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Mentorship

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As I began my career at the Environmental Research Institute of Michigan (ERIM), I was surprised and a bit intimidated when I learned that I would be sharing an office with Juris Upatnieks, who I recognized from my Fourier optics education as one of the pioneers of off-axis holography (along with Emmitt Leith at the University of Michigan). He was a recognizable name in the optics field while I was just a young engineer right out of college, so I thought it was an odd pairing. Fortunately, Juris was a true gentleman with a pleasant and easy-going demeanor, and I quickly became very comfortable in his presence. He was also a skilled experimentalist with a knack for taking ideas sketched out on paper and actually making them work in the laboratory. As the first in a long line of professional colleagues that I consider to be my mentors, he was a positive influence on my laboratory skills while others shaped my analytical, technical writing, project management, and other competencies. Ultimately, I drew a little from each to make me the professional I am today.

Mentorship is essential to the long-term health of any organization or profession, especially one rooted in science and technology. For this reason, many organizations have formal mentoring programs, and I strongly encourage senior professionals to become involved in them. On the other hand, the informal, day-to-day interaction between senior and junior professionals is just as valuable. I personally find it exciting and refreshing to work with junior scientists and engineers as they bring so much energy, enthusiasm, and innovation to the profession. In turn, I hope that they are able to draw something positive from my experiences.

One specific area where senior professionals should invest time with their younger colleagues concerns technical writing. As students in the engineering and scientific fields progress through college, technical writing is not often a primary focus of the curriculum. Even when it is, students sometimes do not make it a priority relative to their other courses. Furthermore, modern society arguably puts more value on the speed and conciseness of communication relative to the thoroughness and accuracy of it, as evidenced by the demise of in-depth reporting in the media in favor of more superficial, late-breaking news stories. I contend that this is not good for science and engineering, and appeal to those who have been well trained in the art of technical writing to pass those skills onto the next generation.

I do not recall how proficient I was at technical writing when I started my career at ERIM. I do recall, however, that my technical papers and presentations were thoroughly reviewed by my more experienced colleagues. This process was sometimes painful, but I am grateful to my mentors for the time that they invested in me. I am confident that the young professionals in your organization will feel the same.

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