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hen I joined OSA more than 30 years ago, lasers had already become a common part of scientific laboratories, and many of the fundamentals of light-matter interactions had been well developed with respect to laser radiation. We foresaw an evolution toward what we conceived as fundamental limits, such as pulses as short as a few optical cycles and the spatial control of light down to the diffraction limit.

Since then, we've witnessed countless unexpected paths that go around or beyond our perceived limitations. This special issue of OPN is full of inspiring advances that show how far we have surpassed our initial expectations of what is possible.

For example, we can now generate pulses of attosecond duration. While they don't violate what we correctly understood back then as the fundamental limit for pulse duration based on available bandwidth, they go around it by extending the spectral range to coherent X-rays. Using near-field optics, novel imaging and metamaterials, we can also routinely control light on a subwavelength scale—something that was purely the subject of Gedanken experiments in my student days.

Similarly, when I was a student, even the notion of cooling matter with a laser was considered speculative. Today laboratories around the world create and modify new quantum states of cold matter using lasers.

Technological developments have also progressed rapidly—from fiber optics to displays to biomedical optics. We can all take pride in these and other developments to which our community contributed. I look forward to more surprises to come!

As I near the end of my presidential term, I am amazed by the enormous diversity of our society. Aside from the panoply of subfields we represent, our diversity extends to career stage, geography, and whether we work in fundamental research or real-world applications. To me, this diversity is key not only to the vibrancy of OSA, but to that of our field.

I would like to thank two special groups who have made my year easy, enjoyable and fruitful. The first is the volunteer members. The Society's technical publications would not enjoy the same success without a large cast of excellent and hardworking editors, nor could OSA's meetings occur without the engagement of the community. The Society's educational and member services also rely on strong volunteer involvement.

Second, I wish to thank the members of the OSA staff, who make the Society a special organization. They are not only an unusually talented and energetic group, but they have a devotion to the society and to us—the members—that is quite remarkable. OSA's success and high standing surely rests on these indispensable individuals.



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—Tony Heinz, OSA President