



## Optical Sensing and Detection VIII (PE110)

*Conference Chairs:* **Francis Berghmans**, Vrije Univ. Brussel (Belgium); **Ioanna Zergioti**, National Technical Univ. of Athens (Greece)

*Programme Committee:* **Francesco Chiavaioli**, Istituto di Fisica Applicata “Nello Carrara” (Italy); **Thomas Geernaert**, Vrije Univ. Brussel (Belgium); **Roger M. Groves**, Technische Univ. Delft (Netherlands); **Jane Hodgkinson**, Cranfield Univ. (United Kingdom); **Jiri Homola**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Anna G. Mignani**, Istituto di Fisica Applicata Nello Carrara (Italy); **Sinead O’Keefe**, Univ. of Limerick (Ireland); **Kate Sugden**, Aston Univ. (United Kingdom); **Alessandro Tredicucci**, NEST (Italy); **Waclaw Urbanczyk**, Wroclaw Univ. of Technology (Poland); **Jan Van Roosbroeck**, FBGS International (Belgium); **Libo Yuan**, Harbin Engineering Univ. (China)

The optical sensing and detection conference will emphasize the principles, characteristics and performance of photonic sensor and measurement systems. The former focuses on new and advanced optical- and photo-detector technologies for the range from UV to terahertz, while the latter includes point sensor, distributed sensor, inspection and remote sensing systems based either on guided or free-space optics.

The conference welcomes contributions on essentially all aspects of optical sensors, including transduction principles, measurand encoding principles, data-processing, user interfacing and field trials. Contributions on materials, components, architectures, structures, detectors and analyzers for optical sensors are all welcomed. A wide variety of application areas will be considered, including safety and security, manufacturing industry, energy production, oil and gas, mining and extraction, entertainment, robotics, environmental and structural health monitoring, non-destructive evaluation, aerospace, chemical industry, food and drug processing and control, medicine and health, etc.

The objective in bringing these technologies and application fields together is to provide a forum for interchange among researchers and users of the various techniques and to support cross-fertilization of ideas which may benefit research and development in future photonic sensing and optical instrumentation systems.

We therefore encourage the research and development community to submit contributions to the conference in the broad field of optical sensing systems and more particularly on:

- detection and transduction materials, technologies, and techniques
- technological advances in photodetectors, e.g. in the field of low wavelength photosensors and terahertz and IR imaging
- components for sensor systems, e.g. detectors, analyzers, packages, etc.
- optical and electronic signal handling, processing, routing and user interfacing
- data analysis for multi-sensor arrays, multi-component sensing and data fusion
- fibre-optic sensors
- sensitivity enhancement in optical sensing techniques such as for example interferometry, spectroscopy, laser ranging
- sensor component, system and network reliability
- applications of optical sensing techniques in the various fields given above
- field trials.

## Present your research at SPIE Photonics Europe

Below are abstract submission instructions, the accompanying submission agreement, conference presentation guidelines, and guidelines for publishing in the Proceedings of SPIE on the SPIE Digital Library. Submissions subject to chair approval.

### Important dates

|   |                  |
|---|------------------|
| Abstracts due   | 30 November 2023 |
| Authors notified and programme posts online                     | 25 January 2024  |
| Registration opens  | 8 January 2024   |
| Submission system opens for manuscripts and poster videos/PDFs* | 5 February 2024  |
| Manuscripts due   | 20 March 2024    |

\*Contact author or speaker must register prior to uploading

### What you will need to submit

- Presentation title
- Author(s) information
- Speaker biography (1000-character max including spaces)
- Abstract for technical review (200-300 words; text only)
- Summary of abstract for display in the programme (50-150 words; text only)
- Keywords used in search for your paper (optional)
- Check the individual conference call for papers for additional requirements (i.e. extended abstract PDF upload for review or instructions for award competitions)

Note: Only original material should be submitted. Commercial papers, papers with no new research/development content, and papers with proprietary restrictions will not be accepted for presentation.

### How to submit your abstract

- Visit the conference page: [www.spie.org/pe110call](http://www.spie.org/pe110call)
- You may submit more than one abstract, but submit each abstract only once
- Submit by clicking the "Submit an Abstract" button on the conference page
- Sign in to your SPIE account, or create an account if you do not already have one
- Follow the steps in the submission wizard until the submission process is completed
- If your submission is related to an application track below, indicate the appropriate track when prompted during the submission process

### Submission agreement

All presenting authors, including keynote, invited, oral, and poster presenters, agree to the following conditions by submitting an abstract:

- Register and pay the author registration fee
- Oral presenters: recording and publication of your onsite presentation (slides synched with voice) for publication in the Proceedings of SPIE in the SPIE Digital Library
- Poster presenters: submit a poster PDF by the advertised due dates for publication in the Proceedings of SPIE in the SPIE Digital Library; poster PDFs may also be published and viewable in the spie.org programme during and immediately after the event. Each poster must have a unique presenter; one person may not present more than one poster
- Email messaging for the conference series
- Submit a manuscript by the advertised due date for publication in the Proceedings of SPIE in the SPIE Digital Library
- Obtain funding for registration fees, travel, and accommodations
- Attend the meeting
- Present at the scheduled time

### Review and programme placement

- To ensure a high-quality conference, all submissions will be assessed by the conference chair/editor for technical merit and suitability of content
- Conference chairs/editors reserve the right to reject for presentation any paper that does not meet content or presentation expectations
- Final placement in an oral or poster session is subject to chair discretion

### Publication of Proceedings in the SPIE Digital Library

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#### QUESTIONS?

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For questions about your presentation, submitting an abstract or the meeting, contact your conference programme coordinator.

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