3:45 PM - 4:15 PM	Invited Speaker: Coherent detection for phase-sensitive OTDR - <i>Zinan Wang</i>
4:15 PM - 4:30 PM	106. Digital Differential coherent OTDR based on heterogeneous dual-sideband LFM pulse for distributed acoustic sensing - <i>Junfeng Jiang, Tianjin University</i>
4:30 PM - 4:45 PM	39. Availability verification of Brillouin gain-spectrum-model-fitting ring-circumferential-strain measurement using simulation experiments - <i>Hiroshi Naruse, Mie University</i>
4:45 PM - 5:00 PM	85. Distributed Fibre Sensors for the Alpine Fault of New Zealand - <i>James Loveday, The University Of Auckland</i>
5:00 PM - 5:15 PM	128. Enhancing frequency response of phase-sensitive OTDR for interrogating weak reflector array system by using OFDM and Vernier effect - <i>Mengshi Wu, Shanghai Jiao Tong University</i>
5:15 PM - 5:30 PM	97. Threat level discrimination of intrusions with DAS - <i>Huijuan Wu, University of Electronic Science and Technology of China</i>
6:30 PM - 9:00 PM	Conference Dinner - The Maritime Room
Friday, 22 November	
9:00 AM - 9:30 AM	Registration
9:30 AM - 9:45 AM	145. Influence on ammonia gas concentration detection induced by optical path length based on new gas absorption cell - <i>Yuan Shi (03), Shanghai University</i>
9:45 AM - 10:00 AM	55. Phase transition online monitoring of FAPbI ₃ perovskite through Raman spectrometer - <i>Yinlan Ruan, University of Adelaide</i>
10:00 AM - 10:15 AM	13. Evanescent wave optofluidic absorbance sensor based on coiled optical nanofiber - <i>Lei Zhang, Zhejiang University</i>
10:15 AM - 10:45 AM	Morning Tea & Poster Session
10:45 AM - 11:00 AM	130. Femtosecond laser-inscribed fiber-interface directional coupler for refractive index measurement - <i>Jinli Han (04), Shenzhen University</i>
11:00 AM - 11:15 AM	150. Multimodal interference in hetero-core-fiber structure for strain and temperature sensing - <i>Sonoko Hagiwara (05), Tokyo Institute of Technology</i>
11:15 AM - 11:30 AM	73. Locking the laser wavelength to the peak of phaseshift grating in long term AE sensing - <i>Xuezhi Zhang, Tianjin University</i>
11:30 AM - 11:45 AM	76. Characterization of YAP:Ce fiber dosimeter for radiotherapy application - <i>Mao Li (04), Shanghai University</i>
11:45 AM - 12:00 PM	Conference Closing