

Project Title: Characterization of Materials Formed by Plasma Spray Deposition

Hosting Site:

Plasma Processes, LLC 4914 Moores Mill Road Huntsville, AL 35811 www.plasmapros.com

Project Description:

Plasma spray is used to deposit coatings and form near-net-shape monolithic structures of a variety of materials including metals, oxides, nitrides, carbides, borides and alloys of these. The focus of this project is to characterize feedstock powders and deposits in the as-deposited condition as well as after relevant heat treatments. Characterization will include optical microscopy and hardness amongst other techniques. Characterization results will be correlated with mechanical and physical properties to identify processing-microstructure-property relationships.

U.S. citizenship required to participate in this project.

Disciplines:

Materials Science/Engineering, Chemistry, Physics

Mentor:

Dr. Daniel Butts, dbutts@plasmapros.com

The name and contact information of personnel at the hosting site is provided for further assistance with questions regarding the hosting site or the project.

Interns will not enter into an employee/employer relationship with the Hosting Site. No commitment with regard to later employment is implied or should be inferred.