



AIM Photonics, White House Meetings and Washington Fly-in Top NPI's Summer Agenda

It's been an exciting and eventful summer for the National Photonics Initiative (NPI). We were honored to witness history as Vice President Joe Biden awarded the country's first photonics Institute for Manufacturing Innovation (IMI) to the New York-based consortium led by SUNY Polytechnic – a milestone the NPI recently celebrated as part of National Manufacturing Day. The NPI also submitted proposed legislation and comments to members of the Senate Commerce Committee in preparation for America COMPETES Reauthorization, and NPI Steering Committee Chair Alan Willner lead a task force to prepare recommendations for the administration on photonic network architectures needed for optimal performance within the National Strategic Computing Initiative. Finally, members of the photonics community and NPI steering committee advocated for photonics on Capitol Hill during a September fly-in and reception commemorating the International Year of Light (IYL).

SUNY Polytechnic Awarded Nation's First Photonics IMI

On July 27, 2015, Vice President Joe Biden [announced](#) that a New York-based consortium led by SUNY Polytechnic was the winning location for the country's first photonics IMI – now known as the American Institute for Manufacturing Integrated Photonics (AIM Photonics). More than \$110 million federal investment and \$500 million in non-federal funds make AIM Photonics the largest investment to date in President Barack Obama's National Network of Manufacturing Institutes (NNMI). AIM Photonics is the sixth IMI and the fourth to be led by the Department of Defense (DOD).

A year and half before AIM Photonics was announced, the NPI submitted a white paper to the White House Office of Science and Technology Policy (OSTP) recommending a photonics prototyping and advanced manufacturing facility. "Strategic Request: A National Photonics Prototyping and Advanced Manufacturing Facility to Ensure Economic Growth and National Security" opened the door to conversations between the NPI and DOD, and aided in the national push for a photonics IMI.

During the DOD selection process, the NPI coordinated responses from dozens of experts within the national photonics community. While the NPI did not endorse a specific proposal, it is strongly committed to supporting the winning New York consortium through the platforms, programs and resources of its top scientific societies. On behalf of AIM Photonics, the NPI will serve as an interface with Capitol Hill and government agencies, and promote AIM Photonics through public outreach, educational and media initiatives.



On October 2, the NPI celebrated National Manufacturing Day and the one year anniversary of President Obama's announcement to create a photonics IMI. As part of the celebration, NPI supporter [Optikos Corporation hosted Rep. Seth Moulton \(D-MA\)](#) at their headquarters in Wakefield, Mass. to see first-hand how a local high tech firm uses optics and photonics to develop and manufacture products that can be found in homes, laboratories and manufacturing facilities around the world.



NPI Provides Administration with Recommendations for High Performance Computing (HPC)

On October 20 and 21, NPI Steering Committee Chairman Alan Willner will participate in a White House Workshop on the National Strategic Computing Initiative (NSCI). Willner's invitation to attend the workshop follows the submission of a white paper by the NPI to members of the White House OSTP HPC team outlining recommendations for targeted private and public sector investment in photonic network architectures to ensure a strategic advantage for HPC installations in the United States. In May, Willner met with OSTP to discuss next generation HPC policy. Following that discussion, Willner worked with a team of industry and academic experts to draft the white paper and recommendations.

Supporting Photonics in America COMPETES Reauthorization

One of the NPI's key legislative priorities, the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education and Science Act, also known as the America COMPETES Act, invests in innovation through research and development (R&D) and improves US competitiveness in response to widespread concern that the United States was falling behind its international competitors in science and technology.

The NPI urges the US Senate to introduce America COMPETES reauthorization to help bolster national competitiveness in science and technology in the years to come. Further, the NPI requests the Senate bill include optics and photonics language to encourage partnerships between the federal government, industry and academia.

To convey our point, the NPI responded to a request by Senate Commerce Committee members Sens. Cory Gardner (R-CO) and Gary Peters (D-MI) who were seeking input from the US science and research community and interested third parties on federal R&D policy priorities as part of efforts to reauthorize the America COMPETES Act. The NPI submitted "[Optics and Photonics: Driving US Competitiveness through Investment in Public-Private Partnerships and Workforce Development](#)" to the committee on August 27. The paper includes recommended legislative language that promotes opportunities for private and federal investments in optics and photonics, and strengthens the future of US scientific innovation and competitiveness.

Advocating for Photonics on Capitol Hill

Members of the photonics community and NPI Steering Committee converged in Washington September 9-12 to advocate for photonics in key congressional offices and attend a reception in celebration of IYL 2015 hosted by the National Science Foundation (NSF) in conjunction with the American Institute of Physics, American Physical Society, IEEE Photonics Society, National Academy of Sciences, The Optical Society, and SPIE, the international society for optics and photonics.



Over the course of two days on Capitol Hill, 13 individuals visited 36 congressional offices, including the offices of Senate Health, Education, Labor and Pensions Committee Chairman Sen. Lamar Alexander (R-TN), Senate Commerce Committee Ranking Member Sen. Bill Nelson (D-FL) and House Education and Workforce Committee Chairman John Kline (R-MN). Key messages discussed in congressional meetings included:

- **Reauthorize the America COMPETES Act in the Senate**, which invests in innovation through research and development and improves US competitiveness.
- **Reauthorize the Higher Education Act** to include private-public optics and photonics vocational objectives within existing US Department of Education community college initiatives, such as Title III Part A.
- **Overhaul US export controls to save American jobs through the Export Control Reform (ECR) initiative.** Current guidelines are vague, inconsistent and outdated. However, the current proposal for Category XII of the US Munitions List does not uphold the principals of ECR.

The NPI will continue to work with our elected officials in Washington to push for the inclusion of photonics and photonics-related language and funding in current and upcoming legislation.

Contact Us

The NPI is interested in hearing from you. Are you interested in joining our efforts? Do you have questions? Need additional information? Have questions? Need additional information? Please contact Laura Kolton at (202) 416 1499 or lkolto@osa.org, or Krisinda Plenkovich at (360) 685 5518 or krisindap@spie.org.

