



Soumya Mohan

B.S. in Metallurgy and Materials Engineering, Indian Institute of Technology Roorkee (2009)

M.S. in Welding Engineering (2014)

Ph.D. in Welding Engineering (2015)

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

I am an experimental researcher, and my research focus is extraction of crystal level elastic-plastic properties of metals and alloys using spherical nanoindentation. I collaborate with national labs and companies to conduct research on steels, titanium and aluminum alloys using indentation mechanics. One of my duties is to mentor graduate students with their research. This involves teaching them to use scanning electron microscopes and nano/microindenters, as well as aid them in develop their ideas. I also manage the experimental lab facilities.

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

To be successful in my role as a researcher, I need to find gaps in scientific knowledge and try to fill them using my scientific approach and technical expertise. Effective and frequent communication with your mentors, collaborators and team is crucial. Self-motivation and a sharp focus on your research goals is very important.

Good technical writing skills are a significant part of science and practicing writing is key.

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

The Welding department in OSU is one of the best welding programs in the US. It is a very important field for joining existing as well as advanced materials that can sustain harsh environments. A Welding engineering degree can open many avenues and job opportunities. Try to gain as many internship experiences and collaborate within/outside of OSU as much as possible.

