Describe your overall duties/responsibilities as a Manager - Applications Metallurgical & Development Labs:

I am the manager of our technology lab with seven associates reporting to me. I (and those in our lab) perform investigations related to failures in use/service, customer claims, quality or plant issues, development of new grades or applications, steel cleanliness evaluations, customer qualifications of new product lines or supply chains, etc. We are the technical support for Sales, Technical Service, Quality, & Manufacturing.

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

Due to the nature of our work, sufficient technical knowledge of metallurgy/materials science and strong problem solving/critical thinking skills are required to be able to perform the investigative work and meet our customers' needs/expectations. At the same time, the people/soft skills (communication, leadership, patience, compassion, empathy, etc.) are so important for working in any company, particularly if you want to go into management. But what I think has helped me the most so far in my career as a whole is my strong work ethic. If you are willing to put in the effort and try your best to do your job day in and day out, most people will help you with the parts you don’t know or aren’t as good at.

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

Do internships and try it out. See if you actually like some of the work that goes into what you are studying. And if you aren’t sure, try something else. Materials Engineers are used in over half of the different positions at my company so there are a lot of ways that you can apply your major that can also incorporate that different aspects that you enjoy. The major gives you a broad knowledge of all materials while also letting you delve deeper into some specific materials so you have a lot of flexibility in what you do after you graduate depending on what you find interesting.