The Ohio State University
Center for Automotive Research

Consortium

Providing a unique opportunity for industry to engage in original, highly leveraged precompetitive research in automotive and mobility systems, with a focus on advanced propulsion; electrification; vehicle safety and security, connectivity, and automated driving systems.

"The precompetitive research and industry networking opportunities combined with the chance to recruit the top automotive engineering students makes the CAR Consortium program one of a kind."

- Ford Motor Company

Recent Projects

Design of a Computationally Efficient Algorithm for Vehicle Velocity and Energy Management Optimization in a Connected and Automated Mild-Hybrid EV

Driver-In-The-Loop Simulator for Vehicle Dynamics Research

Reliability of Variable Flux Machines for Hybrid Electric Vehicles

Development of a Battery Life Estimation Framework for Automotive Applications Using Supervised Learning

Engineering High-Voltage Cathode - Solid Electrolyte Interfaces

Test Cases for Automated Vehicle Systems and Safety

N.W. 33 Road SMART Corridor Multi-Resolution Traffic Simulation

Dynamic Routing for Autonomous Vehicles for Transportation and Deliveries

Intelligent Vehicle Monitoring for Safety and Security (IVMSS)

Development of a Mobility Cyber Range

Enhancement of Capabilities of Open-Source Automated Driving Stack for Evaluation of Energy Efficiency Potential of CAV
Technologies.

Scenario-Based Approach for Test Case Generation and Simulation for Level 3 Highway Automated Driving

Range Estimation Tool for Battery Electric Transit Buses

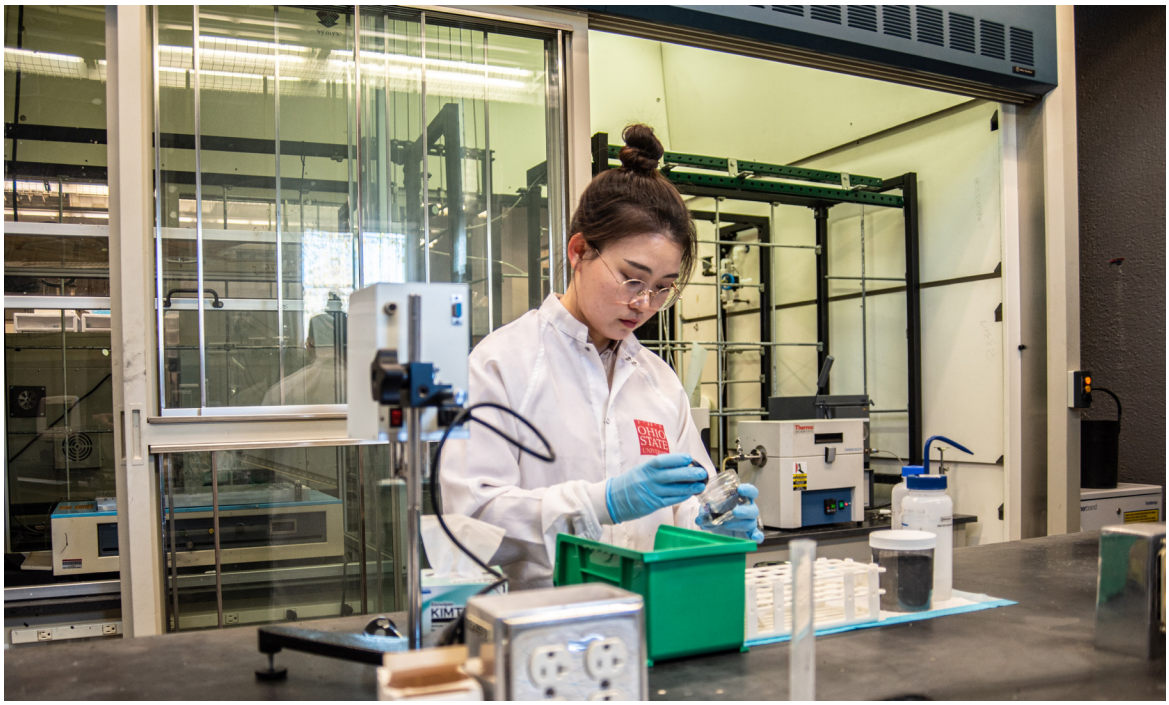
Consortium Membership

The program provides industry partners with a variety of networking opportunities as well as the chance to engage with students who complement their academic studies with hands-on project experience.

The program also provides a platform allowing industry, academic researchers and students to come together and pool their resources to focus on automotive innovations in a pre-competitive environment.

The Consortium provides young faculty with seed grants to engage in industry-relevant research and build towards future collaborative work.

At the Gold level members can provide input on the project selection and at the Platinum level members have the opportunity to directly select a project or topic.



Students are at the center of the program. The vast majority of the membership fees directly support incoming graduate students that will be engaged in the membership research projects which in turn increases the production of graduates who meet the stringent requirements of today's automotive industry.

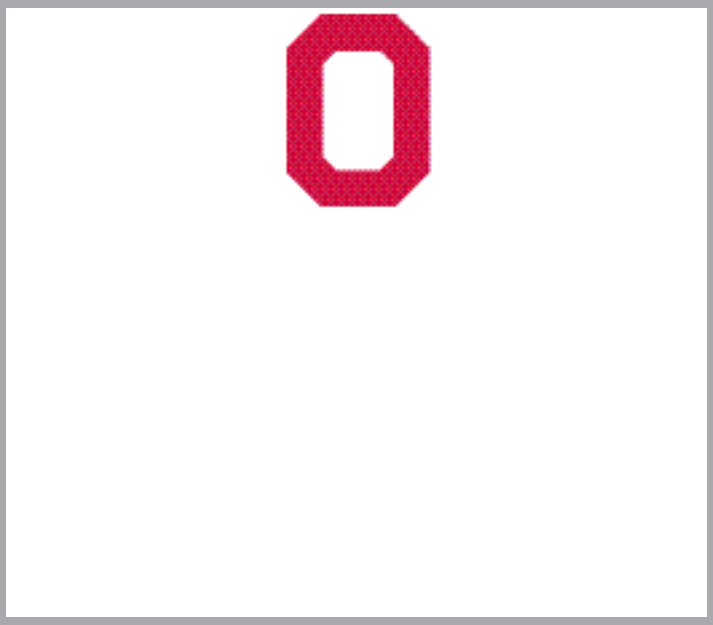
Member Benefits	Gold $30,000	Platinum $50,000
Showcase/feature members in CAR marketing materials	✕	✕
Invitation to Bi-Annual Executive Advisory Board Meetings	✕	✕
Membership sponsored exploratory reporting meetings and access to results and presentations	✕	✕
Distance education benefits (Pre-recorded seminar library)	$5,000 limit	$10,000 limit
Opportunity to present technical seminars at CAR	✕	✕
Opportunity to recruit CAR students through resume access, information sessions and meet and greet events	✕	✕
Corporate mentorship for graduate students	✕	✕
Input on project selection for exploratory research projects	✕	
Direct project selection for exploratory research projects		✕
Consultant time with faculty and senior research staff	✕	✕
10% discount on testing services	$5,000 limit	$10,000 limit

25 years of the CAR Membership Consortium

Smart@CAR

From 2009-2015 Smart@CAR provided a comprehensive research and development consortia program focused on plug-in hybrid electric vehicles (PEVs), electric vehicles and intelligent charging.

AEP AMERICAN ELECTRIC POWER · DP&L · FirstEnergy · pjm · DUKE ENERGY



The Center for Automotive Research (CAR) is the pre-eminent research center in sustainable and safe mobility in the United States and an interdisciplinary research center in The Ohio State University's College of Engineering. CAR research focuses on developing innovations across the mobility industry with an emphasis on projects related to advanced propulsion; electrification; vehicle safety and security and connectivity and autonomy. CAR offers state-of-the art facilities for students, faculty, research staff and industry partners. With a concentration on preparing the next generation of automotive leaders, CAR is recognized for its interdisciplinary emphasis on systems engineering, collaboration on advanced product development projects with industry and a balance of government and privately sponsored research. **More:** car.osu.edu.