

PHOTONICS WEST SHOW DAILY

'I spy...
busy booths
at Moscone'



Credit: Joey Cobbs.



Credit: SPIE.

WANTED: Optics and Photonics Technicians

AmeriCOM proposes a solution to address the growing need for technicians

As the expansiveness of Photonics West shows, the optics and photonics industry is booming. Photonics is enabling an impressive and growing number of applications and industries. As this technology advances, the demand for skilled technicians in the fields of optics and photonics is also increasing. Optics and photonics technicians are responsible for designing, assembling, and testing products that use light-based technologies. These products include optical components such as lenses, mirrors, and prisms and photonic components such as lasers and detectors — many of the products seen on the exhibit floor this week.

This demand for technicians and the related shortages will be addressed at a panel discussion today hosted by [AmeriCOM](https://www.americom.org) — [the American Center for Optics Manufacturing](https://www.americom.org). AmeriCOM is working with

optics manufacturing companies, community partners, and academic institutions to create regional ecosystems as part of a Workforce Development Initiative to identify and train new technicians.

“Our goal is to increase the capacity and quality of skilled optics technicians by a factor of 16 — from less than 50 per year to more than 800 per year by 2025,” says panelist and AmeriCOM’s National Marketing and Workforce Development Operations Director, Josanne DeNatale.

In hosting the panel, AmeriCOM aims to show the impact a coordinated partnership between industry and academia can have on increasing the number of people entering the field. Hopefully, recruiting more companies to get involved in the effort; as DeNatale notes, “companies need to be our most vocal ambassadors for the field of optics, a field largely unknown to

the general public. Other ways to support this effort include advising local colleges on optics curricula, encouraging experienced professionals to serve as adjunct professors, participating in apprenticeship programs, or offering shadow days or tours of their facilities to students interested in optics.”

Partnering with academia is an essential part of AmeriCOM’s mission as fellow panelist Dr. Amanda Meier of Front Range Community College (Colorado) confirms, “Our Optics Technology program must stay connected with industry partners and AmeriCOM to provide relevant skills training for optics technicians on state-of-the-art equipment, in addition to helping market our program and career options to fill the optics technician pipeline.” As the Program Director and Faculty in Front Range’s Optics Technology Program, Meier has seen firsthand how acute the need for technicians is. Since joining the program in 2020, she knows of only one student who completed the program not finding a job — and that was primarily due to citizenship requirements by the employers in the local area.

All the way across the United States from Front Range Community College, employers in New York are seeing the same demand for technicians. Director of Technology Mike Hyman says Optimax is looking to their local community colleges, trade schools, and traditional recruitment efforts but has also benefited from apprenticeship programs offered by AmeriCOM and others. He puts the number of technicians hired over the past three years over 200, making up a large part of their growing workforce. Hyman will be a participant on today’s panel and will present on their strategic partnership with AmeriCOM, including as a technical collaborator with AmeriCOM’s technology and development group. “This helps us communicate what skill sets we think are needed in the future,” says Hyman. “These collaborations address our needs now and ensure there is alignment for our needs in the future.”

SPIE is also working to help address this growing need with scholarships for students pursuing technician certificates or degrees. In addition, they are also hosting educational materials in partnership with OP-TEC and others, promoting the field and jobs through web advertisements, and creating marketing collateral for institutions or companies to use in their recruitment efforts.

With 1300 exhibiting companies at Photonics West all working to develop the next great product, our growing industry will need to come together and collaborate to find solutions to this need, and AmeriCOM hopes to be a catalyst to this collaboration. DeNatale notes, “For every optics engineer focused on innovation, we need ten optics technicians to bring that innovation to market.”

And Hyman sees the benefit of having someone help form the collaborations, “other optics manufacturing companies should consider working with AmeriCOM to help leverage resources within their geographic regions. In areas where resources are not available, AmeriCOM can help those companies with guidance and strategic partnerships to help bridge gaps.”

Business Development Manager at Thorlabs, Navid Entezarian, agrees, “AmeriCOM is the catalyst that can bring public and private sectors together to achieve something greater than the sum of their parts. They’ve formulated the many steps required to set up a new optics training lab in their Playbook, which I recommend reading for anyone contemplating getting involved.”

Like many of the scientists and engineers in attendance this week, AmeriCOM is trying to solve a complex problem and is looking for passionate collaborators and industry partners at Photonics West. They are tackling a big problem, but the optics and photonics industry has repeatedly proven capable of meeting challenging targets and AmeriCOM and its partners are not backing down.

KEVIN PROBASCO

ATTEND TO LEARN MORE

AmeriCOM Panel: Where Have All the Technicians Gone? How Optics Ecosystems Are Bringing Them Back

February 1, 2023

2:45 PM - 3:45 PM

Moscone Center, Expo Stage, Hall DE
(Exhibit Level)



Credit: SPIE.



Credit: SPIE.