

# PROCEEDINGS OF SPIE

## ***Photonics and Education in Measurement Science 2019***

**Maik Rosenberger  
Paul-Gerald Dittrich  
Bernhard Zagar**  
*Editors*

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## Introduction

The Joint TC1 - TC2 International Symposium on Photonics and Education in Measurement Science, which takes place 17–19 September 2019 in collaboration with the Conference on Optical Fibre & Photonic Sensors for Industrial & Safety Applications (OFSIS), addresses recent research and developments in photonic instrumentation and applications as well as education and training in measurement sciences.

The conference focuses on the theme, “Photonics and Education in Measurement Science,” and provides a forum for the exchange of the latest research findings and innovations related to this theme. Topics include, but are not limited to, the following:

- Measurement, Instrumentation, and Photonics for Education & Training
- Applied Photonics for Science and Engineering in Industry, Biology, Medicine, Environment, and Administration
- Sensor & System Characterization for Machine Vision and Image Processing
- Photonic Sensors and Systems for Multimodal Sensing
- Photonics, Machine Vision, and Image Processing in UV, VIS, NIR, SWIR, and LWIR Wavelength Range including Thermal and THz
- Software & Processing of Multivariate and Multidimensional Data as well as Deep Learning Approaches
- Development of Models, Methods, and Algorithms in Photonics, Machine Vision, and Image Processing.

Well-known experts from leading research facilities, companies, and institutions will give insights on their latest research and developments in photonic measurement engineering for quality assurance.

This conference is where scientists and innovators meet to share, inspire, and network. We are proud to host the Joint TC1 - TC2 International Symposium on Photonics and Education in Measurement Science 2019 in Jena, Germany. This year's schedule is packed with scientific keynotes and lectures about new technologies, methods, and applications as well as scientific tours, an exhibition of instruments, and solutions for photonic measurement sciences.

We are grateful to all the contributors who present their valuable work to the research and industry community. We sincerely wish you a very pleasant stay during the conference, and a nice trip home with plenty of pleasant memories of

this conference. We give our best regards to the participants of the conference.  
Welcome to Germany! Welcome to Jena!

**Maik Rosenberger  
Paul-Gerald Dittrich  
Bernhard Zagar**