Prof. Lin Li’s group at the University of Alabama has three openings for PhD students to join starting Fall 2018. Please find details below and contact Prof. Lin Li at lin.li@eng.ua.edu along with the up-to-date CV and transcript if you are interested.

- **Position 1: Mechanical behaviors of multi-component alloys.** We are specifically working on structure and deformation dynamics of advanced multi-component complex metallic systems including metallic glass and high entropy alloy. The project will integrate multiscale material modeling approaches including atomistic simulations and shear transformation zone dynamics simulations, and multiscale experimental characterization and testing techniques including atomic force microscopy, nanoindentation, scanning electron microscopy and atom probe tomography. The project is funded by Department of Energy (DOE) and in collaboration with Oak Ridge National Lab, Lawrence Berkley National Lab.

- **Position 2: Deformation hierarchy of complexion engineering nanocrystalline alloy.** We are specifically working on the coupled deformation mechanisms in nanocrystalline alloy with amorphous grain boundary complexion. The project will integrate multiscale material modeling approaches including atomistic simulations and crystal plasticity finite element model, and multiscale experimental characterization and testing techniques including in-situ transmission electron microscopy, in-situ neutron diffraction, and atom probe tomography. This project is funded by National Science Foundation.

- **Position 3: Microstructure and property relationship of advanced alloys fabricated by additive manufacturing.** The project will include work of phase field and finite element modeling and advanced material microstructural characterization using electron back scattering diffraction (EBSD) and transmission electron microscopy (TEM) techniques. The project is funded by NASA and the University of Alabama in Huntsville (UAH) and in collaboration with NASA Marshall Space Flight Center.

Potential graduate students can find more information about our university admissions process and requirement at:
- Application: https://graduate.ua.edu/prospective-students/apply-now/
- Required documents: https://graduate.ua.edu/prospective-students/apply-now/supporting-documents/

The research topics in Dr. Lin Li Group include (1) multiscale modeling of structure and deformation dynamics of advanced metallic systems including metallic glass, nanocrystalline metal and high entropy alloy; (2) material microstructural modeling of processing and microstructural relationship of advanced Ni based superalloy fabricated by selective laser melting; (3) strain engineering of two-dimensional materials. For details, please refer to the group website (http://linli.people.ua.edu/).