Chao Peng is currently studying to earn his doctorate in Polymer Science under Dr. Abraham Joy. Read more about Chao and his academic journey in CPSPE.

How does your major fit into your life’s plan?  
In the future, I want to be a research scientist in industry, who can develop new materials and contribute to our life. With this aim, I chose polymer science as my major since polymer materials are used in many fields, such as aerospace, automotive, electronics, and medical devices, which can provide a variety of career options. In addition, polymer science is an inter-disciplinary subject that includes different aspect of polymers, such as chemistry, physics, and engineering, which fulfills my curiosity in a broad range of topics.

What have you learned that makes a difference to you?  
During my PhD research, I have greatly improved my learning capability and adaptability. As a PhD student, there is always a need to leave the comfort zone and learn something new. In the Joy research group, I have the opportunity to work on several inter-disciplinary projects and collaborate with people from different research backgrounds. Even though I was trained as a polymer chemist, I also learned to perform various biological experiments due to the project needs. Through such experience, I improved the ability to adapt to new environments and working styles, and I learned how to communicate effectively with people from different backgrounds.

Why did you choose The University of Akron, specifically the College of Polymer Science and Polymer Engineering?  
What attracts me to the polymer program in Akron is the well-rounded research areas and the fully equipped facilities for polymer research in CPSPE. There are remarkable faculty members and research groups in CPSPE with a wide range of interests and backgrounds. Such diversity allows me to broaden my knowledge and choose a research group that I’m interested in. My strong interest in polymer chemistry drove me to join Dr. Abraham Joy’s research group, working on functionalized polymers for antimicrobial applications.

Tell us about your experience in an internship or research project.  
Last year in the Fall semester, I was an R&D Intern at Kimberly-Clark, developing materials for flushable wet wipes with the aim of improving the dispersibility of the wipes in the sewer system. During this internship, I had the opportunity to develop polymers in an industrial setting and converted the knowledge I learned in the lab into innovative solutions to a real life problem. Through optimizing polymer composition and synthetic protocol, I developed two promising candidates that can greatly improve the dispersibility of the product. At K-C, I worked in a cross-functional team and I learned different aspect of product development as well as the importance of collaboration.

Who is your favorite professor (or staff person) and why?  
My favorite professor is my advisor Dr. Abraham Joy. Dr. Joy cares about his students, keeps in regular contact with the group, and gives his students enough freedom to try the things they are interested in. Thanks to his supervision, I improved a lot during these years. His encouragement and trust make me feel needed and give me the courage to explore, try, and learn from the mistakes, which developed my self-confidence and resilience to cope effectively with life’s many challenges.

What are your plans after graduation?  
After graduation, I would like to be a research scientist in industry and continue to work in the field of polymer materials.