

# —President's Message

*“The skills you acquire can always be effectively redeployed. You will look back on setbacks and be grateful for the catalyst that came not a moment too soon.”*

—Thomas Freston, U.S. business executive

**W**hat technical area will you be involved with in five or ten years? This question is a staple of strategic career thinking and an important issue to ponder at any stage.

Having been in the optics community and an OSA member for 30 years, I have seen several cycles of ups and downs in our “industry.” However, this is too narrow a view since we don’t really have a single industry. In optics and photonics, people use diverse skills from different areas to work in multiple application markets. Ours is the prototypical multidisciplinary field.

Any of us can describe ourselves narrowly, but this is, in truth, selling ourselves short. Although my workplace at the University of Southern California was named the Optical Communications Lab 25 years ago, we have engaged in many technologies that have helped students gain broader employment. In their current positions, my former students use their core skills in many different technical areas—such as beam propagation, polarization, fiber optics, free-space systems, sensors, switching, networking, signal processing, imaging, amplifiers, high-speed measurements, waveguides, millimeter waves—to advance many different applications.

This is one of our greatest strengths. It gives us the opportunity to periodically embrace new career directions. And, as with diversifying a stock portfolio to mitigate financial risk, it offers a built-in mechanism for mitigating career risk.

After 30 years, whenever I saw a downturn in some part of the optics industry, there was always another part that was growing. Optics and photonics critically enable so many different commercial sectors that the whole economy would have to be sinking in order for us to have nowhere to turn.

After the bubble-and-bust of the early 2000s, in which optics took center stage, people of all ages felt anxious about the future. In a panel discussion at an OSA meeting about the job market, Steve Fantone, CEO of Optikos, pointed out something simple yet profound. Our skill set, he said, can be applied to many different areas, so people should look for opportunities in the broader optics context—and there were plenty of such opportunities. Everyone on the panel readily agreed.

About ten years ago at an OSA meeting in Rochester, New York, I asked Steve Chu, Nobel Laureate and former U.S. Secretary of Energy, for some advice to a mid-career person. He said that I should learn a new field every seven years. At first, I thought this was too difficult—until I realized that I had done that a few times already. I had taken a broad, core skill set in optics and applied it to a “slightly” different field, picking up valuable new technical skills in the process.

So, coming back to my original question of what technical area you will be involved with in five or ten years, I can propose an answer: It probably will be related to optics, and you will draw on your years of experience in our field. As the singer Reba McEntire said, “I use all my skills that I can muster up, but the fun thing is that I find some untapped skills every once in a while.”



OSA

**“Ours is the prototypical multidisciplinary field.”**

Respectfully and warmly submitted,

*Alan Willner,  
OSA President*