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Proceedings
of the International
Conference on Atomic,
Molecular, Optical & Nano
Physics with Applications

CAMNP 2019



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Preface

The Department of Applied Physics, Delhi Technological University, New Delhi, India, has organized the three days "International Conference on Atomic, Molecular, Optical and Nano Physics with Applications (CAMNP-2019)" during 18–20 December 2019, co-sponsored by LASTEC, DRDO, Delhi. The objective of CAMNP-2019 was to bring prominent scientists and researchers from academia and industry as well as experts from all strata of society under one roof to explore and muster the new horizon of novel technological and industrial developments in the field of science and technology.

The CAMNP-2019 featured a diverse array of research presentations on the theoretical and experimental developments in atomic, molecular, optical, nanoscience and technology. Such studies leave a powerful impact on various industrial applications in information technology, renewable energy, climate change, space technology and biological studies.

The response received against the call of papers for CAMNP-2019 has also been overwhelming. This conference has attracted researchers, scientists and practitioners from academia and industry to exchange ideas and share their valuable experiences. We have received a larger number of research contributions (around 100 invited talks and 260 poster presentations) worldwide. These research contributions represented a wide variety of research topics in all the emerging areas. Indeed, these contributions augmented the knowledge and encouraged many of us to take up these challenging application areas and contribute successfully to research in engineering and applied sciences. A large number of international invited speakers in our technical programme schedule indicated the success of the CAMNP-2019 conference that makes all the organizers extremely proud.

We are thankful to Springer Nature for accepting our proposal of publishing the recommended manuscripts in the Springer Proceedings in Physics. We have received 75 full-length manuscripts for publication in the Springer Proceedings in Physics. Accordingly, a review committee has been constituted for reviewing the manuscripts. After the sufficient and appropriate review cycles, the review committee has recommended 63 manuscripts for publication in the Springer Proceedings in Physics.

x Preface

The success of this conference has been the collective effort and contribution of the entire organizing team. We are sincerely grateful to Hon'ble Vice Chancellor, DTU, Prof. Yogesh Singh, for his constant support. We would also like to thank Prof. S. K. Garg, Pro-Vice Chancellor and Prof. Samsher, Registrar, and the concerned authorities for their guidance and encouragement. We are also thankful to government (AICTE, MoEF&CC, SERB, DRDO, TEQIP-III, CSIR, BRNS, ICAR) and private agencies for providing financial assistance.

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Infrared Optics

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