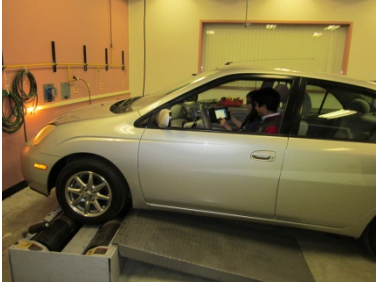


## FACILITIES

The Hybrid and Electric Vehicle Technology Laboratory is equipped with a dynamometer, various diagnostic scanners, instrumentation battery chargers and charging station.



## STAFF

Faculty members of the department and college along with trained technicians and eager students are ready to assist in research and special studies covering a wide range of topics such as electric and hybrid engines, batteries, charging stations, on-board software development.



## SERVICES

This laboratory is available to support delivery of workshops, academic curriculum, and research opportunities as well as to provide test capabilities for car enthusiasts.

## SPONSORS



## CONTACT

### Hybrid & Electric Vehicle Technology Laboratory

Mechanical Engineering Department  
San Jose State University  
One Washington Square  
San Jose, CA 95192-0087  
(408) 924-3850  
Contact: Dr. Fred Barez  
fred.barez@sjsu.edu  
408-924-4298

# Hybrid & Electric Vehicle Technology Laboratory



**SAN JOSÉ STATE  
UNIVERSITY**

**MECHANICAL ENGINEERING  
DEPARTMENT**

## LABORATORY

The Hybrid and Electric Vehicle Technology Laboratory is developed to provide students with state of the art knowledge and education in preparation to enter the workforce for this growing industry. This Laboratory is established to provide research opportunities in the following areas of battery studies, charging stations, on-board electronics and navigation, and the overall vehicle drive train performance.



## HYBRID/ELECTRIC VEHICLE

These vehicles combine the benefits of an efficient gasoline engine and a clean, quiet electric motor. It can be powered by the engine, the electric motor, or a combination of both, and will automatically choose the most efficient mode for the best mpg.



## ELECTRIC VEHICLES

Electric Vehicles use the electrical energy of the batteries, thus reducing the emissions generated the conventional IC engines.



## RECHARGEABLE BATTERIES

Advanced compact and light weight Lithium-Ion battery packs power the electric drive system used in Hybrid/Electric, and Electric vehicles.



## HOME CHARGING STATION

Convenient home charging stations are used to plug-in vehicles for overnight recharge of batteries to provide long range travel on a single charge.



## PUBLIC CHARGING STATION

Public charging stations located in urban settings, public roads and highway would allow batteries to be charged quicker for long distance travelers.

