

OFS30 Preliminary Program

30th International Conference on Optical Fiber Sensors

30 November–4 December 2026 | Raleigh Convention Center, Raleigh, USA

All times are Raleigh local time (EST, UTC–5), shown in 24-hour format. This preliminary schedule is subject to change.
Updates: ofs30.org.

Monday 30 November 2026

Time	Program
09:00–12:00	Pre-conference tutorials Morning sessions
12:00–13:00	Lunch For pre-conference tutorial registrants
13:00–15:00	Pre-conference tutorials Afternoon sessions
15:00–18:00	Workshops Topic and speakers to be announced
18:30–20:00	Welcome reception

Confirmed tutorial speakers

Eric Pinet, Resonetics

Derek Rountree, Luna

Shaobo Han, NEC Labs

Individual tutorial titles and times will be announced.

Tuesday 1 December 2026

Time	Paper	Presentation title and authors
09:00–09:30		Opening ceremony
09:30–10:30		Plenary 1 Ming-Jun Li Corning Incorporated, USA <i>Title to be announced</i>
10:30–10:45		Coffee break
10:45–12:00		Tu1 Distributed reflectometry and thermometry
10:45–11:15	Inv.	Invited presentation Fumihiko Ito Shimane University, Japan <i>Title to be announced</i>
11:15–11:30	110	Hierarchical Coding enabled Optical Frequency Comb Spectrum-Correlation Reflectometry Zhonghong Lin
11:30–11:45	46	Sub-band correlation averaging for large error suppression in WS-COTDR sensing Xin Lu, Sebastian Chruscicki, Konstantin Hicke
11:45–12:00	185	Remotely pumped optical fiber heating for distributed active thermometry Laura Hernández-Martín, Miguel Soriano-Amat, Juan Diego Ania-Castañón, Hugo F. Martins
12:00–13:30		Lunch
13:30–15:00		Tu2 Brillouin sensing and measurement methods
13:30–14:00	Inv.	Distributed Plastic Optical Fiber Sensing Heeyoung Lee Shibaura Institute of Technology, Japan
14:00–14:15	37	Frequency-Modulated Continuous-Wave Encoding for Computational Brillouin Fiber Sensing Youhei Okawa, Hidemi Tsuchida, Hiromitsu Furukawa
14:15–14:30	45	Millimeter-Scale Distributed Brillouin Sensing Using a BDG-Based OFDR System Young Hoon Kim, Kwanil Lee, Kwang Yong Song
14:30–14:45	150	Pump-Depletion Mitigation in Time-Domain BOCDA Using Anti-Stokes Brillouin Loss Detection Radomyr Diachenko, Kwanil Lee

Time	Paper	Presentation title and authors
14:45–15:00	123	Forward stimulated Brillouin scattering in nickel-coated single-mode fibres towards magnetic field sensing Minghua Zhang, Yichun Li, Haoran Xie, Jianxiang Wen, Mengshi Zhu, Heming Wei, Fufei Pang, Tingyun Wang, Liang Zhang, Marcelo Soto
15:00–15:30	Coffee break	
15:30–17:00	Tu3 DAS methods and long range telecom fiber sensing	
15:30–16:00	Inv.	Invited presentation Antonio Mecozzi University of L'Aquila, Italy <i>Title to be announced</i>
16:00–16:15	62	Sensitivity Limits for ϕ-OTDR Juan M. Marin, Roman Ermakov, Huwei Wang, Francesco Da Ros, Darko Zibar
16:15–16:30	56	High Acoustic Bandwidth Distributed Fiber Optic Acoustic Sensor Based on OFDM Modulation Daniele Orsuti, Luca Palmieri, Luca Schenato, MARTINA CAPPELLETTI, Marco Santagiustina, Andrea Galtarossa, Massimo Zampato, Axel Turolla
16:30–16:45	190	Environment-Aware Fiber-Health Monitoring for Subsea ϕ-OTDR Systems Huwei Wang, Lukas Bernhardt, André Sandmann, Marko Tikas, Roman Ermakov, Juan M. Marin, Esther Renner, Francesco Da Ros, Bernhard Schmauss, Darko Zibar
16:45–17:00	76	Rayleigh Fingerprint-Based DAS over a 688-km Repeated Fiber Link Using 500-MHz Chirped Pulses Daniele Orsuti, Luca Palmieri, Ruben Soares Luis, Jun Sakaguchi, MARTINA CAPPELLETTI, Marco Santagiustina, Luca Schenato, Andrea Galtarossa, Hideaki Furukawa
17:30–19:00	Poster Session I 65 posters. Listings follow the daily agenda.	

Wednesday 2 December 2026

Time	Paper	Presentation title and authors
08:30–09:30	Plenary 2	Speaker to be announced <i>Title to be announced</i>
09:30–09:45	Coffee break	
09:45–11:30	W1 Photonic interrogation and microfabricated sensors	
09:45–10:15	Inv.	Distributed Acoustic Sensing and Integrated-Photonic Interrogation (Invited) Zuyuan He Shanghai Jiao Tong University, China
10:15–10:30	9	AIF-assisted silicon photonic integrated interrogator for DAS Zhicheng Jin, Jiageng Chen, Zhengyuan Xiao, Jiazhen Ji, Zhengwen Li, Hanzhao Li, Keke Hu, Xuhui Yu, ZUYUAN HE
10:30–10:45	114	Towards OFDR-based distributed fiber sensing on a silicon chip Sebastian San Martin, Isey Bekele Meka, Javier Elaskar, Yonas Muanenda, Fabrizio Di Pasquale, Marcelo Soto, Claudio Oton
10:45–11:00	111	High-performance OFDR based on dual electro-optic frequency combs Shuyan Chen, Huan He, Jingchuan Wang, Zhiyong Zhao, Ming Tang, Chao Lu
11:00–11:15	33	Ultraminiature Optical Fiber Mass Sensor Based on a 3D Microprinted Fiber-Top Optomechanical Microbalance Shangming LIU, Peng WANG, Xiuhua YANG, A. Ping Zhang
11:15–11:30	108	Real-Time Characterization of Nanoparticles in Solution Using Fiber-Tip Photonic Crystal Cavities Hasan Yalcinoglu, René P.J. van Veldhoven, Ewold Verhagen, Andrea Fiore
11:30–12:30	Lunch	
12:30–14:00	W2 Quantum optics and optomechanical sensing	
12:30–13:00	Inv.	Invited presentation Speaker to be announced <i>Title to be announced</i>
13:00–13:15	43	Bright Seeded and Quasi-Continuous Two-Mode Intensity Squeezing in Commercial Fiber Elad Zehavi, Avi Zadok, Alon Bernstein, Michal Natan, Yosef London, Ohad Buch, Avi Pe'er
13:15–13:30	15	Dual-comb photoacoustic Brillouin spectroscopy in a gas-filled hollow-core optical fiber Zihang PENG, Hanyu Liao, Haihong BAO, Yingying Wang, Wei Jin

Time	Paper	Presentation title and authors
13:30–13:45	131	Polarimetric Frequency-Noise Discriminator Based on Brillouin Fiber Ring Lasers Jorge Canudo, Elena Maldonado Denche, Miguel Soriano-Amat, Maria Rosario Fernández-Ruiz, Sonia Martín López, Miguel González Herráez, Javier Preciado-Garbayo, Pascual Sevillano Reyes, Jesús Subías
13:45–14:00	135	Flow coating fiber optic acousto-optic couplers Cameron Marashi, Kara Peters, Waliur Rahman
14:00–14:30	Coffee break	
14:30–16:30	W3 Biomedical and wearable sensors	
14:30–15:00	Inv.	Invited presentation Speaker to be announced <i>Title to be announced</i>
15:00–15:15	80	Ultrabroadband fiber-optic ultrasound sensor for microscale photoacoustic imaging haohao Mo, Ziyang Ma, Xiaoxuan Zhong, Long Jin
15:15–15:30	59	Fiber-Coupled Optical Microresonator with a Dielectric Pickup for MRI-Relevant RF Electric Field Sensing Ahmed Zikrallah, Jordan L. Edmunds, Onur Afacan, Soner Sonmezoglu
15:30–15:45	26	Multicore Fiber Bragg Sensors for finger motion tracking Euarda Marinho, Ricardo Oliveira
15:45–16:00	177	FBG-Based Wearable Hand Gesture Sensor for Human-Robot Interaction and Rehabilitation Jingtong Wu, Weiliang Zhao, Jialei Zuo, Xiangpeng Xiao, Qizhen Sun, Zhijun Yan School of Optical and Electronic Information, Huazhong University of Science and Technology, Wuhan, Hubei 430074, China
16:00–16:30		Session discussion
17:00–18:30	Plenary Session with Sponsors Presentation details to be announced	

Thursday 3 December 2026

Time	Paper	Presentation title and authors
08:30–09:30	Plenary 3 Christian Petrie Oak Ridge National Laboratory, USA <i>Title to be announced</i>	
09:30–10:00	Coffee break	
10:00–11:30	Th1 Harsh environments and radiation sensing	
10:00–10:30	Inv.	Invited presentation Speaker to be announced <i>Title to be announced</i>
10:30–10:45	31	High-sensitivity Radiation Detection Based on Perovskite Quantum Dot-doped Polymer-silica Fiber Fan Chen, Jianxiang Wen, Chengyong Hu, Yanhua Dong, Yanhua Luo, Yi Huang, Sujuan Huang, Tingyun Wang
10:45–11:00	44	Long-term Annealing and Stability at High Temperature of Femtosecond Laser Sapphire Fiber Bragg Grating Antoine Bourel, Thomas Blanchet, Leo Colliard, Geraud Bouwmans, Sylvain Magne, Guillaume Laffont
11:00–11:15	119	Sapphire Photonic Crystal Fiber Bragg Grating Sensor Tongyu Liu, Mohan Wang, Zipei Song, Richard Reeves, Frank P. Payne, Igor N. Dyson, Patrick Salter, Martin J. Booth, Julian Fells, Kaihui Zhang, Tao Wang, Jian Zhang, Zhitai Jia
11:15–11:30	165	Observability-Driven Co-Design of Multi-Sensor Optical Fiber Instrumentation for Nuclear Reactor State Monitoring Aabid Hassan, Siddhartha P Duttagupta
11:30–12:30	Lunch	
12:30–14:00	Th2 Distributed sensing in infrastructure and field applications	
12:30–13:00	Inv.	Environmental monitoring and large-scale early-warning systems María R. Fernández-Ruiz University of Alcalá, Spain
13:00–13:15	34	Seismic Tomography of a Hydropower Dam Using Distributed Acoustic Sensing and Passive 2D MASW João Paulo Bazzo, Jean Carlos Cardozo da Silva, Choon Park, Uilian J. Dreyer, Larissa W. Kulik, André B. Di Renzo, Beatriz Brusamarello, Gustavo Macioski, Daniel Pipa, Sidnei H. C. Teixeira, Gilson A. Brunetto, Luis F. P. Melegari, Cicero Martelli

Time	Paper	Presentation title and authors
13:15–13:30	104	Distributed Acoustic Sensing for Crowd Monitoring at a Mass-Participation Road Race Jorge Canudo, Diego Gella, Pascual Sevillano Reyes, Javier Preciado-Garbayo
13:30–13:45	173	Field Demonstration of Fiber Route Reconstruction Using Co-Registered Rayleigh DAS/DTSS and Multi-Anchor Correspondence Jian Fang, Ming-Fang Huang, Tingfeng Li, Scott Kotrla, Jeffrey A. Mundt, Junqiang Hu, Ting Wang, Yoshiaki Aono
13:45–14:00	48	Optical Continuity Detection in Aerial Optical Cables Using Bend-Induced Light Leakage and Lock-in Thermography Tomokazu Oda, Ryo Murata, Masami Miyazaki, Hiromu Hashimoto
14:00–15:30	Th3 Chemical gas and refractive index sensing	
14:00–14:30	Inv.	Hetero-Core Optical Fiber Sensors for Chemical, Plasmonic, and Environmental Sensing Michiko Nishiyama Soka University, Japan
14:30–14:45	13	Crosslinker-Regulated PEI-Based Ion-Imprinted Reflective Modal Sensors for Cd²⁺ Detection Xujie Wang, Abdullah Al Noman, Xuguang Huang, Changyuan Yu
14:45–15:00	58	Temperature decoupled Hydrogen Sensing with Pd:Au Coated dual-FBG Fabry-Pérot Etalons Anja Braunmüller, Johannes Roths, Fabian Buchfellner, Markus Becherer
15:00–15:15	66	Interference-Subtraction Cross-Correlation Fitting for Trace Ethane Detection in High-Methane Background via Hollow-Core Fiber Photothermal Spectroscopy Mengrui Han, Shuangxiang Zhao, Wei Jin
15:15–15:30	124	Nested Dual-Cavity Refractive Index Sensor Combining Selective Chemical Etching and Fiber Bragg Gratings David Barrera, Elena Lorente Cantarero, Emanuele De Cristofaro, Lucía Arques, Elham Nazemosadat, Javier Madrigal, Salvador Sales
15:30–16:00	Coffee break	
16:00–17:30	Poster Session II 65 posters. Listings follow Poster Session I.	
18:30–21:30	Conference banquet NC Museum of Natural Sciences	

Friday 4 December 2026

Time	Paper	Presentation title and authors
09:00–10:30	F1 Physical shape and multiparameter fiber sensing	
09:00–09:30	Inv.	Invited presentation Ole Henrik Waagaard <i>Title to be announced</i>
09:30–09:45	63	Near-Infrared Optical Strain Sensing Based on Cholesteric Liquid Crystal Elastomers Nahyeon Hwang, Min Yong Jeon, Soyeon Ahn, Min Su Kim, Ji Su Kim, Sung Yoon Cho, Minjun Kim
09:45–10:00	78	Shape sensing using 500 m optical cable Hyuga Kurokawa, Hideaki Murayama, Shintaro Nakamoto, Makito Kobayashi, Kiyoshi Kamimura, Nobumoto Hanzawa, Takashi Matsui, Kazuhide Nakajima
10:00–10:15	67	Multipoint temperature and humidity monitoring in a PEM fuel cell test bench using fiber Bragg gratings Roman Kruglov, Jonathan Brendle-Behnisch, Bastian Werner, Rainer Engelbrecht
10:15–10:30	92	Minimal invasive FBG based Temperature Sensing in Thermal Runaway Experiments for Safety Research Reinhard Klambauer, Hartmut Popp, Andrey Golubkov, Lukas Liedl, Alexander Bergmann
10:30–10:45	Coffee break	
10:45–12:00	Post-deadline session Papers and authors to be announced	
12:00–12:30	Closing ceremony	
12:30–13:30	Lunch	

Poster Session I

Tuesday 1 December 2026 | 17:30–19:00 | 65 posters

All posters in this session are presented during the period above. Posters are grouped by topic; the paper number is the submission ID.

OFDR reflectometry and Raman sensing

Poster	Paper	Presentation title and authors
P1-001	8	Optical fibers for distributed humidity sensing Michael J. Joyce, Andrei Stolov, Ping Lu, Matthew Popelka, David Burgess
P1-002	64	Distributed strain rate sensing based on Doppler effect in optical frequency domain reflectometry Yuyao WANG, Ning DENG
P1-003	83	Single-frequency Raman temperature sensing in dispersion-compensating fiber based on near-Rayleigh anti-Stokes scattering Ariasu Tamura, Koki Mita, Yosuke Mizuno
P1-004	99	Over 20 km OFDR-type dynamic distributed strain measurement using Negative Frequency Component Diffusion Method Akiko Tada, MASARU KOSHIHARA, Takanori Saitoh
P1-005	100	High-Precision Distributed Velocity Sensing with Wide Measurement Range Wei ziqiao, Cuofu Lin, jun yang, Qin Yu Wen
P1-006	152	High-Precision Large-Strain Demodulation in OFDR Using Spectral-Domain Dynamic Time Warping Liu Ao, Cuofu Lin, jun yang, Guo Ruihai
P1-007	171	1-cm Spatial Resolution Distributed Fiber-Optic Ultrasonic Sensor Based on OFDR Scheme Rongrong Niu
P1-008	179	Frequency-Division-Multiplexed Optical Correlation-Domain Reflectometry for Simultaneous Full-Length and Local Measurements Soshi Yoshida, Takaki Kiyozumi, Sze Yun Set, Shinji Yamashita, Yosuke Mizuno

Brillouin sensing

Poster	Paper	Presentation title and authors
P1-009	75	All-Analog Brillouin Optical Correlation Domain Analysis for Ultrafast Real-Time Strain Mapping Kwang Yong Song

Poster	Paper	Presentation title and authors
P1-010	88	Sample-count dependence of Brillouin gain spectra in BOCDR with periodic pseudo-random modulation Takumi Morikawa, Yoshitomo Murata, Yosuke Mizuno, Heeyoung Lee
P1-011	125	Metal-Coated Optical Fiber for Distributed Corrosion Monitoring using Stimulated Brillouin Scattering Nageswara Lalam, Badri Mainali, Hari Datta Bhatta, Ruishu F. Wright
P1-012	130	Detecting hotspots shorter than the spatial resolution in BOTDR with inverse methods Thibault North, Christian Buntebarth, Benjamin Efunbajo, Arran Gillies, Tobias Zacherle
P1-013	192	Long Range Gas Pipeline Hoop Strain Monitoring Using PCA - Trained Shallow Probabilistic Neural Network in BOTDA Hari Datta Bhatta, Nageswara Lalam, Matthew Brister, Sandeep Reddy Bukka, Ruishu F. Wright

DAS methods and telecom links

Poster	Paper	Presentation title and authors
P1-014	17	A Wrap Consistent Integer Branch Recovery Method for Phase Unwrapping Error Correction in Distributed Acoustic Sensing Zongrui Ma, Yuzhe Sun, Mengjie Wu, Chao Wang
P1-015	32	Elliptope-based denoising for distributed acoustic sensing Konstantinos Theofilos Drylerakis, Mohammad Belal, Rafael Mestre, Timothy J. Norman, Christine Evers
P1-016	65	Sampling Rate Dependent Representation Trade-offs for Leakage-Safe DAS Event Sensing Yangmin Ding, Yue Tian, Sarper Ozharar, Yusuf Elbana, Ting Wang
P1-017	72	Fading-resilient chirped electro-optic frequency-comb ϕ-OTDR using reliability-aware weighted rotated vector summation Desheng Li, Zhiyong Zhao, Ganggang Li, Faisal Nadeem Khan
P1-018	89	300km Ultra-Low Frequency Distributed Acoustic Sensing with Inner-Pulse Frequency-Division Fading Suppression Ke Ai, Cunzheng Fan, Tao He, Yukang Luo, Hao Li, Zhijun Yan, Qizhen Sun
P1-019	115	Large dynamic range distributed acoustic sensing using ultra-weak fiber Bragg grating array with spectral phase-shift demodulation Hongyu Huang, Xiangpeng Xiao, Can Chen, Zhonghong Lin, Huan He, Zhiyong Zhao, Zhijun Yan, Ming Tang

Poster	Paper	Presentation title and authors
P1-020	141	Experimental Characterization of DD-COTDR Distributed Sensing Sensitivity Under High-Speed Optical Communication Co-Propagation Natalia Herguedas, Pascual Sevillano Reyes, David Izquierdo, Ramón Cajal-Pérez, Jesús Subías, Ignacio Garcés
P1-021	159	DAS-NanoNet: Scenario-Adaptive Search of Sub-2K Parameter Neural Networks for Distributed Acoustic Sensing Recognition Gao Yuan, Yu Tao, Xuzhe Zhang, Xuhui Yu, Yanyang Wan, ZUYUAN HE
P1-022	183	Hybrid Distributed Acoustic and Strain Measurements for Time-Multiplexed Multi-Parameter Sensing Surabhi Raj, Subbash Padmanabhan, Balaji Srinivasan
P1-023	202	Fading Mitigation and Event Detection using Distributed Acoustic Sensing in Buried Multi-core Fiber Elisa Prathibha Mathew, Balaji Srinivasan

DAS field applications

Poster	Paper	Presentation title and authors
P1-024	19	Identifying Acoustic Signatures of Internal Pipeline Metal Loss Using Fiber-Optic Distributed Acoustic Sensing Alaaeddine Rjeb, Juan M. Marin, Abderrahim Fakiri, Shaj K. Manjilivalapil, Mohamed Hassan, Abdelsalam AlSarkhi, Ali Al Alwan, Mahmoud A. Mohamdin, Rahul Gajbhiye, Islam Ashry, Boon Ooi
P1-025	47	Application of Masked Autoencoder to DAS-based Construction Vibration Monitoring Using Telecommunication Optical Fibers Taichi Murakami, Shuhei Eguchi, Ryota Sumiya, Hiromu Hashimoto
P1-026	132	25 km Pilot Study on DAS-Based Pipeline Leak and Intrusion Detection Using Bare and HDPE Optical Fibers Anand VP, Arsath A. Ayubali, Surabhi Raj, P. S. Harrish, Nandhakishore C. S., Rakesh Kumar Mandal, T. P. Yuvaraj, Balaji Srinivasan
P1-027	153	Microseismic Monitoring in Tunnel Excavation Using Enhanced Distributed Acoustic Sensing Guoheng Qi, Wentao Zhang, 义钱 黄, Hongbin Xu, Wenzhu Huang, Feng Li, Yanliang Du
P1-028	163	Distributed Acoustic Sensing for Debris-Flow Monitoring in a Physical Flume: System-Level Challenges and Experimental Results Silvia Zampato, Luca Schenato, Nora Poursalimi, Yujiao Li, Luca Sarno, Pia Rosella Tecca, Maria Clorinda Mandaglio, Gianluca Marcato, Claudia Guarnaccia, Domenico Rossi, Luca Palmieri, Giacomo Viccione, Alessandro Pasuto, Andrea Galtarossa

Poster	Paper	Presentation title and authors
P1-029	170	Field Demonstration of PIG Tracking and Acoustic Characterization Using Telecom Fiber and DAS Sarper Ozharar, Ming-Fang Huang, Mariano Devigili, Aleksandra Kaszubowska-Anandarajah, Daniel Kilper, James Freeman, Phelim Dolan, Yue Tian
P1-030	187	All-Season Wind-Speed Estimation from Telecom-Fiber DAS with Implications for Dynamic Line Rating Mohammadreza Bakhtiari, Yangmin Ding, Junhao Ran, Yue Tian, Ting Wang
P1-031	203	Detection of Low Altitude Drones Using Fiber-Wrapped Balloon and Distributed Acoustic Sensing Arjunkumar G, Hari Kesava Moorthy, Balaji Srinivasan

Interrogation fabrication and microdevices

Poster	Paper	Presentation title and authors
P1-032	21	PS-FBG with interferometric interrogation achieving 2.5×10^{-6} pm/VHz wavelength noise toward DFB fiber laser performance Lun kai Cheng, Lorenzo Scherino, Wim de Jong, Alvaro Gonzalez Jimenez, Benoit Quesson, Daniele Piras, Kees de Meijere, Paul van Neer, Rob Jansen
P1-033	55	Thermo-optical control of a hybrid three-section wavelength tunable laser for Fibre Bragg Gratings Interrogation Gabriel Dogat, Jean-Baptiste Quelene, Benoit Mottet, Thomas Blanchet, Guillaume Laffont
P1-034	113	Oil-free fabrication of Bragg gratings in coated fibers using adaptive optics Zipei Song, Tongyu Liu, Mohan Wang, Patrick Salter, Martin J. Booth, Julian Fells
P1-035	158	Neural-Network-Based Discrimination of Temperature and Strain with π-phase-shifted Fiber Bragg Gratings in Polarization-Maintaining Fiber Esther Renner, Lukas Bernhardt, Philipp Schnicke, Bernhard Schmauss
P1-036	182	Laser Frequency Noise Reduction Using a Brillouin-Based Frequency Discriminator and Feedback Control Elena Maldonado Denche, Jorge Canudo, Elena Pascual-DeLaMorena, Pablo Feroso, Javier Preciado-Garbayo, Pascual Sevillano Reyes, Jesús Subías, Miguel Soriano-Amat, María R. Fernández-Ruiz, Miguel González Herráez, Sonia Martín López

Optomechanics and acoustic devices

Poster	Paper	Presentation title and authors
P1-037	57	Forward Brillouin Scattering in Fiber Through Axial Acoustic Modes Ori Pearl, Avi Zadok, Shahaf Noimark, Shai Ben-Ami, Alon Bernstein, Elad Zehavi, Ohad Buch, Tal Kazlov, Ophir Eliyahu

Poster	Paper	Presentation title and authors
P1-038	101	Thermally Induced Opto-Mechanical Deformation in PDMS-Filled Microbubble WGM Resonators Yiming Shen, Zhe Wang, Anand Vadakkedathu Raveendran, Rayhan Habib Jibon, Zhuochen Wang, Rodion Dobretsov, Bo Cai, Qiang Wu, Yuliya Semenova
P1-039	129	AI-Enabled Cloud Platform for Low-Cost Ultra-Sensitive Fiber Optic Acoustic Sensing Sandeep Reddy Bukka, Swetha Dokala, Nageswara Lalam, Hari Datta Bhatta, Matthew Brister, Ruishu F. Wright
P1-040	197	Simulated Guided Wave Tomography Adapted to Quasi-Distributed Fiber Optic Sensor Area Coverage Enrico Sarcinelli, Prince Panta, Khurram Naeem, pengdi zhang, Paul Ohodnicki

Biomedical and biochemical sensing

Poster	Paper	Presentation title and authors
P1-041	10	Analysis of the Physical and Mechanical Properties of 3D Printing Resins for Dentistry Ana Paula Gebert de Oliveira Franco, Hypolito Kalinowski, Danielle Fontenele, Vinicios Pereira silva, Valmir de Oliveira
P1-042	25	Fiber-Optic Sensor Diameter-Induced Bias in In Situ Pressure Measurements in Small Vessels Éric Pinet, Georges Baldenberger
P1-043	40	Fiber optoacoustic sensing for MRI-compatible continuous arterial hemodynamics Long Jin
P1-044	107	Bovine Serum Albumin Detection Using a Microbottle Whispering Gallery Mode Microfluidic Resonator Rodion Dobretsov, Anand Vadakkedathu Raveendran, Ahmed Mahmoud, Zhe Wang, Yiming Shen, Zhuochen Wang, Rayhan Habib Jibon, Yuliya Semenova

Harsh environments and radiation

Poster	Paper	Presentation title and authors
P1-045	35	Radiation-Induced Bragg Wavelength Shift of Type-I, -R, -II and -III Fiber Bragg Gratings – A Review Thomas Blanchet, Benjamin Sapaly, Adriana Morana, Emmanuel Marin, Sylvain GIRARD, Sylvain Magne, Guillaume Laffont
P1-046	39	Monolithic Sapphire Fabry-Pérot Temperature Sensor with Silica Lead-in Fiber for Operation up to above 1000°C Pritesh Soni, Johannes Roths, Alexander Roehrl, Fabian Buchfellner

Poster	Paper	Presentation title and authors
P1-047	90	Investigation of Photobleaching Effect in an Aluminosilicate Optical Fiber for Dosimetry Alberto Facchini, Hugo Boiron, Adriana Morana, Emmanuel Marin, Aziz Boukenter, Youcef Ouerdane, Thierry Robin, Sylvain GIRARD
P1-048	148	Near-Infrared Temperature Dependent Radiation-Induced Attenuation in B/Ge-Doped Optical Fibers Ethan Sinley, Matthew Leoschke, Zachary Van Horn, Federico Scurti
P1-049	204	Ultraviolet Radiation-Induced Attenuation in Phosphorus-Doped Optical Fibers for Real-Time Radiation Dosimetry Gabriel Lebron, Mario Coto, Matthew Leoschke, Adriana Morana, Youcef Ouerdane, Sylvain GIRARD, Federico Scurti
P1-050	208	Hysteresis-Free, Long-Term-Repeatable Cryogenic Thermometry from 295 K to 20 K with a Pultruded Fiber Bragg Grating Richard J. Black, Edgar A. Mendoza, Mehrdad Moslehi, Fumio Furuta, Peter Holdsworth, Behzad Moslehi, William Price, Keo Sourichanh

Chemical gas and environmental sensing

Poster	Paper	Presentation title and authors
P1-051	3	Alginate Nanosphere-Encapsulated Fluorescent Probe for Reusable Chloride Monitoring in Concrete Liang Fan
P1-052	5	Coaxial Optical Fiber Sensor for Relative Humidity Measurement Angel Ignacio Correa Serrano, Marko Galarza, José R. Vento Alvarez, Raphael Jamier, Rosa Ana Perez Herrera, Manuel Lopez-Amo
P1-053	51	Towards multi-point refractive index sensing using SPR and time-expanded ϕOTDR Alonso Romero Barrueco, Miguel Soriano-Amat, María Moreno Maldonado, Óscar Esteban, Miriam Cadenas, Fernando Bernabé Naranjo, María Cruz Navarrete, Natalia Díaz Herrera, Sonia Martín López, Miguel González Herráez, Maria Rosario Fernández-Ruiz
P1-054	96	Evaluation of Cladding Thickness Dependence in Swelling-type POF alcohol Sensors Using a Polystyrene Core Soma Furugaichi, masayuki morisawa
P1-055	136	Triple-channel optical fiber sensor integrating SPR-MMI for liquid sample evaluation Eric D. Galván Navarro, Monserrat Alonso Murias, David Monzon-Hernandez
P1-056	186	Monitoring underwater volcanic CO₂ degassing with packaged fiber Bragg grating sensors Margot Durou, Julien Govoorts, Corentin Caudron, Christophe Caucheteur

Physical shape and structural sensing

Poster	Paper	Presentation title and authors
P1-057	12	Thermal sensitivity enhancement of Fiber Bragg Grating sensors by copper electroplating Honggu Son, Dae-Hyun Kim
P1-058	61	Deep Learning Assisted Curvature Sensing in Randomly Coupled Multicore Fibers Mingjing Xu, Lin Ma, Tianqi Cheng, Fengrui Yu, ZUYUAN HE
P1-059	103	Reciprocity and its effect on local perturbations in reflective Spun Fiber Optical Current Sensors Philipp Peter Trampitsch, Johannes Mandl, Lukas Liedl, Alexander Bergmann, Reinhard Klambauer
P1-060	121	Femtosecond-Laser-Inscribed Mach-Zehnder Interferometer in a Multicore Fiber for Temperature Sensing Lucía Arques, Elham Nazemosadat, David Barrera, Tina Eschrich, Javier Madrigal, Elena Lorente Cantarero, Salvador Sales
P1-061	149	Optical-Fiber-Coupled YIG Single-Crystal Fiber Magneto-Optic Sensor for DC and AC Magnetic Field Readout Jun Young Hong, Dolendra Karki, Paul Ohodnicki
P1-062	162	Fiber-Optic Positioning System Based on Micro-Nano Fabrication for High-Speed Maglev Shi Xiao
P1-063	181	Curvature Sensor Based on Micro-Tapered Long-Period Fiber Gratings Fabricated in Double-Cladding Fiber by CO₂ Laser Yi Luo, Yunqi Liu, Xiaolong Fan, Lu Chen, Li-Ao Zuo, Slyu Chen, Chengbo Mou
P1-064	195	Vector Curvature Sensor Based on a Helical Long-Period Fiber Grating Inscribed in a Four-Core Fiber Suying Wu, Yunqi Liu, Slyu Chen, Rui Zhang, Wei Chen, Chengbo Mou
P1-065	196	Study on the Application of Optical Fiber Sensing in Construction Sector Rajib Kumar Biswas, Takahiro Saito

Poster Session II

Thursday 3 December 2026 | 16:00–17:30 | 65 posters

All posters in this session are presented during the period above. Posters are grouped by topic; the paper number is the submission ID.

OFDR reflectometry and Raman sensing

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P2-001	16	Local Temperature Change Detection over 50 m Optical Fiber in Liquid Nitrogen Environment by Using PNC-OFDR KOKI NAKANO, Shun Asahara, Fumihiko Ito, Naoyuki Amemiya, Yuichi Yoshimura, Michio Imai
P2-002	82	Single-detector bend sensing using a multi-core FBG via two-photon absorption in a Si-APD and incoherent OFDR with 1 s data acquisition YUTA KURIHARA, Yosuke Tanaka, TAKUMA SERIZAWA, Kenta Yoneta
P2-003	84	Polarization-state-controlled OCDR for identifying closely spaced reflection points Yuto Sekine, Yosuke Mizuno, Yuta Higa, Keisuke Motoda, Takaki Kiyozumi
P2-004	85	Enhanced Raman temperature sensing in ultrahigh-numerical-aperture optical fiber Ariasu Tamura, Yosuke Mizuno
P2-005	127	4,000 km Gated-OFDR Sensing Using a Recirculating Fiber Loop Yossi Dadush, Moshe Tur, Avishay Eyal
P2-006	157	FPGA-Accelerated Coherent Correlation Distributed Fiber Sensing Using a DP-BPSK Probe Botao Yang, Tao Zeng, Te Ke, Yimei Pan, Chen Wang, Ziyi Zhong, Ziqing Liu, Ming Luo, Xi Xiao, Hanbing Li
P2-007	176	Compensation for Nonlinear Frequency Sweep in an Optical Frequency-Domain Reflectometer by Exploitation of the Sawtooth Flyback Surya Radha Balaji, Anand VP, Balaji Srinivasan

Brillouin sensing

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P2-009	86	Experimental demonstration of measurement-range extension in slope-assisted BOCDR using multiple modulation-frequency ranges Takumi Morikawa, Yosuke Mizuno, Heeyoung Lee

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P2-011	126	BOTDA-based 3D shape reconstruction with compensation of error accumulation Leonardo Rossi, Francesco Falcetelli, Piero Lovato, Filippo Bastianini, Raffaella Di Sante, gabriele bolognini
P2-012	189	Benefits and limitations of tailored-probe slope-assisted BOTDA Avraham Itzhak Shalev, Moshe Tur

DAS methods and telecom links

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P2-014	23	A Cascaded Residual Raman Pump Multiplexing Scheme for Extending the Sensing Limit of Interferometric Distributed Optical Fiber Vibration Sensing Yang Yan, Yunke Du, Churui Li, Chao Wang College of Smart Materials and Future Energy, Fudan University, Shanghai, China
P2-015	50	Real-Time Polarization Sensing and Monitoring in 50G-PON Huan Yang
P2-016	69	Cross-Domain Event Recognition for Distributed Acoustic Sensing Under Contaminated Training Data Conditions Gao Yuan, Xuzhe Zhang, Yu Tao, Xuhui Yu, Yanyang Wan, ZUYUAN HE
P2-017	74	Coherent detection DAS system driven by a short coherence laser Eran Burstein, Alexander Katsenelson, Moshe Tur, Avishay Eyal
P2-018	120	Performance Comparison of Standard and Enhanced Optical Fibers for Low-Frequency Distributed Acoustic Sensing Denis Bolhosa, Jean Carlos Cardozo da Silva, Guilherme Dutra, Guilherme Bordim, Isabelle Santi, Danilo Fernandes Gomes, Guilherme Heim Weber, Eduardo Henrique Dureck, Cicero Martelli, Manoel Feliciano da Silva Junior
P2-019	144	Agentic-DAS: Agentic Event Detection and Classification for Distributed Acoustic Sensing Prince Panta, Enrico Sarcinelli, Shovan Raj Shrestha, Khurram Naeem, Sandeep Reddy Bukka, Pengdi Zhang, Ruishu F. Wright, Paul Ohodnicki
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P2-022	200	Signal to Noise Ratio Limitation on the Maximum Measurable Phase in Distributed Acoustic Sensor V R Ranjith, Neethu Sasikumar, Anand VP, Balaji Srinivasan
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P2-036	155	Stable Tuning Method for MG-Y Lasers Based on Stability-Prioritized Feature Point Selection in Grating Section Jingrun Wang, Linhao Liu, Chengyong Hu, Jindong Liu, Yi Huang, Xiaobei Zhang, Qi Zhang, Yanhua Dong, Sujuan Huang, Tingyun Wang Key Laboratory of Specialty Fiber Optics and Optical Access Networks, Shanghai University, Shanghai, China
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