



# 24th Australian Institute of Physics Congress

## Monday 12 December 2022

### 7th International Workshop on Speciality Optical Fibres: WSOE 1 - Advanced Fabrication 1 - Hall A (11:00 - 12:30)

-Conveners: Heike Ebendorff-Heidepriem

time	[id] title	presenter
11:00	[7] Molten core fiber fabrication: Opening up the Period Table	BALLATO, John
11:30	[782] Laser-based drawing of optical fibre	HARVEY, Clarissa
12:00	[693] Silica Optical Fibres via 3D Printing Technologies	PENG, Gang-Ding

### 7th International Workshop on Speciality Optical Fibres: WSOE 2 - Fibre Sensing 1 - Hall A (14:00 - 15:30)

-Conveners: Michel Dignonnet

time	[id] title	presenter
14:00	[380] Sensing Figures of Merit for Terahertz Photonic Light Cages	TUNIZ, Alessandro
14:30	[633] Polymer Fiber Bragg Grating-embedded Artificial Skin for Tactile Force Detection and Contact Localization of Robotic Fingers	Mr LEONG, Chern Yang
14:45	[291] Fibre-based Optomechanical Acoustic Sensing	MCQUEEN, Lauren
15:15	[713] Exploiting complex light transmission in multimode optical fibre for distributed sensing	SMITH, Darcy

### 7th International Workshop on Speciality Optical Fibres: WSOE 3 - Fibre Lasers 1 - Hall A (16:00 - 17:15)

-Conveners: Clemence Jollivet

time	[id] title	presenter
16:00	[779] Can we produce high power visible light using doped silicate fibre?	Prof. JACKSON, Stuart
16:30	[306] Characterisation of Erbium-Doped DFB Lasers Pumped Resonantly at 1480 – 1540 nm	SIMAKOV, Nikita
16:45	[494] A 10 W narrow-linewidth thulium fibre master oscillator power amplifier	Ms BOLINGBROKE, Georgia
17:00	[47] Active Nanostructured Core Fiber for Two-Color Fiber Laser	BUCZYNSKI, Ryszard

## Tuesday 13 December 2022

### **7th International Workshop on Speciality Optical Fibres: WSOF 4 - Advanced Fabrication 2 - Hall A (11:00 - 12:30)**

**-Conveners: John Ballato**

time	[id] title	presenter
11:00	[769] Hollow-Core Fibers for the Rise of Industrial Innovations	Dr CHENARD, Francois
11:30	[900] Fabrication and Properties of Intrinsically Low Nonlinearity Optical Fibers.	Dr HAWKINS, Wade
12:00	[109] Mid-Infrared Polarization-Maintaining Photonic Crystal Fiber	CHENARD, FRANCOIS
12:15	[294] 3D printing Bullseye glass preform for fibre drawing	PAN, Xuanzhao

### **7th International Workshop on Speciality Optical Fibres: WSOF 5 - Online/Hybrid Session - Hall A (14:00 - 15:30)**

**-Conveners: Clarissa Harvey**

time	[id] title	presenter
14:00	[780] Specialty optical fibers for dispersion management in the spectral ranges of normal and anomalous material dispersion	ALESHKINA, Svetlana
14:30	[811] Polarization Maintaining Anti-Resonant Hollow Core Fiber	WANG, Yingying
15:00	[274] Efficient 2.8 $\mu\text{m}$ Er <sup>3+</sup> -doped ZBLAN fiber laser pumped at 1.7 $\mu\text{m}$	Mr ZHANG, Junxiang
15:15	[130] 200 km-long single-ended random fiber laser and sensor with ULLF	Dr RAO, Yunjiang

### **7th International Workshop on Speciality Optical Fibres: WSOF 6 - Fibre Sensing 2 - Hall A (16:00 - 17:30)**

**-Conveners: Heike Ebendorff-Heidepriem**

time	[id] title	presenter
16:00	[778] Volumetric integration of nanodiamonds in optical fiber cores	Prof. BUCZYNSKI, Ryszard
16:30	[575] Fiber Based Polarization Insensitive Optical Coherence Tomography System	MUKHTAR, Kandeel
16:45	[644] Remote magnetometry with fluorescent microdiamonds incorporated in optical fibres	CAPELLI, Marco
17:00	[720] Design of scintillator-based dosimeters using femtosecond laser processed polymer optical fibers for radiation measurement	IOANNOU, Andreas
17:15	[764] Optical fibers with NV nanodiamonds end-face coating for magnetic field sensing and imaging	WOJCIECHOWSKI, Adam

# Wednesday 14 December 2022

## **7th International Workshop on Speciality Optical Fibres: WSOE 7 - Nonlinear Effects - Hall A (11:00 - 12:30)**

**-Conveners: Stuart Jackson**

time	[id] title	presenter
11:00	[731] Tradeoff between the Brillouin and transverse mode instabilities in high-power fiber amplifiers	Dr HU, Jonathan
11:30	[378] Transverse Mode Instability Mitigation with Multimode excitation in Fiber Amplifiers	WISAL, Kabish
11:45	[345] Efficient third harmonic generation: phase compensation using inter-fibre spacing	PETERKOVIC, Zane
12:00	[375] Suppressing Stimulated Brillouin Scattering in Multimode Fibers with High Output Beam Quality	WISAL, Kabish
12:15	[610] Simultaneous beam shaping and suppression of simulated Brillouin scattering by adjusting the input wavefront in a multimode fiber	WEI, SHUEN

# Thursday 15 December 2022

## **7th International Workshop on Speciality Optical Fibres: WSOF 8 - Fibre Lasers 2 - Hall A (11:00 - 12:30)**

**-Conveners: FRANCOIS CHENARD**

time	[id] title	presenter
11:00	[808] Advances in High Power Fibre Lasers for Defence and Dual Use Applications	HEMMING, Alex
11:30	[807] High Performance Large-Mode Area Double-Clad Fibers for kW Power Scaling of Fiber Lasers from 1 to 2.1 $\mu\text{m}$	JOLLIVET, Clemence
12:00	[613] Development of components and processes for power scaling of diode-pumped metal coated optical fibre amplifiers	Mr GAMBELL, Adam
12:15	[66] Scalable All-Fiber Coherent Beam Combination Using Digital Control	LEGGI, Samuel

## **7th International Workshop on Speciality Optical Fibres: WSOF 9 - Advanced Techniques - Hall A (14:00 - 15:30)**

**-Conveners: Ryszard Buczynski**

time	[id] title	presenter
14:00	[810] Optically Cooled Yb-Doped Silica Fiber Lasers	DIGONNET, Michel
14:30	[549] How to Build a High Performance MPLC: From Simulation to Fabrication	DAHL, Daniel
14:45	[621] Machine Learning for Pressure Sensing Using Pure Silica Microstructured Optical Fiber Based Specklegram Sensor	Mr REJA, Mohammad Istiaque
15:00	[49] An achromatic metafiber for focusing and imaging across the entire telecommunication range	REN, Haoran
15:15	[155] Comparison of Radiation-Induced-Attenuation in Pure Silica Core and F-doped Silica fibres	BERKOVIC, Garry

## **7th International Workshop on Speciality Optical Fibres: WSOF 10 - Fibre Sensing 3 - Hall A (16:00 - 17:30)**

**-Conveners: Gang-Ding Peng**

time	[id] title	presenter
16:00	[632] Large Range Torsion Sensor Based on Twin-Core Polymeric Optical Fibre	Dr CUI, Jingxian
16:15	[486] Multipoint fibre Bragg grating sensors for industrial temperature monitoring	SCHARTNER, Erik
16:30	[730] Selectively tuning the temperature and humidity sensitivity of CYTOP fibre Bragg grating sensors	IOANNOU, Andreas
16:45	[728] Metal-coated optical fiber embedment in WAAM aluminium parts for distributed temperature sensing	WILCZYŃSKI, Krzysztof
17:00	[926] WSOF Closing Ceremony	