Strong Showing for Imaging and Sensing Congresses

The annual co-located Optica Imaging and Applied Optics Congress and Optical Sensors and Sensing Congress were held from 11 to 15 July in Vancouver, Canada. The congresses featured nine topical meetings, special sessions, a combined exhibit and four plenary talks. The meetings were well attended, with more than 600 attendees in person and online. One highlight was a room where attendees could view the first images from the James Webb Space Telescope, which came out that same week. Coincidently, Imaging Congress plenary speaker Scott Acton had worked on the telescope, a pioneer in the field of III–V compound semiconductors. Now supported by Osram GmbH, the Welker Award recognizes outstanding research in the area of III–V compound semiconductors.

Chang-Hasnain Wins Welker Award

Congratulations to 2021 Optica President Connie Chang-Hasnain, who has been awarded the 2022 Welker Award. Chang-Hasnain was honored for “pioneering contributions to VCSEL photonics, nanophotonics and high contrast metastructures for optical communications and optical sensing.” Siemens AG established the Welker Award in 1976 to honor Heinrich Welker, a pioneer in the field of III–V compound semiconductors.

In Memoriam: Rasheed Azzam, 1945–2022

Rasheed Azzam, an Optica Fellow, a former topical editor of the Journal of the Optical Society of America and Applied Optics and a former member of the Optica Publications Council, passed away 17 February, 2022. He was 76.

An expert on polarized light, Azzam achieved international recognition for his seminal work on ellipsometry, a nondestructive optical technique to determine properties of materials, thin films, interfaces and surfaces that is indispensable in semiconductor technology. His book Ellipsometry and Polarized Light is cited more than 10,000 times and is translated into several languages.

Azzam was one of the first Distinguished Professors at the University of New Orleans, USA, having taught for 41 years in the electrical engineering department before retiring in 2020. He was a Fulbright Scholar, a visiting professor at the Université de Provence in France, and a professor of physics at the American University in Cairo, Egypt. Recognitions include the 2005 G.G. Stokes Award from SPIE, the 1993 Photonics Circle of Excellence Award, a 1993 R&D 100 Award, a 1988 Outstanding American Inventor Award and Fellow status in Optica and SPIE.

Azzam was a memorable individual, an outstanding teacher who was always ready with a smile and encouraging words. He is also remembered for his integrity and penetrating insight. He is survived by his wife of 47 years, daughter, five sons and six grandchildren.

D.E. Aspnes, North Carolina State University, USA, and John Woollam, J. A. Woollam, Inc., Lincoln, NE, USA

Optica Fellow Stories

2022 Fellow Ryohei Urata believes that finding good mentors throughout your career and consistently putting in the work lead to a solid foundation for success. He shares this important advice with young professionals and students: “Don’t be afraid, always challenge yourself to try something outside of your comfort zone.” Learn more about Urata and other Optica Fellows at optica.org/fellowprofiles.
Optica Women Scholars

The Optica Foundation has recognized the inaugural class of Optica Women Scholars. This program provides visibility, community and resources for women in optics and photonics via financial support, professional development and establishment of a global network as they enter the field. The scholarship is awarded based on need, academic performance and demonstrated potential.

Launched in January 2022, the program garnered more than 160 applications from undergraduate and master’s students in 36 countries. The selection process was highly competitive, given the exceptional pool of applications. The outstanding scholars were selected to receive a US$10,000 scholarship to reduce financial hurdles and barriers, allowing them to focus on their academic experience.

“When I came up in the world of optics, women peers and role models were rare,” said selection committee member Janet Fender, the 1997 president of OSA (now Optica). “These scholars will be peers to each other and mentors to the generation coming next.” To read about the program, visit optica.org/womenscholars.

In Memoriam:
Richard F. Weeks, 1932–2022

Richard F. Weeks died in Grinnell, IA, USA, on 11 July, 2022. During a long career, Weeks contributed to the Apollo space program and worked with early lasers. At Polaroid Corporation, he headed the team that designed the optics for the iconic Polaroid SX-70, the world’s first folding single-lens reflex camera. For this, he and a colleague earned the Richardson Medal from OSA (now Optica) in 1980 for distinguished contributions to applied optics (he was also an Optica Fellow). Later, NASA asked him to chair a blue-ribbon panel of scientists and engineers charged with overseeing the metrology in fabricating the optics of the Chandra X-ray Observatory.

Weeks was curious, independent, ingenious and relentlessly enthusiastic—“all sail and no anchor,” according to his high school yearbook. He was a talented inventor, photographer, woodworker, boat builder, house restorer and self-taught jack-of-many-trades.

Weeks is survived by his wife, son, daughter and many grandchildren and great-grandchildren.

—Dan Weeks, Des Moines, IA, USA

Siegman School Breaks Records

The 2022 Siegman International School on Lasers was held from 25 June to 2 July at the University of Warsaw, Chęciny, Poland. The week-long program provides students in-depth learning about lasers and their applications from internationally recognized academic and industry leaders.

The 2022 school had a record-breaking number of attendees at 105 people—40% of them women—and representation from 32 countries. The program included speakers, networking, cultural experiences and opportunities to socialize with peers. In addition to research presentations and a series of lectures, attendees enjoyed fun activities, from sightseeing to a pierogi workshop and silent disco party.
Congratulations, Congressional Fellows

Optica and two partner societies have named Sindhu Nathan and Clara Tibbetts the 2022–23 Congressional Science and Engineering Fellows. Nathan will serve as the 2022–23 Optica/MRS Congressional Fellow, and Tibbetts has been named the 2022–23 Arthur H. Guenther Congressional Fellow, co-sponsored by Optica and SPIE.

Each Fellow will serve a one-year term in Washington, DC, USA, as a special legislative assistant for a member of the US Congress or as a staff member for a congressional committee. The Fellowship allows the two recipients to lend their technical and scientific backgrounds to federal policymaking and gain firsthand experience in the policymaking process.

Jannick Rolland on Freeform Optics

On 12 July, Optica hosted its first “Light Conversations” webinar, which had more than 100 attendees. Optica Associate Editor Qiwen Zhan interviewed Optica Fellow and Director of the Center for Freeform Optics (CeFO) Jannick Rolland about her career and research area, freeform optics for imaging, which is also the topic of her recent mini-review in the journal.

In addition to the design, fabrication and metrology of freeform optics and her experience writing and publishing a mini-review in Optica, Rolland spoke about the challenges she has faced. She advised attendees on the importance of collaboration and making time to write and communicate one’s results. She also told them that stubbornly following one’s instincts in the face of discouragement is sometimes the only way to carve a new path.

From 29 to 30 June at Optica’s headquarters, Optica hosted CeFO’s Industry Advisory Board (IAB) Meeting for the Industry/University Cooperative Research Centers program of the US National Science Foundation. Led by Rolland and Optica Fellow Thomas Suleski, site director of CeFO at the University of North Carolina at Charlotte, USA, participants—including students, academic faculty and industry and government members—attended presentations that covered the center’s various projects, followed by a reception, a poster session and additional events. (Fun fact: CeFO is a byproduct of “Freeform Optical Surfaces,” Optica’s first-ever incubator meeting back in 2011.)
Optica Events

Many Optica events will be presented in a hybrid format, a combination of in-person and virtual components. Check event websites to confirm presentation format.

Virtual Industry Meeting:
New Ultrafast Laser Applications
27 September 2022
optica.org/Industry

Frontiers in Optics + Laser Science
16 – 20 October 2022
Rochester, NY, USA
FrontiersInOptics.org

Virtual Industry Meeting:
LIDAR 2.0 Miniaturization
25 October 2022
optica.org/Industry

Co-Packaged vs. Pluggable Optics
Industry Summit at DuPont Silicon Valley Tech & Innovation Center
26 – 27 October 2022
Sunnyvale, CA, USA
optica.org/Summit_at_DuPont

Quantum Industry Summit at iXblue
08 – 09 November 2022
Saint-Germain-en-Laye, France
optica.org/Summit_at_iXblue

Virtual Industry Meeting:
Automotive Lighting
22 November 2022
optica.org/Industry

Optica – Laser Congress and Exhibition
11 – 15 December 2022
Barcelona, Spain
optica.org/LaserOPC

Virtual Industry Meeting:
Photonics for Medical Devices
17 January 2023
optica.org/Industry

OFC Conference and Exhibition
Co-Sponsored by IEEE Communications Society, IEEE Photonics Society and Optica
05 – 09 March 2023
San Diego, CA, USA
OFCConference.org

CLEO Conference and Exhibition
Co-Sponsored by APS-DLS, IEEE Photonics Society and Optica
07 – 12 May 2023
San Jose, CA, USA
CLEOConferrence.org

Thank You, Volunteers
Thank you to the chairs, subcommittee members and theme organizers of Frontiers in Optics, the Optica Annual Meeting.

Chairs: T.-C. (Ting-Chung) Poon, Virginia Tech, USA; Turan Erdogan, Plymouth Grating Laboratory, Inc., USA.

Subcommittees: FiO 1: Fabrication, Design and Instrumentation: Yuzuru Takashima, University of Arizona, USA; FiO 2: Optical Interactions: Andrew Forbes, University of the Witwatersrand, South Africa; FiO 3: Quantum Electronics: Jason Orcutt, IBM, USA; FiO 4: Fiber Optics and Optical Communications: Alexey Turukhin, Cisco Systems, Inc., USA; FiO 5: Integrated Devices for Computing, Sensing and Other Applications: Linjie Zhou, Shanghai Jiao Tong University, China; FiO 6: Optics in Biology, Medicine, Vision and Color: Ireneusz Grulkowski, Nicolaus Copernicus University, Poland; FiO 7: Information Acquisition, Processing and Display: Yaping Zhang, Kunming University of Science and Technology, China.

Theme Organizers: Machine Learning: Aydogan Ozcan, University of California, Los Angeles, USA; Lei Tian, Boston University, USA; Laura Waller, University of California, Berkeley, USA.

Virtual Reality and Augmented Vision: Douglas Lanman, Facebook Reality Labs, USA; Kaan Aksit, University College London, UK.