Describe your overall duties / responsibilities as a Materials Research Engineer:

My work focuses on the application and development of elastomeric and styrenic plastics for the automotive industry. This can range from working with suppliers during a quality assurance visit to testing and proving out a new material to apply to automobiles. As far as specific testing, on certain days I could be running a durability test for suspension parts, performing a hot to cold temperature cycle for vehicle confirmation, or developing a new test method and setup to represent vehicle market usage.

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

Communication – This is an important skill that applies to any job and quite honestly life in general. If you can’t communicate your plan nor your projects, don’t expect someone else to have a clear understanding. I routinely communicate with associates whose first language is Japanese, so clear communication is of the utmost importance in my day-to-day work life. Perseverance – The most rewarding projects never follow a smooth and easy path. You will most certainly run into setbacks and frustration when working on any new technology, unique problem, or difficult challenge. Since these are inevitable issues, the key for success is how you handle them. Positive Attitude – This not only helps you be successful but it also benefits those around you. This also helps with perseverance. Having a positive attitude helps you and those around you to be tremendously successful.

What advice would you give to students who are considering majoring in Materials Science and Engineering?

Engineering is tough. You will hear that a thousand times. You’ll spend your fair share of studying overnight, hours locked away in a lab, and the occasional not so “easy” exam. Every engineer experiences this, but you won’t be able to find the same environment that MSE provides. While I was in school, I enjoyed smaller class sizes and the tight group of 40-50 students in my graduating class. Bonding with the smaller group made the overnight studying, exams, and labs bearable. The MSE faculty are highly capable and qualified to teach almost everything about materials. Whether it is polymers, metals, electronics, or ceramics, understanding the behaviors of materials is essential for any engineering job, and The Ohio State University Materials Science & Engineering department is a perfect place to learn.