



JSNN



Joint School of  
Nanoscience and Nanoengineering

## Fall 2025 Seminar Series

**Friday, August 29th, 11 AM**

**Prof. Oscar Avalos-Ovando**

Department of Nanoscience

Joint School of Nanoscience and Nanoengineering

*"What's so Hot About Electrons in Plasmonic Nanomaterials?"*

**Friday, September 5th, 11 AM**

**Prof. Sampath Gamage**

Department of Nanoscience

Joint School of Nanoscience and Nanoengineering

*"Quantum Materials: Exploring Nanoscale Phenomena for Efficient and Sustainable Device Applications"*

**Friday, September 12th, 11 AM**

**Prof. Maren Roman**

Department of Sustainable Biomaterials, Virginia Tech

*"Cellulose Nanocrystals: Promising bio-based Nanoparticles for Drug Delivery and Biomedical Applications"*

Host: Prof. Jeff Alston

**Friday, September 19th, 11 AM**

**Prof. Marina Sokolsky-Papkov**

Center for Nanotechnology in Drug Delivery

Eshelman School of Pharmacy, UNC Chapel Hill

*"Nanomedicine Strategies to overcome Treatment Challenges in Pediatric Tumors"*

Host: Prof. Kristen Dellinger

**Friday, September 26th, 11 AM**

**Prof. Shana Lee McAlexander & Prof. Richard Sheridan**

Department of Mechanical Engineering & Materials Science, Duke University

*"Building Interdisciplinary Capacity and Community for AI + Materials Research"*

Host: Ms. Nancy Brown

**Friday, October 3rd, 11 AM**

**Prof. Rosario Porras-Aguilar**

Department of Physics and Optical Science, UNC Charlotte

*"Shaping Light with Liquid Crystals: Smart Materials for Bioimaging"*

Host: Prof. Tetyana Ignatova

## Fall 2025 Seminar Series (continued)

**Friday, October 17th, 11 AM**

**Prof. Erik Santiso**

Department of Chemical and Biomolecular Engineering  
North Carolina State University

*“Understanding the Nucleation of Molecular Crystals”*

Host: Prof. Yirong Mo

**Friday, October 24th, 11 AM**

**Prof. Junhong Chen**

Pritzker School of Molecular Engineering, The University of Chicago

*“Molecular Engineering of Field-Effect Transistor Water Sensors  
based on 2D Nanomaterials”*

Host: Prof. Tetyana Ignatova

**Friday, October 31st, 11 AM**

**Prof. Gaurav Arya**

Department of Mechanical Engineering and Materials Science, Duke University

*“In-silico Design of Nanoparticle and DNA Assemblies with  
Emerging Architectures and Functions”*

Host: Prof. Hemali Rathnayake

**Friday, November 7th, 11 AM**

**Prof. Orlando Argüello-Miranda**

Department of Plant and Microbial Biology, North Carolina State University

*“Generative AI-Driven Cell Biology”*

Host: Prof. Sam Oliveira

**Friday, November 14th, 11 AM**

**Prof. Gagan Deep**

Wake Forest University School of Medicine

*“Extracellular Vesicles as Biomarkers: Unlocking the Potential of Liquid Biopsy”*

Host: Prof. Kristen Dellinger

**Friday, November 21st, 11 AM**

**Prof. Nathan Crook**

Department of Chemical and Biomolecular Engineering  
North Carolina State University

*“Engineering Probiotic Yeast for Synthesis of Vitamins and Drugs  
in the Mammalian Gut”*

Host: Prof. Sam Oliveira



*Seminar presentations will be held in-person in the JSNN Auditorium unless otherwise noted.*