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Arthur J. Davis
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Editors

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Introduction

The twentieth annual conference for Novel Optical Systems Design and Optimization was held in San Diego, California this year.

Our technical sessions included tracks on: Exotic and Unconventional Optics and Systems; Multi- and Hyperspectral Applications; Novel Systems; Biomedical Applications and Human Factors; Volumetric Displays and 3D Imaging; and Metrology and Inspection Systems.

In addition, there was a poster session, an Optical Engineering Plenary Session and Technical Group Events.

The session on Exotic and Unconventional Optics and Systems had interesting presentations on curved sensor arrays and novel optical distance measurement.

Multi- and Hyperspectral Applications included wide spectral band and wavelength tunable technologies. In Novel Systems we saw novel optical circuits, lens cloak theory and new developments in aspheric microlens manufacturing. The Biomedical Applications and Human Factors session demonstrated wearable devices including energy harvesting from walking/running. In Volumetric Displays and 3D Imaging, developments in 2D/3D displays and microscopic 3D imaging were discussed. Finally, the Metrology and Inspection Systems session presented novel vision systems and a new confocal microscope design.

Our conference had three invited papers this year.

Our thanks to Christophe Gaschet for his very well received presentation on curved sensor technology. Thanks to David Parker for his presentation on aberrations of temporally modulated optical wavefronts. Also thanks to Oliver Kröning for a summary on the progress of human kinetic energy harvesting systems.

We are very grateful to those who helped make this conference a success, especially the authors, audience, SPIE staff, and program committee, which provided excellent assistance to ensure the quality of the content while also presiding over a number of the sessions.

Our Session Chairs were Francois Callewaert, Joseph Choi, Peter Goldstein, G. Groot Gregory and R. Hamilton Shepard. Thanks to them for keeping our conference running smoothly and on time.

Also thanks to everyone else on our Program Committee for helping review the Abstracts and Paper Submissions: Yi Chin Fang, Eric Herman, John Koshel, Scott

Lerner, Bharathwaj Narasimhan, Craig Olson, José Sasián, Haiyin Sun and Udo Zölzer.

Next year we will return for our twenty-first conference. The chairs will be Arthur Davis, Cornelius Hahlweg and Joseph Mulley. We look forward to seeing you in 2018!

Arthur J. Davis
Cornelius F. Hahlweg
Joseph R. Mulley