

Center Specs

Name: Center for Friction Stir Processing (CFSP), Wichita State University Research Site

Lead and Partner Institutions:

- Lead Institution:
 - South Dakota School of Mines & Technology (SDSM&T)
 - Mr. William Arbegast (Center Director)
- Partner Institutions:
 - University of South Carolina (USC)
 - Brigham Young University (BYU)
 - University of Missouri–Rolla (UMR)
 - Wichita State University (WSU)

Principal Investigator(s):

- SDSM&T: Dr. Michael West (Site Director and PI)
- USC: Dr. Anthony Reynolds (Site Director and PI)
- BYU:
 - Dr. Tracy Nelson (Site Director and PI)
 - Dr. Carl Sorensen (PI)
- UMR: Dr. Rajiv Mishra (Site Director and PI)
- WSU: Dr. Dwight Burford (Site Director and PI)

Center Mission:

- To advance, develop and promote research into the principles and technology of Friction Stir Processing science and engineering through research, development, education, and technology exchange among academic, industry, and government entities;
- To increase the quantity and quality of the professionals prepared to work in the area;
- To involve the faculty of the University(s) in research in areas of common interest to Sponsors and the University(s);
- To perform research which will allow global Friction Stir Processing facilities to be competitive in the world economy.

Overview of Research Activities

Titles of current or pending projects: WSU Research Site Projects:

- CFSP07-WSU-01: Performance Evaluation of Discontinuous Friction Stir Welding
- CFSP07-WSU02 – The Effect of Surface Treatments and Sealants on the Faying Surface of Friction Stir Spot Welds
- CFSP07-WSU03 – “Low” Z-Force FSSW – Conventional Tool & Process Development Approach

Description of research thrusts or foci: Pathways to Implementation. WSU Site Research projects complement the other CFSP Research Site projects by focusing primarily on applied research that facilitates implementation of Friction Stir Technologies.

Other Areas of Interest for Collaboration – What research areas interest you for potential collaboration with your fellow Centers that complements your Center’s goals?

We have interest in collaborating with IUCRC Centers in the following areas: 1) Advanced Manufacturing, 2) Advanced Materials, 3) Energy and Environment, and 4) Quality, Reliability and Maintenance. We also have interest in collaborating with Health and Safety Centers. Friction stir related technologies are “green” technologies that simplify and provide innovative solutions to manufacturing, offer alternative means for preparing advanced materials, offer improved quality, and allow for innovation in preparing or fabricating safety equipment and structure such as aircraft seats, etc.

Directors, these are the specifications for putting together a simple overview of your current or pending research. Please submit the overview to Kate Ryan at kryan@abecker.com by December 10, 2007.

1. The overview should be no more than one page, single- or double-spaced.
2. Text should be understandable to non-specialists in your field.
3. Graphics are acceptable, but they should not substitute for text.

Thank you!