Putu Ustriyana is currently working toward her Ph.D. in Polymer Science at UA under Dr. Nita Sahai. She was working in the same laboratory to earn her master’s degree in 2016 as a Fulbright Master of Science and Technology Initiative Scholar. Scroll down to read more about Putu and her story as a student in CPSPE.

How does your major fit into your life’s plan?
Before coming to UA, I graduated from dental school in Indonesia and practiced for a year. I initially planned to continue clinical practice after graduating. Throughout my clinical years as a dental student and in my first year of practice, I realized the importance of materials science in dental treatment. Reflecting back on how I’d enjoyed previous research experiences, such as on toothpaste as a part of my undergraduate thesis, I decided I wanted to seek out an opportunity working in biomaterials. I later learned that current biomaterials development involves the application of polymeric materials. Everything came together when I was selected as a Fulbright scholar, accepted for a master’s degree, and later admitted to the Ph.D. program in polymer science at UA.

What have you learned that makes a difference to you?
What I can accomplish with hard work and perseverance. I had quite a learning curve when I started my master’s degree here. Among many students whose backgrounds seemed to better prepare them for study in the Department of Polymer Science, I needed to relearn many concepts I’d studied as an undergrad, meanwhile trying to keep up in subjects I’d never been exposed to. Without the support of wonderful professors, teaching assistants, classmates, family, and friends, I don’t know whether I could have done it. Now I’m glad to say that I “survived” the most challenging schooling period I have ever experienced.

Why did you choose The University of Akron, specifically the College of Polymer Science and Polymer Engineering?
I chose the College of Polymer Science and Polymer Engineering at The University of Akron because of the credentials of the program, professors, and research. Knowing that the college’s research centers would provide access to top-notch facilities and instruments, I did not have to hesitate.

Tell us about your experience in an internship or research project.
Working under the supervision of Dr. Nita Sahai, I’ve explored the area of biomaterials from a more fundamental perspective. For my master’s thesis, I worked on a research project aiming to identify protein compositions and roles in mineralized and non-mineralized tissues. We hope this data might potentially lend itself to understanding the processes of bone diseases and providing cues for the design of biomaterials. As this was a new area of research for the Sahai group, I had to learn through collaboration with multiple research groups in different institutions. The knowledge and skills I gathered through this project have allowed me to get involved with and collaborate in a few smaller projects with other graduate students as well as postdocs. Through this project I also decided to continue to the doctoral program here.

What are your plans after graduation?
I would like to continue to enhance my research skills for a few years as a postdoctoral scientist, preferably in dental materials-related research, before going back to Indonesia. This experience will equip me with the skills necessary to design my own research and work independently in the future.