



## Next-Generation Optical Communication: Components, Sub-Systems, and Systems XI (OE803)

*Conference Chairs:* **Guifang Li**, CREOL, The College of Optics and Photonics, Univ. of Central Florida (United States); **Kazuhide Nakajima**, NTT - Tsukuba R&D Ctr. (Japan)

*Program Committee:* **Kazi S. Abedin**, OFS Fitel LLC (United States); **Jin-Xing Cai**, TE Connectivity Ltd. (United States); **Ezra Ip**, NEC Labs. America, Inc. (United States); **Yongmin Jung**, Optoelectronics Research Ctr. (United Kingdom); **Tsuyoshi Konishi**, Osaka Univ. (Japan); **Ming-Jun Li**, Corning Incorporated (United States); **Chao Lu**, The Hong Kong Polytechnic Univ. (Hong Kong, China); **Akihiro Maruta**, Osaka Univ. (Japan); **Takashi Sasaki**, Innovation Core SEI, Inc. (United States); **Siyuan Yu**, Univ. of Bristol (United Kingdom); **Xiang Zhou**, Google (United States); **YanJun Zhu**, Hisense Broadband, Inc. (United States)

Conference Co-Sponsors:

**CORNING**

**NTT Electronics**

This conference provides a forum to present the latest advances in technology and product developments in next-generation optical communication including coherent, space- and mode-division multiplexed optical transmission systems. The conference program encompasses components and subsystems related to next-generation optical communication technology as well as coherent, ultra-wide band, space- and mode-division multiplexed optical communication systems. Early-stage concepts and controversial solutions are also welcome and encouraged.

We particularly invite students to submit their thesis work to this conference. Students who are first authors will be eligible for the Optical Communications Best Student Paper Awards.

Topics for the conference include but are not limited to:

- advanced components for coherent transmitters and receivers
- photonic and optoelectronic integration
- subsystems including DSP algorithms, AI/ML
- coherent and ultra-wide band transport systems
- free-space optical communication
- analog and microwave photonics
- optical switching
- coherent detection for networking including access networks
- components for space-division multiplexing
- components for mode-division multiplexing
- electrical and optical signal processing for space- and mode-division multiplexing
- space- and mode-division multiplexed optical communication systems
- SDM networks.

### OPTICAL COMMUNICATIONS BEST PAPER AWARDS

We are pleased to announce Best Paper Awards in Optical Communications, sponsored by Corning and NTT Electronics. These awards will recognize the outstanding work of students and professionals who present the most notable recent results with broad impact in the area of optical communications. Qualifying papers will be evaluated by the awards committee. Manuscripts will be judged based on technical merit, impact, and clarity. The winners will be announced immediately following the Optical Communications Joint Keynote Session, and the presenting authors will be awarded a certificate and cash prize.

#### To be eligible for the Best Student Paper Award, you must:

- be a student without a doctoral degree (undergraduate, graduate, or PhD student)
- be listed as an author on an accepted paper within conferences OE801, OE802, or OE803
- have conducted the majority of the work to be presented
- submit your manuscript online by 29 December 2021
- present your paper as scheduled
- be present at the Awards Ceremony.

#### To be eligible for the Best Technical Paper Award, you must:

- be a post-doc or early career professional
- be listed as an author on an accepted paper within conferences OE801, OE802, or OE803
- have conducted the majority of the work to be presented
- submit your manuscript online by 29 December 2021
- present your paper as scheduled
- be present at the Awards Ceremony.

#### How to Apply:

After your Manuscript is submitted online (by 29 December 2021), send an email to [nasfine@stny.rr.com](mailto:nasfine@stny.rr.com) by **Monday 3 January 2022**, stating your desire to be considered, and for which award you qualify.

#### IMPORTANT:

The Proceedings for this conference will be published on the SPIE Digital Library on the first day of the meeting. Manuscript submission (4-page minimum) is obligatory for participation in the conference. Note the earlier manuscript due date of **29 December 2021**.

# Present your research at SPIE Photonics West

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

Abstract submission deadline	11 August 2021
Author notification	11 October 2021
Submission system opens for presentations and manuscripts*	29 November 2021
Manuscript due date	29 December 2021
Oral presentation videos due	29 December 2021
Poster PDF and preview videos due	29 December 2021
Oral presentation slide deadline	20 January 2022

\*Authors must register prior to uploading.

## What you will need to submit

- Title
- Author(s) information
- 250-word abstract for technical review
- 100-word summary for the program
- Keywords used in search for your paper (optional)
- Check the individual conference Call for Papers for additional requirements (for example, some conferences require 2- to 3-page extended summary for technical review, or have 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/oe803call](http://www.spie.org/oe803call)
- You may submit more than one abstract but submit each abstract only once.
- Click 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.

## Application track

- **Brain:** Papers that describe the development of innovative technologies that will increase our understanding of brain function.
- **Translational Research:** Papers that showcase the latest photonics technologies, tools, and techniques with high potential to impact healthcare.
- **3D Printing:** Papers that showcase innovative ways to apply this multidimensional/multidisciplinary technology.
- **COVID-19 Research:** Papers that illustrate the creativity and breadth of the optics and photonics community's response to the COVID-19 pandemic.

## 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: Submit a presentation video by the advertised due date, or agree to the presentation capture of your presentation on site, for online conference viewing during the event and publication in the Proceedings of SPIE on the SPIE Digital Library.
- Poster Presenters: Submit a Poster PDF and optional preview video by the advertised due date, for online conference viewing during the event and publication in the Proceedings of SPIE on the SPIE Digital Library.
- Submit a 4-page-minimum manuscript by the advertised due date, for online conference viewing during the event and publication in the Proceedings of SPIE on the SPIE Digital Library.
- Obtain funding for registration fees, travel, and accommodations, independent of SPIE, through their sponsoring organizations.
- Ensure that all clearances, including government and company clearance, have been obtained to present and publish. If you are a DoD contractor in the USA, allow at least 60 days for clearance.
- Attend the meeting.
- Present at the scheduled time.

## Review and program 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

- SPIE will publish all presentations for viewing during the conference, as well as permanently archive all presentations in the conference proceedings on the SPIE Digital Library.
- SPIE retains rights to distribute and market the official SPIE recording of the presentation, presentation video, and/or poster.
- Most SPIE conferences follow an onsite publication model, meaning that manuscripts received by the advertised due date will be published for online viewing during the event, as well as archived in the SPIE Digital Library.
- A select few of SPIE conferences may elect to follow a Post-Meeting model of publication in order to conduct a more thorough review of manuscripts. In this model, manuscripts will be published 2-4 weeks after the event in the SPIE Digital Library, and may not be published for online viewing during the event.
- Authors must be authorized to transfer copyright of the manuscript to SPIE, or provide a suitable publication license. Authors retain the right to prepare derivative publications based on the paper.
- Conference Chairs/Editors may require manuscript revision before approving publication and reserve the right to reject for publication any paper that does not meet acceptable standards for a scientific publication.
- Conference Chair/Editor decisions on whether to allow publication of a manuscript are final.
- Only papers, presentations, and posters presented at the conference and received according to publication guidelines and due dates will be published in the conference Proceedings of SPIE on the SPIE Digital Library.
- SPIE partners with relevant scientific databases to enable researchers to find the papers in the Proceedings of SPIE easily. The databases that abstract and index these papers include Astrophysical Data System (ADS), Ei Compendex, CrossRef, Google Scholar, Inspec, Scopus, and Web of Science.
- More publication information available on the [SPIE Digital Library](http://www.spiedigitallibrary.org)

# ABSTRACT SUBMISSION GUIDELINES

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