

SMU Department of Mechanical Engineering
SEMINAR

“Rapidly Renewable Packaging and Structural Composites”

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3:00 – 4:00 p.m.

Junkins 101

Abstract: Interest in a sustainable and renewable basis for material selection is on the rise. In this presentation, results of compostable and structurally advanced composites based on cellulose and natural fiber reinforced polymers will be presented. Polymers such as poly lactic acid and poly hydroxyl alkanoates as the host material and the resultant composites were examined using dynamic mechanical analysis, differential scanning calorimetry and thermogravimetric analysis. The results indicated, design is a critical element in harnessing properties of biobased products.

Bio: . Nandika Anne D’Souza is a Professor in the Department of Materials Science and Engineering and heads the Polymer Mechanical and Rheology Laboratory. She is interested in interactions and properties of heterogeneous materials- blends, alloys, composites and nanocomposites. Her teaching and research focus is on mechanical properties, fracture, transport phenomena, viscoelasticity, rheology and polymer characterization.