

News - Fall 2000

UCR IntelliShare Expansion

AN EXPANSION OF THE UCR INTELLISHARE PROGRAM IS CURRENTLY under way. UCR IntelliShare is an experimental program that allows participants to rent electric cars for local trips. With funding from the federal Congestion Mitigation and Air Quality Improvement Program provided through the Riverside County Transportation Commission and CalTrans, the Transportation Systems Group is making plans for two additional stations at or near UCR to provide further research opportunities and to expand the service. Each station will be equipped with chargers, reserved parking spaces for the vehicles and registration kiosks. Plans also include putting ten additional electric vehicles in the fleet to meet the demands of the growing program.



Participant activating an electric vehicle at an IntelliShare station.

A second phase of expansion is also being explored. CE-CERT has initiated a feasibility study with the City of Riverside to determine whether this type of car-sharing system would work for municipal employees. In this new partnership, UCR IntelliShare would provide the monitoring, accounting and analysis for a fleet of electric vehicles shared by City employees. This expansion would provide further data and modeling opportunities on car sharing systems, including examining the impact of a heterogeneous fleet. The new program could be in effect as early as the spring of 2001.



UCR IntelliShare began in March, 1999 with fifteen electric vehicles at three campus stations. Now, a year and a half later, nearly 300 users are participating in the program, which reached a 20,000-trip milestone in August of this year. Recent changes to the cost structure used in the program have allowed increased study into user behavior, trip duration, and overall vehicle use. The program's director, Matthew Barth, says that UCR IntelliShare is surpassing expectations and added: "We are getting excellent data. It's working out incredibly well."

Team CE-CERT Takes Third in 2000 Ethanol Vehicle Challenge

TEAM CE-CERT STUDENTS, LED BY MECHANICAL ENGINEERING undergraduate Gary Nichols, took third overall in the 2000 Ethanol Vehicle Challenge that took place in Windsor, Ontario, Canada in May, 2000. The seven-person UCR team, along with 15 other teams from the United States and Canada, was required to reengineer a 1999 Chevrolet Silverado 4x4 pickup truck to run on ethanol. The teams then put these vehicles to the test, competing on which truck offered the most efficiency, lowest emissions, and best performance. In the weeklong challenge, vehicles were judged in categories ranging from emissions and fuel economy to handling and design. The University of Texas at Austin took first place in the competition.

News in Brief

CE-CERT Receives Incubation Grant from NSF

CE-CERT AND SEVERAL OTHER UCR DEPARTMENTS HAVE RECENTLY received an incubation grant of \$100,000 from the National Science Foundation. The primary goals of this planning activity include: self-training workshops on the UCR campus to explore the design issues involved in planning for sustainable lifestyles in Southern California; establishing linkages among data management systems; identifying interdisciplinary research opportunities; and integrating an interdisciplinary research program with undergraduate and graduate education.



Team CE-CERT.

Mellon Foundation Funds Clean Air Act Study

CE-CERT DIRECTOR JOSEPH M. NORBECK RECEIVED A GRANT FROM THE ANDREW W. MELLON FOUNDATION TO EXPLORE THE United States Clean Air Act. The proposal titled "Air Quality Management in the United States: A Historical Perspective of the Clean Air Act" was awarded \$150,000. These funds will be used by Dr. Norbeck to prepare a descriptive manuscript suitable for peer-reviewed publication on the history of the Clean Air Act from both regulatory and industry perspectives. Upon hearing of the award, Dr Norbeck stated: "The Clean Air Act is an excellent model for such exploration. It has broad ramifications for the command and control of federal regulations on local industries and agencies responsible for actual implementation of the national standards."

2000-01 CE-CERT Student Awards

Undergraduate Scholarships:

- Ford Motor Company Scholarship: Martin Tsai, Mechanical Engineering. Hybrid Electric Vehicle Testbed.
- Jim Guthrie Research Award: Charles Young, Mechanical Engineering. Vehicle Activity Analysis and Cycle Development.

Graduate Fellowships:

- William R. Pierson/Ford Motor Company Graduate Student Fellowship: Nicole Hill, Chemical and Environmental Engineering Graduate Program. Development of a Pacific Rim Emissions Database for International Vehicle Emissions Modeling.
- Ester F. Hays Graduate Student Fellowship: Nicole Hill, Chemical and Environmental Engineering Graduate Program. Development of an FTIR Sampling System to Measure Non-road Ambient Air Pollutants and Comparison of the Spatial Variability in Air Quality in the South Coast Air Basin.

CE-CERT Distinguished Service Awards

IN KEEPING WITH THE MISSION OF CE-CERT, THESE AWARDS HONOR INDIVIDUALS FROM INDUSTRY, GOVERNMENT, AND ACADEMIA who have made substantial contributions and leadership to the Center over the years.

- Industry: Samuel A. Leonard, General Motors Corporation
- Government: Alan C. Lloyd, California Air Resources Board

- Academia: William R. Pierson, Desert Research Institute, University of Nevada (posthumous recognition)

Update on CE-CERT Buildings

CONSTRUCTION HAS BEGUN ON BOTH THE ATMOSPHERIC CHAMBER AND THE ADMINISTRATION BUILDINGS. PLEASE LOOK FOR information in the near future on the grand opening celebration.

New CE-CERT Brochure

THE NEW BROCHURE IS NOW AVAILABLE. PLEASE CONTACT CE-CERT AT (951) 781-5791 TO REQUEST COPIES OF THE BROCHURE.

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