



Press release for April 21, 1998

Clean, Quiet, Cool--and ready for the road

Humboldt State to unveil America's first street-ready fuel-cell car in Palm Desert April 24

ARCATA, Calif. -- America's first street-ready fuel-cell car is a cherry-red, pint-sized coupe. Produced at Humboldt State University's Schatz Energy Research Center (SERC), it represents a major step toward a quiet, pollution-free automobile.

The coupe will debut officially Friday, April 24, at the Clean Cities Celebration in the city of Palm Desert, Calif., about 800 miles south of the lab where it was made. The fuel-cell-powered neighborhood electric vehicle (NEV) is a small car that carries two people, runs at a top speed of 35 mph, has a range of 30 miles, can be refueled in two minutes, and emits no exhaust other than pure water.

After the ceremony, the car will join three hydrogen-powered golf carts engineered by SERC, which have been in daily use for 18 months. Such vehicles are legal, indeed encouraged, on the streets of Palm Desert, a city that aggressively pursues environmental technologies.

The vehicles are part of a \$3.9 million transportation project to create a fleet of pollution-free vehicles powered by fuel cells--and the infrastructure to support them. The project's next step is to construct a hydrogen-generating and refueling station where solar electricity will power the electrolysis of water to produce hydrogen fuel.

Two Humboldt State environmental resources engineering professors, Peter Lehman and Charles Chamberlin, initiated the project and directed SERC's development of the vehicles. According to Lehman, "This project is a big step toward the transportation system of the future. Our ultimate goal is to see full-size clean and reliable fuel-cell vehicles running on all our nation's highways.

"The beauty of fuel-cell vehicles is that they are pollution-free and energy efficient, and we can make the fuel right here in America," said Lehman. "In electric cars, fuel cells offer important advantages over batteries: They have greater range, and they take minutes to refuel--not hours to recharge."

Lehman envisions a day when fuel-cell vehicles are sold nationally and solar hydrogen will be the fuel of choice at gas stations.

The body of the latest vehicle off the Schatz line was built by Kewet, a Danish company. NEVs are common in Europe, where the lightweight, energy-efficient cars are used for short trips within a community. Leaving the Kewet's 10-horsepower (7.5-kilowatt) motor intact, SERC engineers replaced its batteries with an experimental fuel-cell power system they developed in the Arcata laboratory.

Partners in the Palm Desert project are the Department of Energy (providing \$1.4 million), the state's South Coast Air Quality Management District (\$825,000), City of Palm Desert (\$300,000), SunLine Transit Agency and technology corporations--Dupont, Teledyne- Brown Engineering, ASE Americas, and W.L. Gore and Associates--providing materials and expertise.

The Humboldt State facility will provide more than \$521,000, drawing interest from a \$3.5 million endowment established in 1995 by the center's benefactor, innovative industrialist L.W. Schatz of Pauma Valley, Calif. The research center employs 15 students and graduates of Humboldt's Environmental Resources Engineering program. It has brought in nearly \$10 million to Humboldt County and its work has attracted international interest.

Lehman said the Palm Desert project is "a natural extension" of an earlier research effort funded by Schatz: the Solar Hydrogen Project, which began in 1989 at Humboldt State's Telonicher Marine Laboratory. Completed in 1992 as the country's first stand-alone hydrogen energy system, it demonstrated how hydrogen can serve as storage for solar energy.

"It's amazing to see how far we've come," said Lehman. "I've learned how powerful a simple vision is if you just hold on to it."