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Introduction

We were very pleased to chair the first conference on Optical Instrument Science, Technology, and Applications at the 2018 SPIE European Optical Design event in Frankfurt, Germany. As chairs of a new conference, we are extremely gratified to see such a positive response. Optical instruments remain a critical area of development and enable many technologies. This conference provides a special focus including promotion of sustainable science-to-application timelines. The conference consisted of four sessions of high quality presentations, the poster session, and subsequent proceedings articles. We sincerely thank our contributed speakers, poster paper presenters, and the superb community for making the sessions and conference such a success. We must of course also thank our excellent program committee and SPIE staff for their ideas and promoting this conference. Overall, it is very clear that the topics covered by this conference are of great interest to the optics and photonics community.

The 2018 Frankfurt conference sessions covered a variety of topics in space and remote sensing, optical and photonic instrument applications, computational methods and prototyping, and metrology. The poster session encompassed similar topics. As stated in the call for papers for this first event:

"Optical instruments play an extremely large role in the application and development of future capability in optics and photonics. Optical instruments are a critical lynchpin in numerous applications ranging from government, industrial, and consumer applications. Science and development on optical instruments is continual as technologies involved vary from robust fully developed instruments to fledgling technologies with a bright future."

This Optical Instrument Science, Technology, and Applications conference has been created to further enable the integration of components, design, and modeling key to successful optical instrument development and applications. The focus of this conference is on optical systems and instruments, along with applications enabled by such methods. Topics can include all stages of development and applications where optical instruments are proposed as solutions versus competing non-optical technologies through optical instruments being the key enabling technology.

We know this conference covers areas that will remain very important in the global landscape of optical technologies encompassing a variety of approaches and technology maturity. Establishing forums for speeding up technology integration, which will largely be requiring systemic approaches all the way from science to production, is imperative for future optical instrument science and technology advancement.

This conference will continue at the next European Optical Design event. We encourage everyone interested in optical instrument science, technology, and applications to look for the call for papers and to submit your work. We certainly value the quality submissions as well as the opportunity to help facilitate and take

part in the community's interaction. Please feel free to contact us or anyone on our program committee if you have any questions. We look forward to seeing you at the next event to further discuss this exciting area of optics and photonics.

Nils Haverkamp
Richard N. Youngworth