



## NATIONAL PHOTONICS INITIATIVE URGES EMPHASIS ON EDUCATION AND WORKFORCE DEVELOPMENT

### EXPANDED OPPORTUNITIES REQUIRE EXPANDED WORKFORCE

Our nation's ability to fully optimize the growth opportunities presented by optics and photonics – the science and application of light – depends upon the preparedness of the American workforce in the physical sciences and engineering. The development of photonics technologies could lead to additional defense and commercial employment opportunities if there is a workforce ready to take advantage of them.

According to a 2012 study by OP-TEC, the National Center for Optics and Photonics Education, only 300 optics and photonics technicians graduate annually in the United States. At the same time, the optics and photonics industry is growing at a pace that demands at least three times as many technicians to sustain that growth.

**The National Photonics Initiative (NPI) urges a continued emphasis on private and federal investment to establish and fuel partnerships in optics and photonics education training.**

Examples of programs with current federal investment in workforce training in the sciences include:

- Advanced Technological Education (ATE) program, Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM), and Cyber Corps within the National Science Foundation (NSF);
- Community College Internship (CCI) program within the Department of Energy; and
- Manufacturing USA, a public-private partnership that promotes American manufacturing via innovation, collaboration and education.

Programs like these create a pipeline of qualified optics and photonics technical students to help advance the U.S. industry. Former members of the military present an excellent potential pool of technicians that can enter the optics and photonics workforce. The federal government should prioritize the retention and training of these individuals to keep talent and technology here in the United States.

### ABOUT THE NPI

The National Photonics Initiative (NPI) is a collaborative alliance among industry, academia and government to raise awareness of photonics and the impact of photonics on our everyday lives; increase cooperation and coordination among U.S. industry, government and academia to advance photonics-driven fields; and drive U.S. funding and investment in areas of photonics critical to maintaining U.S. economic competitiveness and national security. The initiative is being led by top scientific societies, including the American Physical Society (APS), the IEEE Photonics Society, the Laser Institute of America (LIA), The Optical Society (OSA) and SPIE, the International Society for Optics and Photonics.

For more information, visit [www.lightourfuture.org](http://www.lightourfuture.org) or contact Emily Pappas at 231.357.6330 or Krisinda Plenkovich at 360.483.8786.