Economic Development Assistantship

This assistantship provides funding for a duration of 4 years for an outstanding graduate student at the PhD level working on the general research area described below.

**Project title:** Modeling and experimental investigation of ultrasonic consolidation of composite materials

The overall goal of this project is to conduct research to enable sustainable manufacturing methods for composite materials through high-power ultrasonics. Composite materials are lightweight and possess superior mechanical properties compared to conventional alternatives, such as metals. Consequently, they are of great interest in several fields of applications where weight reduction is primordial, especially aerospace (space and aeronautics).

Through this assistantship, the student will gain a deeper understanding of the fundamental mechanisms behind ultrasonic consolidation of composite materials through: 1) process modeling, and 2) experimental characterization of structural integrity and mechanical performance.

**Requirements and qualifications:**

- Preferred background in Mechanical, Aerospace or Chemical Engineering, or Materials Science and related fields.
- Undergraduate/graduate GPA: 3.5 or above (must maintain this GPA at LSU to keep the assistantship).
- Excellent communication (written and oral) and leadership.
- Prior experience with composite materials and simulation software such as ANSYS or ABAQUS preferred, but not required.
- US citizenship or permanent residency preferred (may require visits at NASA Michoud facility in New Orleans).

**To apply:**

Send an email to Dr. Genevieve Palardy (gpalardy@lsu.edu) stating your interest and include the following attachments: resume, past transcript(s) and publications (journal or conference, if any).

**Application deadline:** April 1st, 2018
**Estimated starting date:** August 2018