August 15, 2016

Dear members of the Hajim School community:

This year marks the 100th anniversary of the founding of the Optical Society of America, reminding us that the histories of Rochester, OSA, and the Institute of Optics have been closely intertwined. When World War I demonstrated our over-reliance on German optical instruments and expertise, members of the growing optical industry here formed what they hoped would be the first local section of a national society to promote optics in this country. This led to OSA's formation the following year. OSA founders were part of the advisory committee that led to the Institute's creation as our nation's first school of optics in 1929. Appropriately, OSA will return to Rochester this October — for the 22nd time — to hold its annual meeting.

An exhibit opening today in Rare Books and Special Collections at Rush Rhees Library pays homage to this remarkable history, inviting viewers to learn about the achievements and milestones of the optical profession and Rochester's role in it. Carlos Stroud, professor of optics, and editor of a fine history of the Institute, A Jewel in the Crown, worked with library curators in preparing this exhibit. Further evidence of the ongoing ties between the Institute and OSA can be seen in the society's OSA Century of Optics commemorative book, which includes chapters from Carlos and other Institute faculty and alumni, including Govind Agrawal, Joseph Eberly, Jay Eastman, James Wyant, Wayne Knox and the late Kevin Thompson. Govind and Carlos served on the book committee, Joseph and Stephen Fantone on the book advisory group.

Hajim School researchers are in the news again. Congratulations to Qiang Lin, assistant professor of electrical and computer engineering, who is leading a $2 million, NSF-funded project to develop chip-scale integrated silicon carbide quantum photonic processors that could interface seamlessly with fiber-optic links for the distribution of quantum information. He has assembled a veritable "dream team" of collaborators including John Howell, professor of physics and optics; David Awschalom of the University of Chicago; Case Western Reserve University’s Philip Feng, and MIT’s Jurgen Michel for this exciting project, which could have significant applications for secure communication, metrology, sensing, and advanced computing. This could also provide a future pathway for the AIM Photonics initiative. Read more here.

Congratulations as well to Kang Liu, a PhD student in optics, and Xi-Cheng Zhang, the M. Parker Givens Professor of Optics and director of the Institute of Optics, who collaborated with Tzortzakis Stelios’ group in Greece on an ingenious way to extend the "reach" of terahertz waves with an unconventional laser beam, called a ring-Airy beam. This, too, could have a significant impact. “It makes possible the remote sensing of chemical, biological, and explosive materials from a standoff distance,” Xi-Cheng explains, making this a promising tool for Homeland Security and law enforcement agencies. Read more here.

These are two very good examples of how Hajim School research is helping to make the world ever better.
Have a great week!

Your dean,
Wendi Heinzelman