## 24th Australian Institute of Physics Congress



Contribution ID: 357

Type: Talk (preferred)

## Diamond-doped Optical Fibres for Remote Magnetometry Applications

Thursday, 15 December 2022 12:00 (15 minutes)

The ability to monitor weak magnetic fields is a key objective in long-term surveillance. Here I will discuss the fabrication and characterization of an intrinsically magneto-sensitive diamond doped optical fibre with potential applications as a high-efficiency remote magnetic sensing platform.

**Primary authors:** Dr CAPELLI, Marco (RMIT University); Dr BAI, Dongbi (RMIT University); Dr HUYNH, Hoa (The University of Adelaide); Dr LI, Shuo (RMIT University); Dr ZHANG, Wenqi (University of South Australia); Dr REINECK, Philipp (RMIT University); Dr SIMPSON, David (The University of Melbourne); Prof. AF-SHAR.V, Shahraam (University of South Australia); Prof. GREENTREE, Andrew (RMIT University); Dr FOSTER, Scott (Defence Science and Technology Group); Prof. EBENDORFF-HEIDEPRIEM, Heike (The University of Adelaide); GIBSON, Brant

Presenter: GIBSON, Brant

Session Classification: Precision and Quantum Sensing Workshop

Track Classification: PQS2022: PQS: Precision and Quantum Sensing Workshop