Not even a decade removed from her studies at Northwestern University, Beth Carter has firmly established her presence in the chemical engineering field. In August 2017, the American Institute of Chemical Engineers (AIChE) announced it had named Carter among the recipients of its first 35 Under 35 Award, which salutes the industry’s brightest young minds.

As a lead development specialist in the Refining Development Group at Honeywell UOP, Carter heads R&D teams cultivating novel process, equipment, and catalyst technology solutions in oil refining. According to Carter, it’s an opportunity to address real customer needs with innovative technologies, such as a new process that will replace sulfuric acid and hydrofluoric acid with an ionic liquid catalyst to bring heightened efficiency and environmental value to the current petroleum refining process.

Northwestern Engineering interviewed Carter to get more insight into her career since graduation and what the award means to her.

How did you react when you learned about the AIChE award?

I was excited. People often receive awards at the end of their careers when they have a long laundry list of accomplishments. I didn’t think that was me, but receiving the award helped me realize that I’ve had a real impact on energy technology development.

What do you most enjoy about your work at UOP?

I enjoy working with a diverse team of really smart people. Plus, UOP has the resources for tech development—pilot plant, analytical capabilities, process design, commercialization resources, and more—that allow us to bring impactful technologies to market.

Did you always have engineering on your career radar?

I decided to become an engineer largely to avoid having to do a lot of writing. I learned in my first-year Design Thinking and Communication course that wouldn’t be the case. McCormick was always consistent in educating technically competent engineers. The school also taught us how to write, present, and collaborate, all skills I’m applying regularly today.

What experiences and people at Northwestern propelled you to where you are today?

I got my job at UOP through Northwestern adjunct professor Gavin Towler. I met him my freshman year, and he helped me land an internship with UOP that summer. He showed me the possibilities of a career in chemical engineering and how it could lead to having an impact on the world.

Northwestern also gave me an opportunity to get involved in novel projects like the autonomous robot competition. Sometimes it’s hard to be a young engineer. People tend to think that the good engineers all have gray hair. That competition taught me that it’s not the gray hair, but rather the approach to problem-solving and bringing ideas to life that makes an engineer successful.

DANIEL P. SMITH