

Elizabeth Young (she/her/hers) is an Assistant Professor in the Chemistry Department at Lehigh University.

Professor Young believes that the best way for all of us to accomplish great things is with support from others who are invested in our success, and through supporting others in return. She has brought this passion into her research lab through the creation of a mentor-mentee contract that outlines both the ways she will support her students as well how she expects them to support her. She thrives in research collaborations in which she can support colleagues on the team, and expect their support in return. Prof. Young celebrates progress as being fueled by results both big and small. She views research as comprised of a series of small results that lead to larger story or a trajectory that drives the next research question. She values seeing what students “have been up to” and talking with them about their results; and she maintains regular progress meetings with collaborators to hear their updates. While others may think the only way to be successful is by focusing on chemistry all of the time, Prof. Young believes one of the most important things we can do is pursue balance in our lives and see the bigger picture. One of her favorite aspects of being a professor is the balance of teaching and research it entails. Alongside her dedication to her work, her colleagues and students see her purposefully and unapologetically create time to pursue other parts of her life like supporting her family, organizing STEM outreach trips to pre-K classrooms, playing squash, or going running. Prof. Young’s goal is to always remain open to new ideas and different ways of doing things.

Prof. Young grew up in eastern Pennsylvania. She attended Haverford College as an undergraduate where she majored in Chemistry and minored in German, while also playing intercollegiate soccer and squash. As an undergraduate researcher, she worked in with Prof. Julio de Paula on porphyrin-peptide nano-wires – during which time her love of photochemistry and spectroscopy was ignited. After completing her undergraduate studies, she spent a year abroad in Germany as a participant in the Congress-Bundestag Youth Exchange for Young Professionals. While in Germany, she learned about the German culture and language while working in the biophysical laboratory of Prof. Dr. Joachim Spatz at the University of Heidelberg. Upon returning to the U.S., she attended graduate school at the Massachusetts Institute of Technology earning a Ph.D. in Physical Chemistry. Her work in the laboratory of Prof. Daniel G. Nocera focused on photo-induced charge transfer coupled to proton motions in small-molecule donor-acceptor systems. She then spent two years as an NSF ACC-F post-doctoral fellow in the electrical engineering laboratory of Prof. Vladimir Bulovic at MIT learning about charge transfer in organic semiconductor devices.

In 2011, Prof Young began her independent career working with undergraduate students at Amherst College. She moved back to Pennsylvania in 2017 to Lehigh University where she is currently an Assistant Professor. Prof Young’s research efforts focus on understanding excited-state charge transfer processes for a range of applications, including excited-state proton-coupled electron transfer reactions in model system and photo-induced charge transfer in materials of interest for next generation photovoltaic devices.

Professor Young is the co-Founder and co-Director with Prof. Lisa Fredin of the Photochemistry Undergraduate Research Experience (PURE) at Lehigh (established 2021). PURE is a Lehigh research initiative to provide an immersive year-long research experience in photochemistry starting each summer and continuing through the following Fall and Spring semesters. By combining theory and experiment, undergraduates learn scientific computing along with the spectroscopic techniques to fully explore new photochemical materials. Since 2017, Prof Young has served on the Chemistry Women Mentorship Network (ChemWMN), Leadership Team. The goal of the ChemWMN organization is to create a national network of women in academic chemistry to provide support, encouragement and mentorship for young women considering careers in academia. In January 2020, she co-organized the 29th Winter Inter-American Photochemical Society (I-APS) Winter Conference in Sarasota, FL. and in April, 2020 she co-organized the 84th Annual Intercollegiate Student Chemists Convention (virtually) at Lehigh University. Since 2018, she has led chemistry outreach trips to local daycares in which organizes a group of graduate students to develop modules and do outreach activities aimed at getting preschool and pre-K students excited about science.