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Optical and Wireless Technologies

Proceedings of OWT 2018

Springer

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Preface

Optical and wireless technologies are advancing at an accelerating rate recently. The traditional approaches to providing high data rates to the masses are transforming and expanding in a way that is beyond our imagination. The challenges in providing uninterrupted data and broadband communications have not changed. Our mission as a technical community is to understand these challenges and find ways to mitigate them. This includes the development and management of appropriate channels, novel devices, new protocols, efficient networks, and their integration. Keeping in view the amalgamation of these issues, the proceedings of the Second International Conference on Optical and Wireless Technologies (OWT 2018) is being presented herewith.

The conference (OWT 2018) was held in the campus of Malaviya National Institute of Technology, Jaipur, during February 10–11, 2018. A total of 120 participant, including the invited speakers, contributing authors, and attendees participated in the conference. The participants were explored to a broad range of topics critical to our society and industry in the related areas. The conference provided an opportunity to exchange ideas among global leaders and experts from academia and industry in topics like optical materials, optical signal processing and networking, photonic communication systems and networks, all-optical systems, microwave photonics, optical devices for optical communications, nonlinear optics, nanophotonics, software-defined and cognitive radio, signal processing for wireless communications, antenna systems, spectrum management and regulatory issues, vehicular communications, wireless sensor networks, machine-to-machine communications, and cellular–WiFi integration.

Apart from a high-quality contributed paper presented by delegates from all over the country and abroad, the conference participants also witnessed a informative demonstrations and technical sessions from the industry as well as invited talks from renowned experts aimed at advances in these areas. Overall response to the conference was quite encouraging. A large number of papers were received. After a rigorous editorial and review process, 66 papers were invited for the presentation during the conference. Among the presented papers, 59 papers were selected for inclusion in the conference proceedings. We are confident that the papers presented

in this proceeding shall provide a platform for young as well as experienced professionals to generate new ideas and networking opportunities.

The editorial team members would like to extend gratitude and sincere thanks to all contributed authors, reviewers, panelist, local organizing committee members, and the session chairs for paying attention to the quality of the publication. We are thankful to our sponsors for generously supporting this event and Institutional Partner (MNIT Jaipur) for providing all the necessary support, encouragement, and infrastructure in this beautiful campus. At last, we pay the highest regard to the Irisworld Science & Technology Education and Research (IRISWORLD), a "not-for-profit" society from Jaipur for extending support for financial management of OWT 2018.

Best Wishes from:

Jaipur, India	Prof. Vijay Janyani
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Rome, Italy	Prof. Antonio d'Alessandro

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We also pay our best regards to the faculty members from Institutional Partners (MNIT Jaipur and Manipal University Jaipur) for extending their enormous assistance during the conference-related assignments, especially to Mr. Dinesh Kumar Yadav, Mr. Lokesh Kumar from Manipal University Jaipur; Sanjeev Yadav, Ashok Kumar, Jitendra Deegwal from Government Engineering College, Ajmer; Mr. Nidhish Tiwari from JNIT Jaipur; Mr. Ramesh Dewanda, Executive Member, Irisworld Society Jaipur; and Sh. Narendra Godara from MNIT Jaipur.

We also acknowledge the financial supports received from our esteemed sponsors such as JV Micronics, IETE Rajasthan Centre Jaipur, and OSA student chapter of MNIT Jaipur. At last, we extend our sincere thanks to Springer for agreeing to be our publishing partner. Especially, the efforts made by Swati Meherishi, Executive Editor, are highly appreciable.

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Profile Summary: Dr. Tawfik Ismail received the B.Sc. (with honors) from the department of Electronics and Communication, Faculty of Engineering, Cairo University, Giza, Egypt, in 2001. He joined the National Institute of Laser Enhanced Science (NILES) in the department of Engineering Application of Laser (EAL), Cairo University in 2003 as research Assistant. He received the M.Sc. and Ph.D. degrees in the department of EAL in 2009 and 2013, respectively. He is currently an Assistant Professor in the Department of Engineering Applications of Laser (NILES), Cairo University, Egypt. Dr. Tawfik's research interests include optical and wireless networks, IoT, Biomedical telemetry and Optoelectronics. Dr. Tawfik is currently the CoPI of two successful research projects funded by the National Telecom Regularity Authority (NTRA) and Information Technology Industry Development Agency (ITIDA). These projects with collaboration between University of Cairo, Egypt and University of Toronto, Canada.

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