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Introduction

The inaugural SPIE Nanophotonics and Macrophotonics for Space Environments (NMSE) proved to be a well-attended conference, in part, because it was an outgrowth from the previous SPIE Photonics for Space Environments I-XI conferences. The synergism of nanotechnology and photonics for addressing and advancing space applications was clearly evident and proved to be an excellent choice for this new conference providing a unique and useful forum.

As would be expected, the majority of NMSE Conference papers involved the advancement of polymer and hybrid organic materials for development of photonic-based space applications. The focus of many papers was primarily on the ability of the materials and devices to function in a space radiation environment. A large number of invited papers were presented as well as two excellent Keynote presentations by Dr. D. K. Shenoy of the Defense Advanced Research Projects Agency (DARPA) and Dr. K. C. Reinhardt of the Air Force Office of Scientific Research. The former dealt with DARPA's Supermolecular Photonics Engineering Program, while the latter presentation involved Integrated Multi-Mode Sensing. The Nano-Polymer Materials I and II and the Novel Photonic Devices and Concepts for Space Based Applications sessions drew much interest since these topics were addressed by presentations describing the novel integration and fusion of quantum dots, various nanoparticles and nanostructures for improving sensors, solar cells and detector characteristics.

We look forward to the next convening of the SPIE NMSE Conference and expect that additional advanced nano-, micro- and macrophotonic areas of research and development will be presented and continue to expand and improve the conference objectives.

The Chairs wish to thank the SPIE NMSE program committee, speakers, session chairs, and especially the SPIE staff for their many contributions to making the NMSE conference a success.

Edward W. Taylor
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