

Guest Editorial

JLT Special Issue on OFS-25



THIS IEEE/OSA JOURNAL OF LIGHTWAVE TECHNOLOGY Special Issue on OFS-25 contains expanded versions of selected papers that were presented at the 25th International Conference on Optical Fiber Sensors. The International Conference on Optical Fiber Sensors (OFS), established in 1983, is acknowledged as the world's leading conference on all topics related to photonic sensing technologies. OFS provides a forum for reporting and exchanging ideas on the latest advances in research and development on fiber optic and photonic sensing. It has also contributed significantly to industrialization and standardization of the related devices and systems for field deployment.

The 25th International Conference on Optical Fiber Sensors (OFS-25, <http://www.ofs-25.org>) was held at Maison Glad Hotel, Jeju, Korea, from April 24 to 28, 2017. It was the second OFS conference in Korea following OFS-13 in Kyongju in 1999. It was organized by Optical Society of Korea (OSK) and supported by various organizations in the Asia-Pacific region. The scenic and beautiful Jeju Island, which is located off the south coast of Korea, was designated as Biosphere Reserve in 2002, World Natural Heritage in 2007 and Global Geoparks Network in 2010, and is renowned as one of the world's New Seven Wonders of Nature. The conference offered plenary and invited talks, contributed oral and poster presentations, workshops, and exhibition of commercial products. Social and cultural events also took place to foster networking among the participants in a friendly setting.

This Special Issue has 52 expanded papers based on those presented at OFS-25. The Conference Chairs and Technical Program Committee Chairs served as the Guest Editors and the

papers were reviewed according to the stringent procedure of JOURNAL OF LIGHTWAVE TECHNOLOGY to meet the journal's high standards. The papers cover various topics related to fiber optic sensing ranging from the fundamental science of photonic sensing to industrial field deployment tests. Principles and applications of various fiber optic sensing technologies are discussed, and the state-of-the-art performances are reported that will help broaden the areas where optical fiber sensors can be utilized. We believe that this collection of carefully selected papers represents the current forefront of optical fiber sensors and we hope that the readers will benefit greatly in their work on research and development.

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Youngjoo Chung was born in Busan, South Korea, in 1959. He received the B.S. degree in physics from Seoul National University, Seoul, South Korea, in 1982, and the Ph.D. degree in plasma physics from Princeton University, Princeton, NJ, USA, in 1989. He was with the Advanced Photon Source, Argonne National Laboratory, between 1989 and 1996. In 1996, he returned to South Korea as an Associate Professor with the Department of Information and Communications, Gwangju Institute of Science and Technology, where he was promoted to a Full Professor in 2001. He has authored/coauthored 105 journal papers and 167 international conference papers. His current research interests include specialty optical fibers and fiber gratings, optical fiber based devices for communication and sensing, symbolic computing, and high-performance computing. He was the General Chair of the 25th International Conference on Optical Fiber Sensors (OFS-25) in 2017 and he is the current President-Elect of the Optical Society of Korea.



Wei Jin currently holds the position of Chair Professor of Photonic Instrumentation at the Hong Kong Polytechnic University (PolyU). Prof. Jin obtained the B.Eng. degree from Beijing University of Aeronautics and Astronautics in 1984 and Ph.D. degree from University of Strathclyde in 1991. He joined PolyU as an Assistant Professor in 1996 and became a full Professor in 2003. He published 2 books, over 500 Journal and conference papers in guided-wave photonics and sensors. He received PolyU's President Award for outstanding performance in Research, PolyU PTeC's Outstanding Professional Service and Innovation Award, NSFC's Distinguished Young Scholar Award, Chiang-Jiang Chair Professor award from Chinese Ministry of Education. He is a fellow of OSA, a vice Chairman of Fiber and Integrated Optics Committee of Chinese Optical Society. He served as the General Co-Chair of OFS-25 and Technical Chair of OFS-22.



Byoungcho Lee received the Ph.D. degree from the Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, CA, USA, in 1993. Since September 1994, he has been with the faculty of the School of Electrical Engineering, Seoul National University, Seoul, South Korea. He is a Fellow of The Optical Society (OSA) and The International Society for Optics and Photonics, and is a member of the Korean Academy of Science and Technology and the National Academy of Engineering of Korea. He is currently on the Editorial Board of *Advances in Optics and Photonics and Light: Science and Publications*. He was on the Board of Directors of the OSA, and served as the Chair of the OSA Technical Division of Fabrication, Design and Instrumentation. He is a Vice President of the Optical Society of Korea and the Korean Information Display Society. He was the recipient of the National Medal of Jinbo-Jang of Korea in 2016.



John Canning has been an Otto Monsted Professor with the Danish Technical University, Kongens Lyngby, Denmark (2004), Villum Kann Rasmussen Professor with the Interdisciplinary Nanoscience Center, Aarhus University, Aarhus, Denmark (2007), Science without Borders Professor with the Federal University of Technology-Paraná, Paraná, Brazil (2014–2017), and has been a Program 111 Guest Professor with the University of Electronic Science and Technology, Sichuan, China, and the Shandong Academy of Sciences, China (2015). He is the recipient of the 2017 OSA David Richardson Award. He is a Fellow of OSA and the International Society for Optics and Photonics. He was an Expert Member with the University of Sydney's Latin Regional Advisory Committee, has advised both India and China Committees, and helped shape the University of Sydney's International strategy. In 2017, he moved from the University of Sydney to the University of Technology, Sydney. He retains an honorary position with both the University of Sydney and the University of New South Wales. He is a regular committee member of key conferences in photonics and sensing, has more than 700 peer reviewed journal and conference papers, and has lodged more than 30 patents. He has been involved with a number of startups over the years.



Kentaro Nakamura received the D.Eng. degree from the Tokyo Institute of Technology, Tokyo, Japan, in 1992. Since 2010, he has been a professor with the Institute of Innovative Research, Tokyo Institute of Technology. His research interests include fiber optic distributed sensors and opto-acoustic measurements. He is interested in sensor application of polymer fiber, acoustic measurements based on optical method, and optical/ultrasonic sensing devices. He was the Chairman of Lightwave Sensing Technology Group with The Japan Society of Applied Physics.



Libo Yuan received the B.S. degree in physics from Heilongjiang University, Harbin, China, in 1984, the M.Eng. degree in communication and electronic systems from Harbin Shipbuilding Engineering Institute, Harbin, China, in 1990, and the Ph.D. degree in photonics from The Hong Kong Polytechnic University, Hung Hom, Hong Kong, in 2003. He is currently with the School of Electronic Engineering and Automation, Guilin University of Electronics Technology, as a Professor and Director of the Center for Photonics Research. His research interests include in-fiber-integrated optics and fiber-optic sensors and its applications. He has authored and coauthored more than 180 referred international journal papers and more than 150 international conference papers. He holds more than 120 patents related with fiber optic technology and published three books and three book chapters.