



Miranda Marcus

B.S. in Welding Engineering (2005)

M.S. in Welding Engineering (2006)

Ph.D. in Polymer Engineering, University of Akron (2020)

EWI, Columbus, OH

Describe your overall duties/responsibilities as a Senior Engineer:

As a research and development consultant at EWI for polymer welding, I provide training, expertise, and prototyping services to customers in the medical, automotive, and consumer products industries, among others. I help design engineers with initial design for manufacturability and material weldability, process engineers with equipment selection, parameter development, and optimization for cycle time, and quality engineers with weld characterization, troubleshooting, and failure analysis.

Explain the skills/abilities that are required for being successful in your role:

To be a successful R&D consultant, the most important skill is communication. As a consultant, a lot of my job revolves around teaching and the transfer of information. Additionally, it is important to be self-driven, not

only to connect with new customers, but to identify and execute your own research projects to maintain cutting edge expertise.

What advice would you give to students who are considering majoring in Welding Engineering?

Take advantage of the opportunity to work at summer internships. Not only do those provide networking opportunities that could help you grow your career later, but internships also give important insight into the type of work that you want to do. There are a lot of paths open to welding engineers at various stages in the manufacturing process and in many industries. Internships are a great way to identify the right path for you.

