

Guest Editorial on the Special Issue for Optical Fibre Sensors



THIS Special Issue of the IEEE/OSA JOURNAL OF LIGHTWAVE TECHNOLOGY presents a selection of articles whose initial results were presented at the 24th International Conference on Optical Fibre Sensors (OFS-24). Since its first edition in London—1983—the OFS assumed the leadership role as a forum for reporting and discussing the latest progress

in optical fibre sensors and, more recently, other photonic sensing techniques. The OFS series has established a tradition for providing professionals with a high-quality technical program accompanied by a friendly social schedule. The conference series is organized independently of any major professional society, due to the efforts of its International Steering Committee, with the fundamental contribution of the Technical Program Committee in the revision and selection of contributed papers.

The OFS-24 occurred from 28 September to 2 October 2015, at the Pestana Hotel & Convention Centre, Curitiba, Brazil. It was the first time that OFS travelled to Brazil, and only the third edition organized in the Southern Hemisphere. The Brazilian Society for Microwaves and Optoelectronics organized OFS-24 with the cooperation from the Research Group on Photonic Devices and Applications of the Federal University of Technology—Paraná.



Hypolito José Kalinowski received the B.Sc. degree in physics from the Federal University of Paran, Curitiba, Brazil, and the M.Sc. and D.Sc. degrees from the Pontifical Catholic University in Rio de Janeiro (PUC-RIO), Rio de Janeiro, Brazil.

From 1985 to 1987, he was a Postdoc at CSELT (Centro Studi e Laboratori Telecomunicazioni), Turin, Italy, working on single-mode optical fiber characterization techniques. He was a Teaching Assistant at PUC-RIO, a Lecturer and an Associate Professor at the Federal Fluminense University, Niteri, Brazil, until he moved to CEFET/PR (now the Federal University of Technology, Paran), Curitiba, in 1991, from where he retired in 2016 as a Full Professor. He was a Visiting Professor/Researcher at several institutes in Venezuela, Colombia, Northern Ireland, Germany, Italy, India, and Portugal. He holds a Cathedra Title on Optical Communications from the University of So Paulo, So Carlos, Brazil. He was the President of the Brazilian Microwave and Optoelectronics Society. His research interests include photonic devices for telecommunications and sensing applications.

Dr. Kalinowski is a Member of the SPIE and OSA. He was the Chair of the 24th International Conference on Optical Fibre Sensors (OFS-24) held in Curitiba, 2015.

In this issue, there are 31 extended articles based on papers presented at the conference. Each one passed by the reviewing procedure of JOURNAL OF LIGHTWAVE TECHNOLOGY in order to keep the high standards of the journal. The content of the articles varies from the very fundamental basis of optical & photonic sensing, extending the performance of several sensing techniques to a variety of applications that can provide real world sensing with fibre optic sensors. Together they provide an overview of the great potential that such sensors can bring to our sensing needs.

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He is currently a Full Professor at the Federal University of Technology—PR (UTFPR), Curitiba, Paran, Brazil. He is a co-head of the research group on photonics devices and applications at UTFPR, and helped to found the Laser Laboratory, UTFPR, in 1996, where he is currently a laboratory co-director. His current research interest includes photonics, with special interest in optical fiber grating-based sensors and spectroscopy. He has authored and co-authored more than 160 scientific journal and conference papers, as well as patents in the field of photonics.

Prof. Fabris is a Member of The Optical Society of America, the Brazilian Society of Physics, and the Brazilian Society of Microwaves and Optoelectronics.



Wojtek J. Bock received the M.Sc. degree in electrical engineering and the Ph.D. degree in solid state physics from Warsaw University of Technology, Poland, in 1971 and 1980, respectively. Since 1989, he has been a Full Professor of electrical engineering at the Universit du Qubec en Outaouais (UQO), Canada.

In addition, since 2003, he has been a Canada Research Chair Tier-I in photonic sensing technologies and the Director of the Photonics Research Center, UQO. His research interests include fiber-optic sensors and devices, multisensor systems, and precise measurement systems of nonelectric quantities. His current research program centers around developing a variety of novel fiber-optic device solutions and sensing techniques with a view to acquiring better performing photonic sensing components, devices, and systems for applications in sectors of national importance to Canada. He has authored and co-authored more than 380 scientific papers, patents, and conference papers in the fields of fiber optics and metrology, which have been cited about 3300 times.

Dr. Bock has recently received an SPI-NSERC Senior Industrial Research Chair (for 5 years) in photonic sensing technologies for safety and security monitoring. He was an Associate Editor of the IEEE/OSA JOURNAL OF LIGHTWAVE TECHNOLOGY and the International Journal of Sensors. He was also a Chairman of the International Optical Fiber Sensor Conference (OFS21) held in Ottawa in May 2011.