





1st Miami Workshop on Aerosol Science and Technology Summer School in Winter January 17 and 18, 2023 Shalala Student Center, University of Miami *FULL PROGRAM AGENDA*

Time	Title	Speaker/Moderator
1/17/2023, Tuesda	ny li	· · ·
8:00 to 8:50	Breakfast	
8:50 to 9:00	Opening Remarks and Introduction of Online Attendees	Pratim Biswas
Session I: Aerosols in South Florida: Fires, Toxins, and Dusts		Paquita Zuidema Jiayu Li
9:00 to 9:45	Fires and Air Quality in Florida and Beyond	Christopher Holmes
9:45 to 10:00	Aerosolized Algal Toxins in South Florida, Health Impacts, and Exposure Mitigation Strategies	Cassandra Gaston
10:00 to 10:15	The Impact of African Dust on Aerosol Properties in the Caribbean Basin and Southern United States: Past History and Future Prospects	Joseph M. Prospero
10:15 to 10:45	Panel Discussion	
11:00 to 12:00	Group Picture and Campus Tour	Jan Macko
12:00 to 14:00	Poster Session and Lunch (In-person Only)	
Session II: Aeroso	ol and Cloud Physics, and Instrumentation	Yang Wang
14:00 to 14:45	Deployment of the DOE 3 rd ARM Mobile Facility (AMF3) to the Southeastern United States: A Vision for Integrated Model-Observing System Design for Targeting Land-Aerosol-Cloud Interactions	Chongai Kuang
14:45 to 15:00	Smoke And Its Interactions with Clouds Over The Southeast Atlantic: Do Similar Processes Operate Over South Florida	Paquita Zuidema
15:00 to 15:15	Aqueous Processing of Water-Soluble Organic Compounds in the Eastern United States	Marwa El-Sayed
15:15 to 15:45	Panel Discussion	
16:00 to 16:30	Coffee Break	
16:30 to 17:15	Tutorial I: Aerosol Fundamentals and Dynamics	Pratim Biswas
17:15 to 18:00	Instrument Demo by Handix Scientific Inc. SailBri Cooper, Inc. TSI Inc.	Ping Chen Varun Yadav Timothy Wright
18:30	Dinner	
1/18/2023, Wedne		
8:00 to 9:00	Breakfast	
Session III: Aerosol Health Effects		Chang-Yu Wu
9:00 to 9:45	Aerosol Exposure Measurement: Challenges and Opportunities	Pramod Kulkarni







9:45 to 10:00	Applications of Water-based Condensational Growth	Arantzazu Eiguren-
	Technology to Study Adverse Health Outcomes	Fernandez
	Associated with Exposure to Airborne Particles	
10:00 to 10:15	Indoor and Outdoor Particulate Matter – Implications for	Naresh Kumar
	Ocular Surface Diseases	
10:15 to 10:45	Panel Discussion	
11:00 to 12:00	Tutorial II: Aerosol Instrumentation	Chang-Yu Wu
		Yang Wang
12:00 to 14:00	Poster Session and Lunch (In-person Only)	
Session IV: Nanoparticle Technology: Synthesis, Characterization and		Pratim Biswas
Applications		Samiul Amin
14:00 to 14:45	Design, Manufacture and Applications of Functional	Orlin Velev
	Environmentally Benign Nanoparticles	
14:45 to 15:00	Sustainability and Circularity Driven Innovation at	Deep Bhattacharya
	Eastman	
15:00 to 15:15	Reactive Laser Ablation Synthesis in Solution (r-LASiS):	Dibyendu
	A New Paradigm for Synthesizing Functional Composite	Mukherjee
	Nanomaterials	
15:15 to 15:45	Panel Discussion	
16:00	Closing	

Speakers and Workshop Convenors:

- Samiul Amin, Professor of Practice of the Department of Chemical, Environmental and Materials Engineering, University of Miami
- **Pratim Biswas**, Dean of the College of Engineering, Professor of Chemical, Env and Materials Engr. & Atmoshperic Sci. (RSMAS), Member of the National Academy of Engineering, University of Miami
- **Deep Bhattacharya**, Vice President, Care Solutions Technology and Technology Operations, Eastman Chemical Company
- Ping Chen, Founder & CEO, Handix Scientific Inc.
- Arantzazu Eiguren-Fernandez, Senior Research Chemist, Aerosol Dynamics Inc.
- Marwa El-Sayed, Assistant Professor of Environmental Engineering, Embry-Riddle Aeronautical University
- **Cassandra Gaston**, Associate Professor of the Department of Atmospheric Sciences (ATM), University of Miami
- **Christopher Holmes**, Werner A. and Shirley B. Baum Associate Professor of the Department of Earth, Ocean, and Atmospheric Science, Florida State University
- **Chongai Kuang**, Atmospheric Scientist, Environmental and Climate Sciences Department, Brookhaven National Laboratory

UNIVERSITY OF MIAMI





- **Pramod Kulkarni**, Chief of Chemical and Biological Monitoring Branch, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention
- Naresh Kumar, Professor of the Department of Public Health Sciences, University of Miami
- Jiayu Li, Assistant Professor of the Department of Mechanical and Aerospace Engineering, University of Miami
- Jan Macko, Director of Admission, College of Engineering, University of Miami
- **Dibyendu Mukherjee**, Research Assistant Professor of the Department of Chemical & Biomolecular Engineering, University of Tennessee, Knoxville
- Joseph M. Prospero, Professor Emeritus of the Department of Atmospheric Science & the Cooperative Institute for Marine and Atmospheric Studies (CIMAS), Rosenstiel School of Marine, Atmospheric, and Earth Science, University of Miami
- **Orlin Velev**, S. Frank and Doris Culberson Distinguished Professor of the Department of Chemical Engineering, North Carolina State University
- Yang Wang, Assistant Professor of the Department of Chemical, Environmental and Materials Engineering, University of Miami
- **Chang-Yu Wu**, Professor and Chair of the Department of Chemical, Environmental and Materials Engineering, University of Miami
- Timothy Wright, Regional Manager, Research & Analytics Instruments | Southeast US Territory, TSI Inc.
- Varun Yadav, Vice President of Operations, Sailbri Cooper Inc.
- Paquita Zuidema, Professor and Chair of the Department of Atmospheric Sciences, University of Miami