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Introduction

This year in San Diego, California, we held the eighteenth conference of Novel Optical Systems Design and Optimization. The conference was very well attended and featured oral presentation topic tracks in: Novel Instrumentation, Novel Systems, Novel Design and Simulation Methods, Optimization and Novel Display Systems. In addition, there was also a poster session, a joint optical engineering plenary session and technical group events.

The conference started with Novel Instrumentation, which illustrated how novel instrumentation provides advantages in medical and life-science applications. Novel Systems included a number of advances in machine vision technology. The session on Novel Design and Simulation Methods was standing-room only, and the authors presented many interesting applications of computational optics. The session on Optimization covered some new approaches to design optimization, including topics in freeform optics. The final session on Novel Display Systems presented a range of progress from different technological approaches to glasses-free 3D displays.

An invited paper was presented by Dr. Salman Karbasi of the University of California, San Diego during the Novel Design and Simulation Methods session. Dr. Karbasi demonstrated a novel camera system that achieved a very wide angle field of view with high resolution by implementing an improved curved image surface fiber relay.

The Novel Optical Systems Design and Optimization committee continued to explore some new technology niches this year, and this seems to have been a successful and positive endeavor. We look forward to continuing this effort next year!

Our thanks go to those who helped make this conference a success, especially the authors, audience, SPIE staff, and program committee. The authors share the credit for making this conference an unqualified success. The audience built upon this success by being active and asking engaging questions. The SPIE staff ensured that everything ran smoothly before, during, and after the meeting. The program committee provided excellent assistance in ensuring high quality content, while also presiding over a number of sessions. The committee was composed of: Jost Adam, Wenrui Cai, Yi Chin Fang, Peter Goldstein, Richard Juergens, John Koshel, Scott Lerner, Paul Manhart, Joseph Mulley, Bharathwaj Narasimhan,

Jorge Ojeda-Castaneda, Craig Olson, Jeffrey Perkins, Jose Sasian, David Shealy, Hamilton Shepard, Haiyin Sun and Kevin Thompson.

Next year we will return for the nineteenth iteration of this conference. The chairs will be Arthur Davis and Cornelius Hahlweg. The planning for Novel Optical Systems Design and Optimization XIX in 2016 is already underway, so please start planning submissions, questions, and attendance. Focus themes are being decided at this time. If you would like to assist with the 2016 conference or other meetings in the future, please contact one of us. We look forward to seeing you in 2016!

Arthur J. Davis
G. Groot Gregory
Cornelius F. Hahlweg