# PROJECT SUMMARY

**NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)**

Southern University

**ADDRESS (INCLUDE DEPARTMENT)**

Department of Electrical Engineering  
Pinchback Hall, Room 415  
Baton Rouge, LA 70813

**PRINCIPAL INVESTIGATOR(S)**

Fred Lacy

**STUDENT RESEARCH ASSISTANTS**

Alen Jones and Justin Boone

**PROJECT TITLE**

Fabrication of Thin Film Thermistors

**ABSTRACT (DO NOT EXCEED 250 WORDS)**

This research project involves fabricating a thin film thermistor which is equivalent to a thermal resistor. This device changes resistance as temperature changes and thus will be used as a temperature sensor. Thermistors typically have better sensitivity than their counterpart resistance temperature detectors (RTDs) because their resistance changes much more rapidly with respect to temperature. Mr. Boone will learn cleanroom processing techniques such as photolithography since this will be used to fabricate the device. The project will also involve a literature search to determine what materials will be used and what fabrication steps should be used to construct the device. After the thermistors have been fabricated, the sensitivity, operating range, etc. will be characterized by analyzing the sensor output as a function of temperature.