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Nanophotonics and Macrophotonics for Space Environments VII

**Edward W. Taylor
David A. Cardimona**
Editors

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Introduction

This year's Nanophotonics and Macrophotonics for Space Environments Conference VII (NMSE VII), experienced a modest surge in the number of presented papers by some 115 authors and coauthors despite travel restrictions placed on many organizations. The majority of presentations over the two and one-half day conference focused on simulated and modeled space radiation induced effects and testing of advanced detectors, lasers, optical coatings, solar cells and integrated photonic circuits.

Of particular audience interest were presentations on current, future and near-term space applications which included "Photonics on the mission to Mars", "Radiation effects on solar cells: experiments, models, and simulations: DLTS vs. SRIM for trap data", "Modeling ion induced effects in thin films and coatings for lunar and space environment applications", "Quantum interference in electro-optic polymeric materials" and "Compact fiber optic gyroscopes for platform stabilization". The Keynote Session drew a large audience for the excellent Keynote Address by Dr. Gary Hughes of California Polytechnic State University entitled "DE-STAR: Phased-array laser technology for planetary defense, and other scientific purposes". Numerous interesting questions followed the novel presentation testifying to the varied interest of the audience.

In conclusion and on behalf of the NMSE VII Program Conference Committee members, Cochairs and authors we express our gratitude to the SPIE staff for their many contributions which made the Conference a success.

Edward W. Taylor
David A. Cardimona

