Dr. Nicole Knight was recently recognized as one of the Division of Organic Chemistry’s Young Investigator Awardees at the Fall ACS National Meeting in San Francisco, CA. Dr. Knight is an Associate Scientist at Dow Chemical in Freeport, TX, in the Polyurethanes R&D department, where she conducts research on new materials for the coatings, adhesives, sealants, and elastomers (CASE) markets.

Initially a Biology major, Nicole discovered her love of chemistry after taking her first undergraduate organic chemistry class at Virginia Polytechnic Institute and further solidified her commitment to attend graduate school after participating in undergraduate research at University of Illinois at Chicago with Prof. Vladimir Gevorgyan the summer before her senior year. “I did it to get some experience in the lab as I would be searching for a job the next year. The mentorship I had from the graduate students and Prof. Gevorgyan and the excitement I saw in them in the lab made me realize that I wanted to make my mark as well and ultimately go to graduate school.” Nicole also attributes her career path to an early mentor, her inorganic chemistry professor at Virginia Tech, Prof. Karen Brewer. “She was an excellent advisor and taught me a great deal about physical inorganic chemistry.

Through these experiences, I realized that I enjoyed the marriage of physical and organic chemistry.” Nicole attended Michigan State University to study with Prof. Robert Maleczka, where she conducted research on the kinetics of the Stille cross-coupling reaction. Her work would open many doors to exploring the interesting behavior in the catalytic cycle of this well-known reaction. After obtaining her PhD, Nicole completed her postdoctoral training with Prof. David Nicewicz at University of North Carolina at Chapel Hill, where she studied asymmetric catalysis via photo-induced electron transfer.

When choosing her career path, Nicole notes that she had been drawn to industry, especially Dow Chemical, where she had a first-hand glimpse into Dow by participating in their Building Engineering and Science Talent at Dow symposium and through interactions with their employees while attending symposia at MSU supported by Dow. Knight recalls, “I valued their innovation and their commitment to their employees and the community.”

Married to a fellow chemist and a new mom, Dr. Knight recognizes that the work-life balance can be challenging at times, but prefers to consider it a work-life choice. “You really do have the choice. I made the choice to put my family first and work second. And now I am very happy with both. I am not completely overwhelmed with work that I cannot enjoy my family. But I am still working and having stimulating intellectual conversations and making exciting contributions to numerous projects. I love my work and I feel like it actually makes me a better mother and wife” says Dr. Knight.

Nicole’s advice to women in chemistry is to “be confident and support each other! You need to have a track record of making an impact – and then you have to be able to sell yourself.” Nicole also notes, “I think the biggest challenge is when you don’t get support from your fellow women colleagues. I think we tend to feel like there is little room for women to succeed and therefore we must compete against each other. Not only does that send the wrong message and fuels the fire, but that is likely what limits our growth potential.” So what does a successful career in chemistry look like? Nicole believes that it is “full of new and interesting challenges, your contributions are appreciated and you are excited to be at work!”