

Gregory Ryan Lehnhoff



Graduate Institution: Colorado School of Mines

Graduate Discipline: Metallurgical / Materials Engineering

Hometown: Longmont, CO

Relevant SC Research: Basic Energy Sciences

Research Interest:

My research interest lies in understanding the interrelationships between materials processing, structure, properties, and performance. My current project relates specifically to the influence of deformation-induced phase transformations on the mechanical behavior of advanced high strength automotive steels. Steels that exhibit this transformation possess better combinations of strength and ductility, allowing automobile manufacturers to use thinner structural members that reduce vehicle weight and improve fuel efficiency. Beyond this specific project, I have additional interest in general materials processing techniques such as casting, welding, metalforming, and heat treating, and how these processes influence the subsequent performance of a component.

About Me:

As a PhD student at the Colorado School of Mines, I am actively involved with our chapter of Material Advantage, a student program with memberships to four professional societies: TMS, ASM, ACerS, and AIST. I am also a member of AWS, the American Welding Society. As a member of these societies, I enjoy attending local meetings and national conferences, as well as keeping up with their various publications and research/industry news content. I have given presentations/posters at numerous such conferences, and was voted the Best Graduate Student Poster in the Structural

Materials Division at TMS 2012. Along with being a DOE SCGF Fellow, I was a Tau Beta Pi Engineering Honor Society Fellow in 2009-10.

My short term career goals involve finishing my PhD dissertation and incorporating the results into several peer-reviewed publications. My longer term goals involve applying the knowledge and skills I've learned to solve existing and emerging issues in material processing, selection, and implementation, while continuing to learn and grow as a researcher. I haven't yet decided in exactly which arena I would prefer to transition to after completing my PhD, but luckily I still have a little time to figure this out.

Being a Coloradan most of my life, I have been involved in hiking, camping, and skiing for a long time, and have more recently become a fan of target shooting. I also enjoy rock/metal music and make a point to attend several concerts a year.



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