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Introduction

This Proceedings arose from the Third International Conference on Optics and Communication Technology (ICOCT 2023), which was held virtually in Changchun, China from September 15 to 17, 2023. This conference marks the third year that this series has been successfully held.

The scientific and social program for the meeting occurred over three days with about 50 delegates from different regions of China gathering on September 15 and departing on September 17, including keynote speeches, oral presentations, poster presentations, and academic communication.

There were three keynote speeches by renowned professors during the meeting. Prof. Chao Zuo (Nanjing University of Science and Technology, China), who has long been engaged in the development of novel computational optical imaging and measurement technologies, with a focus on phase measuring imaging metrology such as holographic interferometric microscopy, noninterferometic Quantitative Phase Imaging (QPI), Fringe Projection Profilometry (FPP), and Structured Illumination Microscopy (SIM). He has authored more than 200 peerreviewed publications in prestigious journals (e.g., Light, Optica, Adv. Photon.) with over 12,000 citations. His research has been featured over 20 times and highlighted by journals such as Nature, Light. Sci. Appl., SPIE Newsroom, CLP Newsroom, and Optical Image of the Week.

Topics that were the focus of invited presentations and contributed papers at ICOCT 2023 included: High-end Optical Instrument, Advanced Optical Thin Film Materials, Optical Communication Components and Modules, 5G Communication Technology and Complex Multidimensional Information Processing. All submissions had gone through rigorous review by performing a double-blind review to check their quality of content, level of innovation, significance, originality, and legibility.

The Third International Conference on Optics and Communication Technology (ICOCT 2023) could not have been possible without the hard work of the members of the Technical Program Committee and Local Committee. We would also like to thank SPIE for their kindness and support in the preparation of this conference. Finally, we would like to thank all the attendees of ICOCT 2023 for their scientific contributions to the conference, and for their warm spirit of engagement which characterized the scientific discussions and social occasions.

The Committee of ICOCT 2023