FIBER REINFORCED MATERIAL CHARACTERIZATION FOR MILITARY BRIDGE STRENGTHENING TECHNIQUES

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Description:

A new method of strengthening reinforced concrete beams has been developed by the faculty investigator and large scale beam specimens are being tested at Tulane University to further understand and develop the method for military purposes. The LAMP student will conduct laboratory testing of fiber reinforced polymeric materials and perform analysis on the data gathered. The laboratory testing will include testing for tensile strength, bearing strength, and clamped bearing strength. The student will also have the opportunity to assist graduate students in other laboratory testing.

Objectives:

The primary objective of the LAMP research will be to fully characterize the materials to be used by the graduate student researchers conducting the strengthening of the large scale beam specimens. The results of the materials testing will be used to design experiments during the next academic year. The secondary objective is to develop a report documenting the findings of the project.

Prerequisites:

Proficiency with Microsoft Excel is required. Strong math, science, and analytical abilities are preferred. A strong interest in the Tulane University graduate program in Civil Engineering is also preferred.