



Optifab 2021 (OFB21)

Conference Chairs: **Jessica DeGroot Nelson**, Optimax Systems, Inc. (United States); **Blair L. Unger**, N2 Imaging Systems, LLC (United States)

Program Committee: **Jay Anzellotti**, IDEX Life Science Optics (United States); **Thomas Battley**, New York Photonics Industry Association (United States); **Danielle Bechtold**, OptiPro Systems, LLC (United States); **Nicholas Bilis**, Ohara Corp. (United States); **Rebecca Wilson Borrelli**, Harris Corp. (United States); **Matthew R. Brophy**, Optimax Systems, Inc. (United States); **Christopher T. Cotton**, ASE Sailing Inc. (United States); **Johnathan Davis**, QED Technologies, Inc. (United States); **John P. Deegan**, Rochester Precision Optics, LLC (United States); **Peter J. de Groot**, Zygo Corporation (United States); **Dan Gauch**, Schneider Optical Machines Inc. (United States); **Paul Harmon**, Vadient Optics/Nanovox (United States); **Heidi Hofke**, OptoTech Optical Machinery Inc. (United States); **Todd Jaeger**, Coherent, Inc. (United States); **Jay Kumler**, JENOPTIK Optical Systems, LLC (United States); **Justin J. Mahanna**, Universal Photonics Inc. (United States); **Michael A. Marcus**, Lumetrics, Inc. (United States); **John J. Nemechek**, Metrology Concepts LLC (United States); **Matthias Pfaff**, OptoTech Optikmaschinen GmbH (Germany); **Steve Sokach**, SCHOTT North America, Inc. (United States); **Erik Stover**, TRIOPTICS USA (United States); **Kirk J. Warden**, LaCroix Precision Optics (United States)

OPTIFAB INNOVATORS

We are seeking technical papers, new commercial technology presentations and posters in the following topics:

2021 FOCUS TOPICS

- Automated manufacturing – Robotic assisted manufacturing, computer integrated manufacturing (CIM) and software for the optical fabrication industry
- High-volume and high-precision optics manufacturing – Injection molding, glass molding and lithographic processes

NEW ADVANCEMENTS IN FOUNDATIONAL OPTIFAB TOPICS:

- **Materials and material sciences**—optical glasses, polymers, crystals, infrared materials, ultraviolet materials, optical mold insert materials for glass or polymer molding, and optical adhesives
- **Grinding, polishing, and new methods of surface finishing**—loose and bound abrasive, CNC generation, diamond turning, ion figuring, laser polishing water-jet cutting and removal processes, laser processing, sub-aperture lap polishing and mid-spatial frequency smoothing
- **Process science**—materials, abrasives, coolants, tooling, for grinding and polishing that are selected for cost reduction and flow optimization
- **Molding**—injection molding, glass molding, tool design, mold materials,
- **Design for manufacturing**—optical design considerations for manufacturability including, but not limited to, material choice, error budgets, tolerances, optical standards (ISO 10110), mounting, assembly, and testing
- **Metrology**—interferometry, profilometry, MTF measurement, ellipsometry, scatterometry, visual inspection equipment, surface/subsurface metrology and use of alignment fiducials in measurement, manufacturing and assembly
- **Cleaning and Contamination**—cleaning and inspection techniques, packaging, surface contamination

- **Functional coating technology**—all types of optical coatings on glass, metal, plastics and crystalline materials
- **Opto-mechanical design**—assembly, including in-line alignment/metrology, interactivity and data interfaces between optical design programs, mechanical design programs, fabrication equipment and metrology instrumentation
- **Next generation optical fabrication workforce**—Technician training, apprenticeship programs and outreach programs

INDUSTRY

Present your product breakthroughs

OptiFab 2021 will also feature commercial presentations from the leading optical companies in the following areas:

- New developments in optical materials
- New developments in freeform surface design, fabrication, and measurement
- Advanced optical fabrication equipment
- Coating equipment
- Metrology equipment (phase measuring, image quality measuring and surface measuring)
- Current events impacting the field of optical fabrication

Companies will be highlighting their latest developments in these technology areas—this is the best opportunity in 2021 to see presentations on the newest products. Companies interested in presenting their products must submit an abstract and final summary of the commercial presentation by the abstract due date to be considered.

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SUBMISSION GUIDELINES

Present your research at SPIE OPTIFAB

Follow these instructions to develop a successful abstract and accompanying manuscript for the conference and for publication in the Proceedings of SPIE in the SPIE Digital Library.

How to submit an abstract

- Browse the conference topics online: by clicking on the buttons below to see list of online conferences under each area, or view the Call PDF.
- Choose one conference that most closely matches the topics of your abstract. Important: each abstract may be submitted to one conference only.
- Click "Submit an Abstract" from within that online conference. You'll be prompted to sign in to your spie.org account to complete the submission wizard.

What you will need to submit

A completed electronic submission is due 7 June 2021 and should include the following:

- Title
- Author information
- 250-word abstract for technical review
- 100-word summary for the program
- Keywords used in search for your paper (optional)
- Your decision on publishing your presentation recording to the SPIE Digital Library
- Some conferences may indicate additional requirements in the Call for Papers
Note: Only original material should be submitted. Papers with no new research/development content, and papers with proprietary restrictions will not be accepted for presentation.

Submission agreement

Presenting authors, including keynote, invited, oral, and poster presenters, agree to the following conditions by submitting an abstract. An author or coauthor will

- Register and attend the meeting.
- Present as scheduled.
- Publish a 4-page minimum in Proceedings of SPIE in 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.

Important dates

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| Abstracts due | 7 June 2021 |
| Acceptance Notification sent to Contact Author | 5 July 2021 |
| Manuscripts due | 28 September 2021 |

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 content in the SPIE Digital Library

- 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.
- Authors must be authorized to transfer copyright of the manuscript to SPIE, or they must provide a suitable publication license.
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- Oral presentations are recorded, and the slides are synced with the presenter's audio. Only those presentations with author permission will be published in the SPIE Digital Library.
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- More publication information available on the SPIE Digital Library.

Contact information

For questions about your presentation, submitting an abstract post-deadline, or the meeting, contact the Program Coordinator (listed in your [SPIE.org account](https://www.spie.org))

CONFERENCE CHAIRS



Jessica DeGroot Nelson,
Optimax (USA)



Blair Unger
N2 Imaging Systems, LLC.
(USA)

PROGRAM COMMITTEE

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