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**Rolf Rascher
Christian Schopf**
Editors

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Introduction

The Sixth European Seminar on Precision Optics Manufacturing took place 9–10 April 2019 in Teisnach, Germany. More than 120 attendees from all over the world met to discuss topics surrounding manufacturing and measuring technology for precision optics and optical systems. In cooperation with SPIE, this conference has become one of the biggest symposiums on optics manufacturing in the German area. The organizers, Deggendorf Institute of Technology (Germany) and the Technology Campus Teisnach (Germany), would like to thank the committee members, conference and session chairs, authors and speakers, and the internal team behind the scenes. Their contributions of time and effort ensured the symposium's great success. This symposium was brought to life by the audience members who listened to the talks and gave feedback. Their lively and intense discussions during the breaks and sessions reflect the continued need for a high-level communication platform for the experts in optics manufacturing technologies.

Papers addressed a wide range of current tasks in industry and research and fell under these main topics:

- **Manufacturing and measurement of optics from sub millimeter to large and giant dimensions and optical systems:** processes for grinding, polishing, centering, assembly, handling, surface modification, cleaning and coating of optics; standards in optics manufacturing, design of optics, error budgeting, and cost-planning
- **Advanced and next generation (future) technologies in high precision manufacturing:** ultraprecision machining, kinetic abrasive polishing, additive manufacturing, molding, new and special materials, next generation of giant optics manufacturing and testing
- **Smart manufacturing, internet and internet of things in the production of optics:** block chain and distributed-ledger-technology, data, expert systems, optical designs and process parameters with regard to their integrity and security process stability, data mining, handling and analysis, control of environment and media.

The presentations and discussions confirmed the high industrial relevance of the symposium. In these proceedings, the reader will find a great number of the presented talks and posters presented during the symposium.

We look forward to continuing this series of symposia with the Seventh European Seminar on Precision Optics Manufacturing on 31 March–1 April 2020.

Rolf Rascher

