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Indrani Bhattacharya · Yukitoshi Otani ·  
Philippe Lutz · Sudhir Cherukulappurath  
Editors

# Progress in Optomechatronics

Proceedings of the 20th International  
Symposium on Optomechatronic Technology  
(ISOT 2019), India

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# Preface

This volume contains a series of technical papers presented in 20th International Symposium on Optomechatronic Technology, ISOT 2019, held in Resort Marinha Dourada, Goa, India from November 11–13, 2019. ISOT 2019 was organized jointly by University of Calcutta, Kolkata, India, and Goa University, Goa, India, in technical support and collaboration with International Society of Optomechatronics, ISOM, and financially assisted by Science and Engineering Research Board, SERB, of Department of Science and Technology, DST, Government of India.

ISOT 2019 was a three-day conference consisted of plenary, invited, and contributory oral and poster sessions. All contributory submissions are peer reviewed. Interactive sessions were conducted to foster networking and formation of well-focused collaborations among research groups and industry sessions.

In the symposium, discussion and dissemination had taken place on research topics related to adaptive optics, optomechanics, machine vision, tracking and control, image-based micro-/nano-manipulation, control engineering for optomechatronics, optical metrology, optical sensors and light-based actuators, optomechatronics for astronomy and space applications, optical-based inspection and fault diagnosis, polarization sensing and imaging, micro-/nano-optomechanical systems (MOEMS), optofluidics, optical assembly and packaging optical and vision-based manufacturing, processes, monitoring, and control optomechatronics systems in bio- and medical technologies (such as optical coherence tomography, OCT based systems, endoscopes and optical-based medical instruments).

The editors express their sincere thanks and gratitude to Prof. Dr. Kallol Bhattacharya, Professor, Department of Applied Optics and Photonics (AOP), University of Calcutta, the convener and technical chair of ISOT 2019, for his sincere effort to make this meeting possible in India for the first time as well as to make it successful along with Dr. Sudhir Cherakulappurath., Assistant Professor, of Department of Physics, University of Goa, India, who acted as joint convener of the conference.

The editors also wish to acknowledge Prof. Dr. Rajib Chakraborty Professor, Department of AOP, University of Calcutta for his active support and Dr. Kanik Palodhi, to render his valuable service as the treasurer and a contributor of this book.

Sincere thanks and gratitude to very active and enthusiast students of Department of Applied Optics and Photonics, University of Calcutta, along with the students of the Department of Physics, Goa University for their excellent support and cooperation to make the conference successful.

The editors wish to acknowledge and convey sincere thanks to all authors who have contributed to this volume along with the presenters, reviewers, and session chairs for their participation, support, and valuable contribution to make the symposium successful.

Joensuu, Finland

Indrani Bhattacharya  
Editor

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