



UNIVERSITY OF CALIFORNIA
UCRIVERSIDE | CE-CERT

**1084 Columbia Avenue,
Riverside CA 92507**

CE-CERT is dedicated to addressing society's most pressing environmental challenges in air quality, climate change, energy and transportation through research, education and public service



150 student employees

60 faculty & engineers

\$ 30 million in ongoing research

30 laboratories and testbeds



CE-CERT RESEARCH FOCUS: AIR QUALITY, TRANSPORTATION, AND ENERGY



Clean Air

**Quantifying and Measuring Emissions
Toxic, Ozone and PM formation**

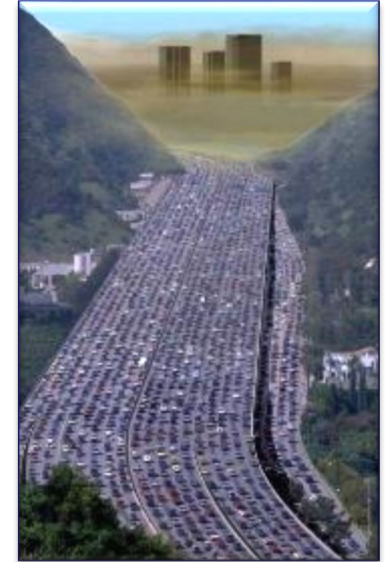


Renewable Fuels

**Aqueous Processing of Biomass to Fuels
Thermochemical Processing of Biomass to Fuels**

Sustainable Transportation

**Intelligent Transportation Systems
Connected and Automated Vehicles
Electric and Hybrid vehicle integration
Ecodriving, Shared Vehicle Systems**



Renewable Electricity & Smart Grids

**Advanced Solar Energy Production
Energy Storage
Energy Management**

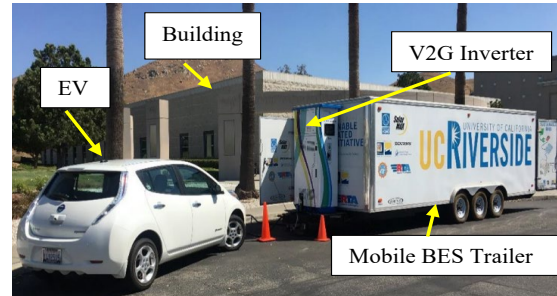


Climate Change Impacts

**Impacts of our fuels
Cloud formation & impacts**



CE-CERT's Latest Initiatives



Projects with the City of Riverside:

- Innovation Corridor & Smart Intersection
- Community Air Quality Monitoring
- Transformative Climate Community Program

Renewable Energy Projects

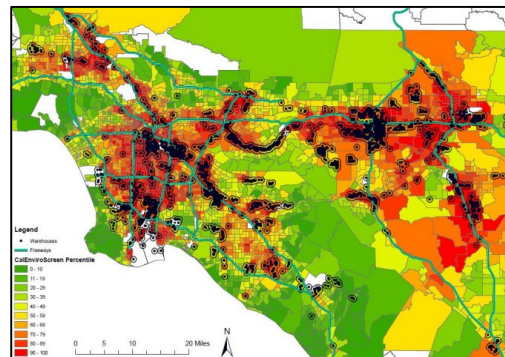
- Vehicle to Grid research
- Hydrogen Program
- Lithium Valley

Sustainable Freight

Working with Industry on new technology deployment: CalTestBed, SCEIN

OMEGA Research Program

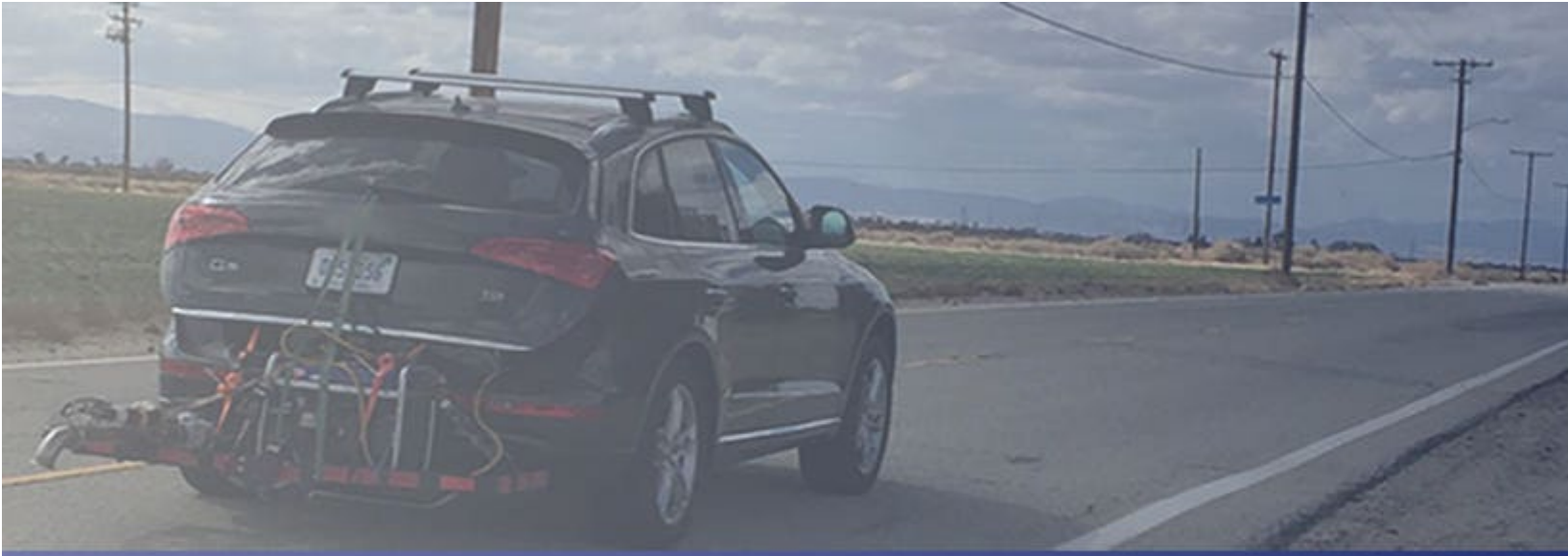
Objective **M**easurement/**M**onitoring/**M**itigation of **E**missions from **G**oods **M**ovement and **I**mpacts on **A**ir Quality



CARB in Riverside



PEMS Conference: March 17-18th, 2022



PEMS2022: Moving towards Onboard Sensing, Analysis, and Reporting (OSAR)

UCR CE-CERT

11th ANNUAL
INTERNATIONAL
PEMS
CONFERENCE

March 17th & 18th
2022

- **Reception:** March 17th, 2022 6pm: CE-CERT Front Lobby
- **Technical Program:** Thursday – Friday, 8am – 5pm, Riverside Marriott
- **Keynote:** Dr. Chris Frey, Deputy Assistant Administrator for Science Policy, U.S. EPA



CE-CERT 30th Anniversary 2012-2022



April 15th, 2022

To Register: <https://www.cert.ucr.edu/ce-cert-30th-anniversary>

- *Alumni Research Symposium:* 9am - noon
- *Awards Recognition Lunch:* noon – 2pm
- *Research Open House:* 2pm – 4pm
- *Celebration Dinner and Program:* 6pm – 9pm, UCR Alumni Center

Sponsorship Opportunities:

30 YEARS, 3 FUNDS, \$90K
EMPOWER THE NEXT GENERATION OF ENGINEERS BY MAKING A GIFT TODAY!



Dr. Chris Frey

Deputy Assistant Administrator for
Science Policy in the Office of Research
and Development as an appointee of the
Biden/Harris administration.