

GWIS Travel Report

Lisa Carlson, Spring 2008

The Society for Photo-Instrumentation Engineers (SPIE) is an organization designed to foster a collaborative approach to advancing the science and application of light. My attendance at this meeting was motivated by a desire to immerse myself in the culture and innovations of this rapidly changing field and to share recent results of my graduate research in carbon nanotube photophysics. This year's conference was held in San Diego, California on August 10–14, and was organized into oral presentations and evening poster sessions, providing many opportunities for students to interact with both peers and experts.

The talks and poster sessions that I attended spanned topics from understanding photoluminescence dynamics to challenges in the construction of nanoscale devices, and touched on advances in the large-scale production of nanomaterials for commercial applications. I enjoyed the plenary talks and attended presentations outside of my immediate field of expertise. Because my research focuses on fundamental science, this engineering conference was particularly valuable as it gave me a greater appreciation for the challenges that device engineers face when integrating new materials into consumer products, for example in the production of nanotube-based flexible electronic displays; I also gained a more realistic sense of the practicality of applications that directly link to my research. Complementing the talks were small group poster sessions, which translated to high attendance and exceptional levels of interaction. I spoke with a diverse group of students, learned about and provided feedback for their research, and exchanged contact information for future discussions and collaborations.

The most motivating part of the meeting for me was the opportunity to present my research in an oral presentation. Although it was challenging to concisely and clearly present three years of research in a twenty-minute talk, it was also exciting and rewarding to share my work with an audience of experts. Surprisingly, I enjoyed the question session after my talk and found that I was less worried about answering questions than I have been during previous conferences and presentations. Instead, I welcomed comments and public discussion of relevant issues related to my talk. I consider this development to be a significant personal and professional milestone that was reached by my participation in this conference.

In addition to technical presentations, SPIE provided a number of forums for students to interact with expert researchers in the field. For example, during a break in the session I presented in, I was able to network with scientists that I had met at the American Chemical Society meeting in April, which represents my first continued contact from a previous scientific meeting. I also attended a networking lunch where professionals discussed their backgrounds and shared experiences that led them to their current jobs. I asked the experts what they wished they knew before searching for jobs, which produced valuable insight into the interview process. I was given helpful advice for conducting job searches as well as suggestions for books that will improve my resume and guide me through interview processes. These discussions were particularly relevant as I plan to begin looking for postdoc or teaching positions this fall.

In summary, the SPIE conference was an excellent way for me to develop both academically and professionally. I valued the opportunity both to learn from other presenters and to share my research, especially as there were few student presenters in my session and in general, I was also one of only a handful of women who spoke at the meeting. I acknowledge the financial support from GWIS that made this experience possible, and recognize support from my research group and advisor, Dr. Todd Krauss.