

## **VOLCANIC HAZARD ASSESSMENT FOR GEORGIA**

**Ivey J. Roubique, Department of Physics, Astronomy, Geosciences, and Engineering Studies**

**Faculty Sponsor: Dr. Mark S. Groszos, Department of Physics, Astronomy, Geosciences, and Engineering Studies**

Large volcanic eruptions are known to occur in the western United States. Volcanic activity in areas such as the Cascade Mountains, Yellowstone National Park, and New Mexico can create significant hazards for areas thousands of kilometers away. The primary threat is eruptions that produce very fine ash that is then ejected into the upper troposphere and stratosphere. This ash is subject to wind currents and the associated jet stream. The northwest winds sweep eastward carrying the ash across North America. This study is an analysis of the hazard that this ash falls present to Georgia. Examination of ash events described in science journals allows for qualitative meta-analysis of future ash events for Georgia. Work here focused on the economic and environmental impacts of hypothetical volcanic eruptions on Georgia. This study shows that future volcanic activity in the western United States could have a profound effect on Georgia.