

2024 North Carolina Battery Technology Workshop Agenda

June 6, 2024 | 7:45 am to 4:00 pm | Duke Centennial Hall, Room 345, UNC Charlotte

7:45 am - 8:30 am | Registration with Breakfast Included

8:35 am - 8:55 am | Opening and Welcome Remarks

- Professor Rob Keynton, Dean of the William States Lee College of Engineering

9:00 am - 9:40 am | Killian Tallman | Albemarle

- Lithium Innovations Fueling Electrification

9:40 am - 10:00 am | Kevin Wepasnick | In-Q-Tel

- Government Investing in Battery Start-up Technologies

10:00 am - 10:40 am | Jian Xia | Arcadium Lithium

- LIOVIX® Printable Lithium Technology for R2R Lithium Anode Manufacturing

10:40 am - 11:00 am | Coffee Break

11:00 am - 11:40 am | Zheng Li | Lithium Industries

- An Automated Recycling Process of End-of-Life Lithium-ion Batteries Enhanced by Online Sensing and Machine-learning Techniques

11:40 am - 12:20 pm | Dr. Gaurav Mishra | Wake Forest University

- Developing a continuum theoretical approach for battery modeling

12:20 pm - 2:00 pm | Lunch Break w/ Tour of BATT CAVE

2:00 pm - 2:40 pm | Brian McCarthy | EC Power Group

- Temperature as a Battery Control Lever

2:40 pm - 3:20 pm | Chavonne Yee | Honeywell

- First Vent Electrolyte Leak Detection: A Deterministic Approach to Battery Safety

3:20 pm - 4:00 pm | Anthony Bombik | University of North Carolina at Charlotte

- Multiphysics Modeling of Battery Degradation as a Result of Mechanical Impact

5:51 pm or 6:11 pm | Lightrail departs to Charlotte Knights Networking Event

7:00 pm - 9:30 pm | Networking Event @ Charlotte Knights Baseball Game

- Buffet-style food is provided for the first 2 hours
- Alcoholic beverages available for purchase
- Lightrail trains run every 30 minutes after 8:27 pm

BATT CAVE

2024 North Carolina Battery Technology Workshop Agenda

June 7, 2024 | 7:45 am to 3:20 pm | Duke Centennial Hall, Room 345, UNC Charlotte

7:45 am - 8:20 am | Registration with Breakfast Included

8:20 am - 9:00 am | Miaofang Chi | Duke University

- Deciphering Interface Challenges in Solid-State Batteries through Advanced Electron Microscopy

9:00 am - 9:40 am | Xiaochuan Lu | NC A & T University

- Interfacial Engineering Enabling Low-Temperature Sodium Metal Battery

9:40 am - 10:20 am | Natalie Holzwarth | Wake Forest University

- Exploration of Solid-State Electrolytes Based on Lithium (Thio) Boracites through Computer Simulation

10:20 am - 10:40 am | Coffee Break

10:40 am - 11:20 am | Austin Rouse | Economic Development Partnership of NC (EDPNC)

- Expansion of Businesses in the “Battery Belt” of North Carolina

11:20 am - 12:00 pm | Wenbin Yin | Celgard

- Celgard® Separator Innovations to Improve Lithium Battery Manufacturing Yields and Cycle Life

12:00 pm - 1:20 pm | Lunch Break in Duke 345

1:20 pm - 2:00 pm | Jeff Dahn | Dalhousie University

- “Watching” Electrolyte Move in Cylindrical Li-ion Cells and Why It Matters

2:00 pm - 2:40 pm | Scott Warren | University of North Carolina at Chapel Hill

- Electrode design for fluoride-ion batteries

2:40 pm - 3:20 pm | Lin Ma | University of North Carolina at Charlotte

- Unveiling the Thermal Stability of Lithium and Sodium Ion Pouch Cells Using Accelerating Rate Calorimetry

3:20 | Closing of the 2024 North Carolina Battery Technology Workshop