

MISA 2025

Materials Innovation *for* Sustainable Agriculture

October 23-24, 2025
Orlando, FL

The Tenth Annual Materials Innovation for Sustainable Agriculture Symposium
University of Central Florida, Live Oak Event Center, 4115 Pyxis Lane, Orlando, FL

Thursday, October 23rd

4:00 pm – 8:00 pm: Registration (Lobby area)

Session I: Student Mixer (Live Oak Ballroom)

Moderator: Allison Lloyd and Melissa Deinys, University of Central Florida, USA

4:30 pm – 4:40 pm: Session Introduction
4:40 pm – 5:20 pm: Mr. Charles A. Richardson-Gongora, NASA, USA
“Analytical Chemistry in an Engineering World”
5:20 pm – 5:50 pm: Dr. Jorge Pereira, University of Central Florida, USA
“Student success – key considerations”
5:50 pm – 6:30 pm: Dr. Swaminathan Rajaraman, University of Central Florida, USA
“My Journey in Commercialization with Axion BioSystems – From the Lab to Marketplace”
6:30 pm – 8:00 pm: Networking dinner
8:00 pm: Day 1 program adjourns

Friday, October 24th

7:30 am – 8:00 am: Registration (Lobby area)
Breakfast (Live Oak Ballroom)

Opening Remarks

8:00 am – 8:05 am: Dr. Swadeshmukul Santra, Professor of Chemistry and Director of Materials Innovation for the Sustainable Agriculture (MISA) Center, University of Central Florida, USA
8:05 am – 8:15 am: Dr. Lei Zhai, Professor of Chemistry and Director of NanoScience Technology Center, University of Central Florida, USA

Session II: Agrochemical Formulation for Crop Protection (Live Oak Ballroom)

Moderator: Dr. Swadeshmukul Santra (University of Central Florida, USA)

8:15 am – 8:20 am: Session Introduction
8:20 am – 9:20 am: Dr. Ariel Singerman, University of Florida, USA

“Keynote: The economics of management strategies to deal with Citrus Greening disease in Florida”

- 9:20 am – 10:05 am: Dr. Tripti Vashisth, University of Florida, USA
“Citrus tree health management with plant growth regulators”
- 10:05 am – 10:50 am: Dr. Lukas Hallman, University of Florida, USA
“Grove-First: Discovering new therapies for managing Citrus Greening disease”
- 10:50 am – 11:35 pm: Dr. Madhura Kunta, Texas A&M University, USA
“An overview of current and emerging disease threats to citrus production in Texas”
- 11:35 pm – 12:10 pm: Dr. Jorge Pereira, University of Central Florida, USA
“Development of multi-nutrient formulations for sustainable agriculture”
- 12:10 pm – 1:15 pm: **Lunch Break and Networking (Live Oak Ballroom)**
- 1:15 pm – 2:15 pm: **Student Poster Presentation (Live Oak Ballroom)**

Session III: Plant Disease Management (Live Oak Ballroom)

Moderators: Dr. Jorge Pereira (University of Central Florida, USA); Dr. Edwin Davidson (Gatorade/Pepsi-Cola)

- 2:15 pm – 2:20 pm: Session Introduction
- 2:20 pm – 3:05 pm: Dr. Fulya Baysal-Gurel, Tennessee State University, USA
“Vascular Streak Dieback in Redbud: A Model for Understanding Emerging Fungal Diseases in Woody Ornamental Nursery Production”
- 3:05 pm – 3:50 pm: Dr. Gustavo de Almeida Teixeira, University of Idaho, USA
“Current management strategies of potato sprouting”
- 3:50 pm – 4:05 pm: **Coffee Break**
- 4:05 pm – 4:50 pm: Dr. Bhabesh Dutta, University of Georgia, USA
“Fungicide resistance, mitigation, detection and monitoring in vegetable crops”
- 4:50 pm – 5:35 pm: Mr. Sam Baker, WriggleBrew
“From an idea to the market: High value organic fertilizer”
- 5:35 am – 6:35 am: Dr. Leticia Scopel, BASF, Sao Paulo, Brazil
“Keynote: Pesticide environmental risk assessment for Latin America”
- 6:35 pm – 8:00 pm: **Dinner and Networking (Live Oak Ballroom)**
- 8:00 pm: **Symposium Adjourns**