Advanced Composite Manufacturing and Application Development for Transportation, Aerospace, Energy and Defense

February 12, 2015 3:30 pm

Location: 1059 SERC

There is increased emphasis on lightweight, energy efficiency, reduced carbon footprint and high strength and high performing advanced materials in a range of sectors.

The core competency of the UAB Materials Processing and Applications Development Center is in advanced thermoset and thermoplastic composites, recycled and green materials and advanced metals casting. This presentation will focus on short, long and continuous fiber thermoplastic materials and manufacturing. Materials by Design; approach featuring discontinuous and continuous thermoplastics in pellet and sheet forms have been utilized. Processes such as extrusion-compression, pultrusion, diaphragm forming and progressive forming have been developed. The integrated process and product development (IPPD) for applications related to automotive, mass transit, aerospace, energy, offshore and defense will be discussed.