



Optics Education and Outreach VIII (OP301)

Conference Chairs: **G. Groot Gregory**, Synopsys, Inc. (United States); **Anne-Sophie Poulin-Girard**, ABB (Canada)

Program Committee: **Katie E. Chong**, Sydney Photonics Industry Network (Australia); **Barbara A. Darnell**, Cubert GmbH (United States); **Judith F. Donnelly**, Problem Based Learning Projects (United States); **Danielle J. Harper**, Wellman Ctr. for Photomedicine (United States); **Svetlana G. Lukishova**, The Institute of Optics, Univ. of Rochester (United States); **Amanda K. Meier**, Front Range Community College (United States); **Brian Monacelli**, Pasadena City College (United States), Jet Propulsion Lab. (United States); **Ignacio Moreno**, Univ. Miguel Hernández (Spain); **Bishnu P. Pal**, Mahindra University Hyderabad (India); **Matthew T. Posner**, Optonique (Canada); **Paul B. Ruffin**, Alabama A&M Univ. (United States); **Marcelo Saito Nogueira**, Tyndall National Institute (Ireland); **Danuta M. Sampson**, The Univ. of Western Australia (Australia), Lions Eye Institute (Australia); **Donn M. Silberman**, Optics Institute of Southern California (United States); **Caitriona Tyndall**, Tyndall National Institute (Ireland); **Perla Marlene Viera-González**, Univ. Autónoma de Nuevo León (Mexico); **María Viñas Peña**, Instituto de Óptica "Daza de Valdés" (Spain); **Linhui Yu**, Apple Inc. (United States); **María J. Yzuel**, Univ. Autònoma de Barcelona (Spain)

The optics industry has seen many advances in technology and applications. Continued innovation and discovery is dependent on a stream of new researchers, engineers and technicians educated in optics. The optics community needs to play a role in understanding how these new knowledge workers are trained. As individuals, we can contribute to this process by sharing our passion for science with students of all ages.

Optics Education and Outreach brings to the optical community a forum to discuss, learn, and network about trends in education and enrichment. The conference is crafted to convey to the community a snapshot of the current state of primary and secondary education in the field of optics. It also brings together individuals working outside the formal educational community who inspire youth to pursue the study of science and optics.

The conference recognizes the roles of formal and informal education. Formal education comprises optics education at universities, colleges, community colleges, through accreditation, lifelong learning, optics in K12 curricula, assessment tools, pedagogy and didactic methodology. Informal education includes outreach activities of student chapters, optical societies, companies and individuals. Reports from all areas of formal and informal education are welcome.

This conference will invite science and technology instructors to join the conversation to share their experiences and needs.

A continued focus of this year's conference is the reporting on events associated with the ongoing International Day of Light. This annual day of celebration continues the efforts begun with the International Year of Light (IYL2015). Submissions on programs initiated or continued are encouraged.

Focus areas for paper submissions:

FORMAL EDUCATION

- assessment tools to measure learning outcomes, especially for education in informal environments
- optics education at universities and community colleges
- optics and science enrichment programs for K-12
- training in multidisciplinary environments
- research in active learning, problem-based learning and pedagogy
- AI tools and techniques for optics and photonics education.

PUBLIC OUTREACH ACTIVITIES

- International Day of Light programs encouraging youth pursuit of optics and science
- science awareness programs for general audiences, from parents to government officials
- outreach activities of student chapters, local optical societies and members
- extracurricular science activities
- exploring light in nature
- outreach collaboration between industry, academia and government.

EDUCATION AND TRAINING TAILORED TO INDUSTRY NEEDS

- programs focused on technicians training
- continuous education and training for academia and industry
- in-company training, apprenticeships and internships
- local and regional economic development through optics and photonics education and research
- progress on accreditation, standards and certification
- programs in innovation and entrepreneurship.

REGIONAL, NATIONAL, AND INTERNATIONAL PROGRAMS

- progress reports on NSF, Photonics 2020 and other governmentally funded education initiatives
- programs introducing or enhancing optics education and industry worldwide
- equity, diversity and inclusion in education
- initiatives tailored to emerging economies
- education in optics in the context of sustainable development
- tackling tomorrow's challenges in optics and photonics education.

The conference proceedings for Optics Education and Outreach VIII will be open access.

Present your research at SPIE Optics + Photonics

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	7 February 2024
Registration opens	April 2024
Authors notified and program posts online	29 April 2024
Submission system opens for manuscripts and poster PDFs*	17 June 2024
Poster PDFs due for spie.org preview and publication	24 July 2024
Manuscripts due	31 July 2024
Advance upload deadline for oral presentation slides**	16 August 2024

*Contact author or speaker must register prior to uploading

**After this date slides must be uploaded onsite at Speaker Check-In

What you will need to submit

- 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 program (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/op301call
- 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

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 program during and immediately after the event. Each poster must have a unique presenter; one person may not present more than one poster per session
- 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 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

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- Only manuscripts, presentations, and posters presented at the conference and received according to publication guidelines and due dates will be published in the Proceedings of SPIE in the SPIE Digital Library
- Manuscripts, presentations, and posters will be officially published after the event in the SPIE Digital Library
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- More publication information available on SPIDigitalLibrary.org

Contact information

For questions about your presentation, submitting an abstract, or the meeting, contact your [Conference Program Coordinator](#).

OPTICAL ENGINEERING + APPLICATIONS 2024 PROGRAM TRACK CHAIRS

Optical Design

José Sasián, Wyant College of Optical Sciences (USA)

Optical Alignment, Testing, and Fabrication

H. Philip Stahl, NASA Marshall Space Flight Ctr. (USA)

Signal, Image, and Data Processing

Khan Iftekharuddin, Old Dominion Univ. (USA)

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Ralph James, Savannah River National Lab. (USA)

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