



SMOKY MOUNTAINS

Mobility Conference

NOVEMBER 14-17, 2022



OAK RIDGE
National Laboratory

Welcome to the Smoky Mountains Mobility Conference 2022

Conference Organizers



Scott Curran
Group Leader,
Fuel Science and Engine
Technologies Research,
Oak Ridge National
Laboratory



Robert Wagner
Director,
Buildings and
Transportation Science
Division, Oak Ridge
National Laboratory



Rich Davies
Director,
Sustainable
Transportation Program,
Oak Ridge National
Laboratory



Burak Ozpineci
Section Head,
Vehicle and Mobility
Systems,
Oak Ridge National
Laboratory



Jim Szybist
Section Head,
Propulsion Science,
Oak Ridge National
Laboratory



Adian Cook
Vehicle and Mobility
Systems Scientist,
Oak Ridge National
Laboratory

Welcome to the third Smoky Mountains Mobility Conference. This conference provides a forum to connect international thought leaders from diverse disciplines across industry, universities, national laboratories, and government agencies. The agenda has been designed to drive this conversation and improve cross-disciplinary communications to address the unprecedented and rapid changes in technology and the barriers to the deployment of a smart, clean, secure and safe mobility future.

We are pleased to announce that the conference will begin with an opening keynote address from Gabe Klein, Executive Director, in the Joint Office of Energy and Transportation. His address will be followed by a moderated executive panel with four industry and laboratory leaders. The agenda then continues with four sessions each with a keynote address and associated panels spanning the areas of the transition to hydrogen, vehicle electrification, difficult to decarbonize transportation sectors, and vehicle connectivity. The combination of presentations from 25 well-known international leaders coupled with an invitation-only audience and significant networking opportunities will lead to an exhilarating couple of days of discussion and setting the stage for the future.

Thank you for joining us in beautiful East Tennessee and the city of Chattanooga which is quickly becoming a world class hub of innovation. We hope you enjoy the conference and leave with new knowledge, new friends, and new ideas for the future of mobility.

For questions or support, please contact Terry Pfeiffer, located in the registration area. If you have questions regarding the program, equipment concerns or network connectivity, please seek out Scott Curran or Robert Wagner.



**MORE
INFO**

- Conference information, materials, and presentations will be available on the conference website: smmc.ornl.gov
- For information about restaurants and activities in Chattanooga, visit: www.visitchattanooga.com
- Registration is outside of Portman BCD.
- Reception and dinner are in Portman A.
- Keynotes and panels held in Portman BCD.



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S I L V E R



THE ENTERPRISE CENTER





Agenda

MONDAY, NOVEMBER 14

- 4:30 p.m. Registration
- 6:00 p.m. Welcome Reception | Recognition of Special Guests | City of Chattanooga
- 9:00 p.m. Adjourn

TUESDAY, NOVEMBER 15

- 7:30 a.m. Registration / Working Breakfast
- 8:30 a.m. Opening remarks and welcome | **Dr. Xin Sun**, Associate Laboratory Director, Energy Science and Technology, Oak Ridge National Laboratory

Executive Session

session chair | **Robert Wagner**, Director, Buildings and Transportation Science Division, Oak Ridge National Laboratory

- 8:40 a.m. Introduction
- 8:50 a.m. Keynote presentation | **Gabe Klein**, Executive Director, Joint Office of Energy and Transportation, U.S. Department of Energy
- 9:50 a.m. Networking break and transition to panel
- 10:10 a.m. Panel presentations and moderated discussion
- **Chris Atkinson**, Deputy Director for Advanced Research, U.S. Department of Transportation
 - **Carla Bailo**, President and CEO, ECOS Consulting LLC
 - **Tim Lieuwen**, Executive Director, Strategic Energy Institute, Georgia Tech
 - **Wolfgang Maluche**, Vice President of Engineering, Volkswagen Group of America
- 12:10 p.m. Working lunch with continued discussions from morning presentations

Transition to Hydrogen Session

session chair | **Rich Davies**, Director, Sustainable Transportation Program, Oak Ridge National Laboratory

- 1:30 p.m. Introduction
- 1:40 p.m. Keynote presentation | **Dimitrios Papageorgopoulos**, Program Manager; Fuel Cell Technologies, Hydrogen and Fuel Cell Technologies Office, Energy Efficiency and Renewable Energy, U.S. Department of Energy
- 2:40 p.m. Networking break
- 3:00 p.m. Panel presentations and moderated discussion
- **Wayne Eckerle**, Vice President, Global Research and Technology, Cummins Inc.
 - **Paul Eiden**, Project Director, Senior Vice President, Sargent & Lundy
 - **Mike Petch**, Strategic Technology Director, Johnson Matthey Hydrogen Technologies
- 5:00 p.m. Panel session adjourns
- 5:05 p.m. Special Guest Speaker | **Molly Cripps**, Director, Office of Energy Programs, Tennessee Department of Environment and Conservation
- 5:20 p.m. Transition to dinner
- 6:30 p.m. Dinner at the Tennessee Aquarium (map and more details in the back of the program)

WEDNESDAY, NOVEMBER 16

7:00 a.m. Registration / Working breakfast

8:00 a.m. Welcome Day Two

Hard to Decarbonize Session

session chair | **Jim Szybist**, Section Head, Propulsion Science, Oak Ridge National Laboratory

8:10 a.m. Introduction

8:20 a.m. Keynote presentation | **Don Stanton**, Program Manager, Renewables and Renewable Energy, Oak Ridge National Laboratory

9:20 a.m. Networking break

9:40 a.m. Panel presentations and moderated discussion

- **Eric Dillen**, Advanced Engine Technology Leader, Wabtec Corporation
- **Anna Oldani**, Engineer, U.S. Federal Aviation Administration
- **John Pendray**, Senior Technical Advisor for Technology, Cummins Inc.
- **Valerie Sarisky-Reed**, Director, U.S. Department of Energy Bioenergy Technologies Office

11:40 a.m. Working lunch with continued discussions from morning presentations

Electrify Everything Session

session chair | **Burak Ozpineci**, Section Head, Vehicle and Mobility Systems, Oak Ridge National Laboratory

1:00 p.m. Introduction

1:10 p.m. Keynote presentation | **Brij Singh**, Technical Fellow, Power Electronics Engineering, John Deere, Inc.

2:10 p.m. Networking break

2:30 p.m. Panel presentations and moderated discussion

- **Anh Bui**, Associate Research, Co-Cluster Coordinator for Equity Cluster, International Council on Clean Transportation (ICCT)
- **Maarten Meijer**, Advanced Technology, PACCAR, Inc.
- **Suresh Reddy**, Chief Engineer, Electric Power Conversion & Control, Caterpillar, Inc.
- **Giordano Sordoni**, Co-Founder and Chief Operating Officer, Xos Trucks

4:30 p.m. Continued discussions and closing remarks

5:00 p.m. Dinner on own

THURSDAY, NOVEMBER 17

7:00 a.m. Registration opens, Working breakfast

8:00 a.m. Welcome Day Three

Connectivity Session

session chair | **Adian Cook**, Vehicle And Mobility Systems Scientist, Oak Ridge National Laboratory

8:10 a.m. Introduction

8:20 a.m. Keynote presentation | **Henry Liu**, Professor, Director of MCity, University of Michigan

9:20 a.m. Networking break

9:40 a.m. Panel presentations and moderated discussion

- **Danielle Chou**, Program Enabling Technologies, U.S. Federal Highway Administration's Turner-Fairbank Highway Research Center
- **Bo Han**, General Manager, TOYOTech
- **Vivek Moudgal**, Vice President of Sales, dSPACE, Inc.
- **Mina Sartipi**, Founding Director, Center for Urban Informatics and Progress, University of Tennessee at Chattanooga

11:40 a.m. Continued discussions and closing comments

12:00 p.m. Conference Adjourns

Executive Session

ORGANIZERS

Robert Wagner

Director, Buildings and Transportation Science Division

Oak Ridge National Laboratory

Scott Curran

Group Leader, Fuel Science and Engine Technologies Research

Oak Ridge National Laboratory

KEYNOTE



Gabe Klein

Executive Director

**Joint Office of Energy and
Transportation**



Chris Atkinson

Deputy Director for Advanced Research

U.S. Department of Transportation



Carla Bailo

President and CEO

ECOS Consulting LLC



Tim Lieuwen

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**Strategic Energy Institute,
Georgia Tech**



Wolfgang Maluche

Vice President of Engineering

Volkswagen Group of America

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Rich Davies

Director, Sustainable Transportation Program

Oak Ridge National Laboratory



KEYNOTE

Dimitrios Papageorgopoulos

Program Manager

Fuel Cell Technologies

Hydrogen and Fuel Cell Technologies Office

Energy Efficiency and Renewable Energy

U.S. Department of Energy



Wayne Eckerle

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U.S. Federal Aviation Administration



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Cummins Inc.



Valerie Sarisky-Reed

Director

**U.S. Department of Energy
Bioenergy Technologies Office**

Electrify Everything Session

ORGANIZERS

Burak Ozpineci

Section Head, Vehicle and Mobility Systems,
Oak Ridge National Laboratory

KEYNOTE



Brij Singh

Technical Fellow
Power Electronics Engineering

John Deere, Inc.



Anh Bui

Associate Researcher and Co-Cluster
Coordinator, the Equity Cluster

**International Council on Clean
Transportation**



Maarten Meijer

Advanced Technology

PACCAR, Inc.



Suresh Reddy

Chief Engineer, Power Conversion & Control

Caterpillar, Inc.



Giordano Sordoni

Co-Founder and Chief Operating Officer

Xos Trucks

Connectivity Session

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Adian Cook

Vehicle and Mobility Systems Scientist

Oak Ridge National Laboratory

David Smith

Deputy Director, Sustainable Transportation Program

Oak Ridge National Laboratory

KEYNOTE



Henry Liu

Director

MCity, University of Michigan



Danielle Chou

Program Enabling Technologies

**U.S. Federal Highway
Administration's Turner-Fairbank
Highway Research Center**



Bo Han

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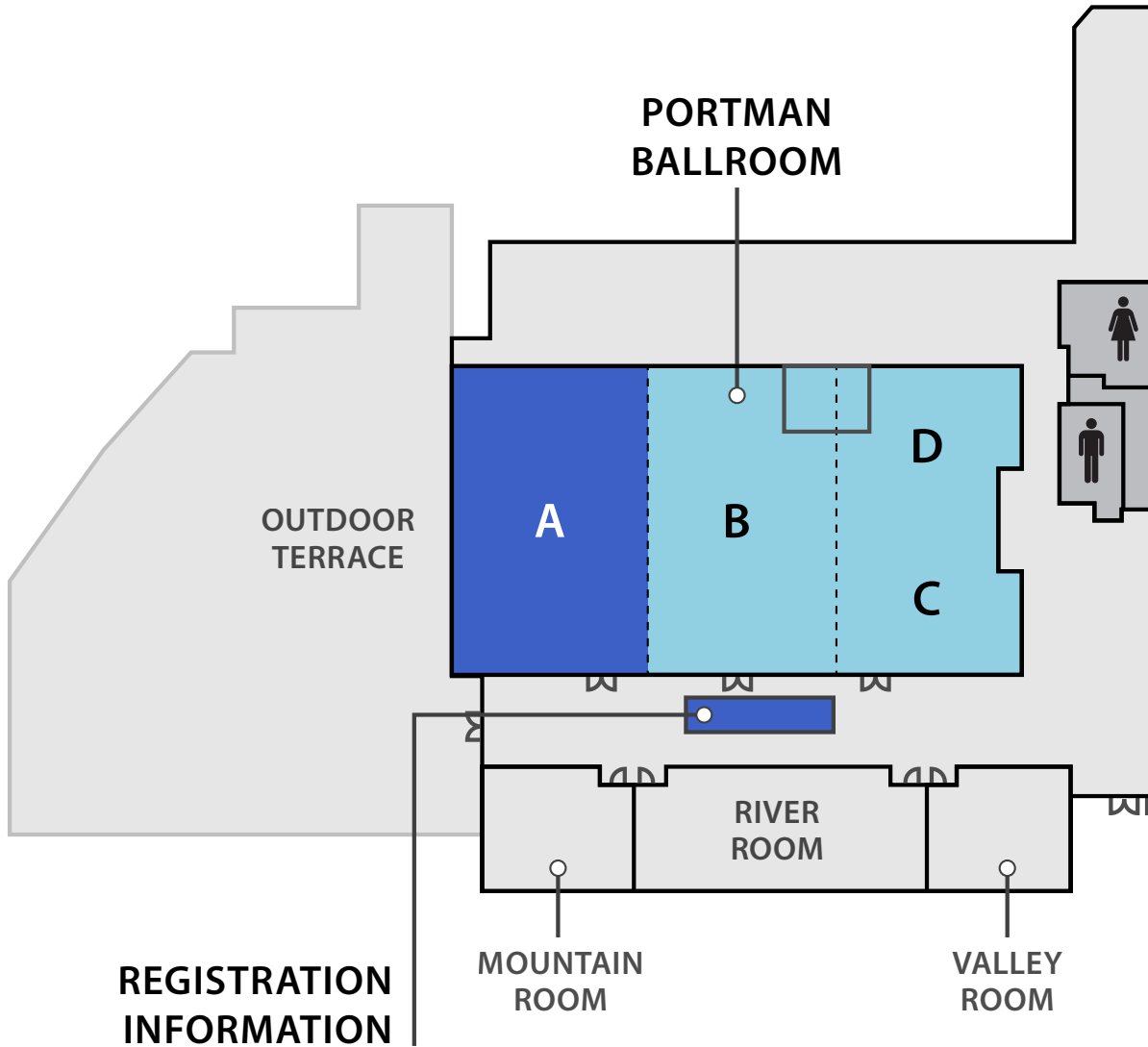





Mina Sartipi

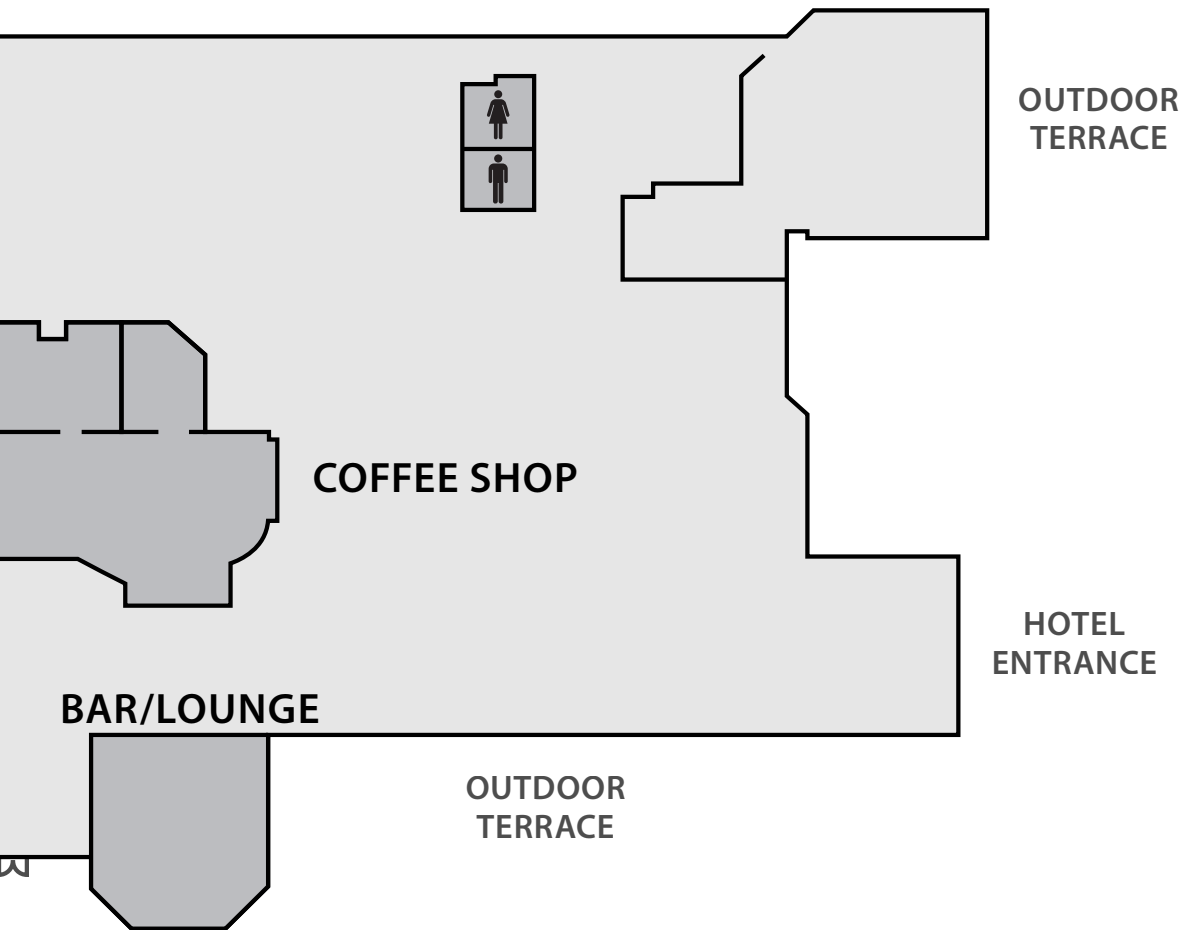
Founding Director, Center for
Urban Informatics and Progress

**University of Tennessee
at Chattanooga**

Conference Hotel Map



-  Sessions
-  Reception (Nov. 14)
-  Breakfast/Lunch



Map to Aquarium



Dinner at the Tennessee Aquarium

TUESDAY, NOVEMBER 15

Arrival at 6:30 p.m.

Cocktails at 6:45 p.m.

Dinner starts 7:00 p.m.–7:15 p.m.

Access to exhibits will continue until 9:00 p.m.
Badges are required for entry.

CARTA shuttles will be available between the hotel
and aquarium from 5:30 p.m. until 10:00 p.m.

We look forward to seeing you all at the aquarium!

Notes



MANAGED BY UT-BATTELLE FOR THE US DEPARTMENT OF ENERGY

