KENNESAW STATE UNIVERSITY
SOUTHERN POLYTECHNIC COLLEGE OF ENGINEERING AND ENGINEERING TECHNOLOGY

SPCEET RESEARCH SEMINAR SERIES

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ROLL-TO-ROLL MANUFACTURING OF THIN FILMS FOR TRENDING APPLICATIONS USING TRADITIONAL AND NOVEL TOOLING

DATE: WEDNESDAY, FEB 25TH
TIME: 11:15 AM - 12:15 AM
LOCATION: Q 107

BIO

Dr. Tequila A. L. Harris is the Director of the Highly Advanced Roll-to-Roll iManufacturing Systems (HARRiS) laboratory. Prior to joining Georgia Tech, she earned her Masters and Doctorate degrees from Rensselaer Polytechnic Institute and a Bachelors in Physics from Lane College. Dr. Harris' research is focused on exploring the connectivity between thin film quality and its functionality, durability and performance, based on its manufacture. Her aim is to elucidate mechanisms that cause system failure, which may have initiated at the manufacturing stage.

ABSTRACT

In this talk, we will explore the scalability of various material forms and patterns using roll-to-roll manufacturing with conventional and innovative tooling to enable control over pattern structure and properties. To address these limitations, investigations of fluid phenomena responsible for coating quality will be interrogated as it relates to manufacturing, using experimental and analytical approaches. An understanding of processing limits in terms of film quality, pattern resolution and feature size will be discussed when processing a single liquid or multiple liquids simultaneously across a variety of manufacturing tools that can translate to scaled manufacturing.