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# *Photonic Instrumentation Engineering III*

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# Introduction

Building on the success of the last two years, the Photonic Instrumentation Engineering Conference has continued to expand, seeing a 40% increase in the total number of submitted papers. This year, the conference had a truly international spirit, with presentations from the United States, Canada, Japan, India, Taiwan, South Korea, Singapore, the United Arab Emirates, Croatia, France, Germany, the Netherlands, and Norway.

This volume features several important contributions to the science of photonic instrumentation development and applications. A broad spectrum of different technologies and applications was presented, including various sensor technologies, laser and LED sources, and interferometric and spectroscopic instruments.

The presented sensor technologies perform numerous functions and work on different principles, including polarization sensing, positioning sensors, sensors based on surface plasmon resonance, interferometric and fiber-optic sensors, and sensors employed in the automotive industry.

A broad array of various photonic sources was presented this year. Some examples include femtosecond lasers, LEDs, lasers with complex field distributions, and high-speed spectrally swept sources.

Advancements made in the field of photonic instrumentation have been manifested this year by several practical applications of complex photonic devices that just a few years ago were considered exotic. This year, we witnessed the practical use of several spectroscopic instruments based on optical frequency combs, and interferometric devices using spectrally swept lasers and low coherence interferometers, just to name a few.

We are looking forward to your participation in the upcoming SPIE conferences, and hope to see the strong continuing interest in the field of photonics instrumentation development and applications from you, the reader.

**Yakov G. Soskind**
**Craig Olson**