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Introduction

The science and applications of polarization continue to expand in sophistication and scope. This proceedings volume represents theoretical and experimental research on optical polarization that was presented at the *Polarization Science and Remote Sensing III* conference in San Diego, California, during August 29–30, 2007. Conferences under this name were held previously in San Diego in 2005 and 2003, in alternate years with our sister conference, *Polarization: Measurement, Analysis, and Remote Sensing*, currently chaired by Drs. David Chenault and Dennis Goldstein.

This conference included three sessions on polarization imaging, a very successful special session on coherence and polarization in scattering organized by Dr. Brian Hoover, and the following individual sessions: Polarization Calibration and Mathematics; Polarization Interaction with Media, Materials, and Surfaces; Active Polarimetry; Polarization-sensitive Optical Components and Systems; and a poster session with multiple high-quality contributions that attracted significant interest. At this conference we benefited from notably high-quality presentations and professional interactions.

We extend our gratitude to all the participants of this conference, the session chairs, the conference organizing committee (with a special thanks to Brian Hoover and his colleagues for conceiving of and promoting the special scattering session), and to the SPIE staff who did so much to make this conference part of the much larger Optics and Photonics Symposium. It is our hope that readers of this proceedings volume will benefit from these combined efforts and will join us for future discussions of optical polarization.

Joseph A. Shaw
J. Scott Tyo