



Macomb Community College's seasonal exhibit and lecture series explores the 1950s, the era of the tailfin. One lecturer at MCC said that the 1950s were not as glamorous as often thought.

New USABC Contract Buys Cobasys

SOUTHFIELD – The United States Advanced Battery Consortium LLC (USABC), an advanced research collaboration among Chrysler Group LLC, Ford Motor Company and General Motors Company, last week announced approximately \$15.6 million in advanced battery development and technology assessment contracts to three firms.

The competitively bid contract awards are co-funded by the U.S. Department of Energy (DOE) and include a 50 percent cost-share from each of the contracted companies.

USABC awarded the contracts to develop and assess advanced energy storage technologies for a lower-energy energy storage system (LEESS) for power-assist hybrid-electric vehicles (PHEV) and high-energy density battery cells and battery packs for electric vehicle (EV) applications.

The companies receiving advanced battery development contracts are:

- Cobasys LLC of Orion, Mich., a subsidiary of SB

LiMotive, which was awarded a three-year \$8.36 million contract for the development of high-energy lithium-ion cells for use in EV applications. The contract will include the design, development, delivery and validation of conforming design-intent cells, and through the design, development, delivery and verification of a 40kWh technology demonstration battery pack.

- Maxwell Technologies Inc. of San Diego, Calif., which was awarded \$7.01 million for a two-year ultracapacitor program to help develop technology that will double existing capacitor power density from 10 to 20 kilowatts per kilogram (kW/kg) and double existing energy density from 15 to 30 watt-hours per kilogram Wh/kg. The advanced ultracapacitors then will be integrated into modules that will be evaluated against the USABC goals for LEESS applications.

- SK Energy Co. LTD of Seoul, South Korea, was awarded \$195,149 for a one-year technology assessment of the performance, cycle life

and accelerated calendar life of the company's EV batteries against USABC goals.

"We are pleased to announce the award of these contracts as part of USABC's broad battery technology research and development programs," said Steve Zimmer, executive director of USCAR.

"These programs are essential to advance the technology needed to meet both near- and long-term goals that will enable a broad spectrum of vehicle electrification."

USABC is a subsidiary of the United States Council for Automotive Research LLC (USCAR). Enabled by a cooperative agreement with the U.S. Department of Energy (DOE), USABC's mission is to develop electrochemical energy storage technologies that support commercialization of electric, hybrid electric and fuel cell vehicles.

As such, USABC has developed mid- and long-term goals to guide its projects and measure their progress. USABC is a consortium based in Southfield.

1950s Auto Industry Not Glamorous

by Christine Snyder
Staff Reporter
Tech Center News

The 1950s were an era of tailfins, prosperity and stability for the auto industry. . . right?

The perspective of 1950s autoworkers interviewed for a current research project paints a very different picture of the era when tailfins graced cars.

Daniel Clark, associate professor of history at Oakland University said his research into literature concerned with 1950s auto industry found something was missing; the workers.

"I found most history written about automakers in the 1950s had the same assumptions. . . none of those assumptions were based from talking to autoworkers," said Clark who gave a lecture at Macomb Community College on his research to complement MCC's exhibit "The 1950s: Affluence and Anxiety in the Atomic Age."

Clark said it was assumed autoworkers were enjoying the middle class; reaping the benefits their unions forefathers fought for. Another assumption was that it was a generational job, that autoworkers followed a relative into the industry.

"There was a consensus this was a prosperous era for autoworkers," said Clark.

Clark set out to gather the oral histories of autoworkers of the 1950s. He attended retiree luncheons and kept his ear to the ground and spoke with 45 men and women. He had no criteria except that he wanted the "rank and file" autoworkers, not necessarily union leaders.

The stories told were quite different from the assumptions made in historical literature, said Clark. They were tales of frequent lay-offs, second jobs and scraping by. So uncertain was a career in the auto industry, that even the term "autoworker" was debatable.

"I found the term 'autoworkers' can be misleading," said Clark. "It assumes a

concrete group of people. In reality by the 1950s, over half (the workers) weren't in the industry five years earlier. There was constant change in autoworkers, turnover was extraordinarily high, always new people coming in. They would hire. . . lots of new workers, and promptly lay them off."

Clark found that historians focused on the performance and wages of the auto industry during the 1950s and announce it "prosperous."

The reality was different. "Most (workers) didn't live in hindsight and had to deal with unemployment in the present," said Clark. "Auto work was an uncertain prospect. Most only worked for half a decade and left (the industry), against their will; they tried and couldn't get a foothold."

One story was of Gene Johnson, born in 1925 in Missouri who worked at Pontiac Motors 14 months and then was drafted in 1942. He reenlisted, went back to Missouri to farm but his efforts made him a laughingstock when his cows wouldn't milk and his chickens chose to lay eggs in the woods instead of the coop.

Johnson got rehired at Pontiac Transmission 1953, and later that year it burned down and left 10,000 workers laid off. He experienced lay-offs, one for 11 months in 1958 for. When laid off, Johnson drove a cab.

"That was a recurrent theme; everyone had a backup plan," said Clark.

L. J. Scott, the 14th and last child of an Alabama sharecropper, was laid off from Chrysler in 1952 on his 84th day: six days before his pro-

bationary period was over and he would gain tenure.

"That was common," said Clark. Scott got a job at Pontiac Motors and the next week got drafted. After his service, he worked again at Pontiac and remembered 1955 as a "boom year" but it didn't last as he got laid off in 1956 and again in 1957. He became a barber in his off-times and by the time he was called back in 1958, he had his own barbershop.

Clark said another thing he found was the rarity of legacy jobs.

"Most (1950s) workers were not from this area, they came from all over, and those from here had immigrant parents," said Clark.

While Detroit was flooded with people looking to break into the auto industry in the 1910s when Ford announced his \$5 a day wage, there was also a huge influx during the 1950s, said Clark.

In fact, Clark said one of the themes that emerged from his research was the circuitous path that brought these people to auto work.

"The assumption was that fathers brought sons to the factory," said Clark, who said of the 45 he interviewed, not one had a relative in the auto industry.

"Most of these people I talked to weren't always autoworkers. They wanted to be and sometimes were," said Clark. "None of them considered the '50s as a prosperous time. Not one. It was a period of insecurity and instability."

Daniel Clark's research project will be available soon at the Walter P. Reuther library at Wayne State University.

'Physics of NASCAR' Talk Comes to LTU Campus

SOUTHFIELD – "NASCAR: The Science behind the Speed" is the topic for Lawrence Technological University's 2011 Walker L. Cisler Lecture, which will be delivered by West Virginia University Physics Professor Dian-dra Leslie-Pelecky on Thursday, March 24, at 7:30 p.m. in the Lear Auditorium (T429) of the University Technology and Learning Center at Lawrence Tech, 21000 West Ten Mile Road, Southfield.

Lawrence Tech's annual Walker L. Cisler Lecture is dedicated to the improvement of science education. The event is free and open to the public, and a dessert reception will follow.

Leslie-Pelecky, the author of "The Physics of NASCAR," will discuss what it takes to make racecars faster and safer, and why driving a stock car is much harder than you might think.

he will explain why drivers beg their crew chiefs to make their cars turn better, why turning throws the crew chief's work off balance, why tires are far more than rings of rubber, and how something as simple as leaving an oil-tank lid slightly askew could lead to a competitive advantage.

A nationally recognized researcher in magnetic nanomaterials, Leslie-Pelecky earned a PhD in condensed matter physics from Michigan State University. Her work, which has been funded by the National Science Foundation and the National Institutes of

Health, focuses on the fundamental understanding of magnetic materials and their application to medical diagnosis and treatment processes such as magnetic resonance imaging and chemotherapy.

She was a professor at the University of Nebraska for 14 years and recently became the director of the West Virginia Nano Initiative as well as a physics professor at West Virginia University.

Leslie-Pelecky is also nationally recognized for her work in science education for K-12 schools, future science teachers, and the public. She has directed projects aimed at improving science education at all levels, supported primarily by the National Science Foundation. Educational materials on the science of motorsports are being developed for middle and high schools (www.buildingspeed.org).

Her book, "The Physics of NASCAR," was excerpted by TIME magazine and has been featured in Sporting News magazine.

She appears periodically on the Sirius Speedway satellite radio program to update listeners on the scientific principles that affect their favorite drivers.

Lawrence Tech's 102-acre campus is in Southfield, and programs are also offered in Detroit, Lansing, Petoskey, Traverse City and Toronto. Lawrence Tech also partners with universities in Mexico, Europe, the Middle East and Asia.

DOT, Magazine Release Survey on Driving

YONKERS, N.Y. – The U.S. Department of Transportation and Consumer Reports magazine have released a poll that illustrates how widespread distracted driving is among young people and a plan to help fight it.

The poll says 63 percent of people under 30 acknowledge driving while using a hand-held phone and 30 percent say they've sent text messages while behind the wheel. For those over 30, the percentages were 41 percent on the phone and 9 percent texting.

Only about a third of the young people said they feel such behavior is very dangerous.

"Distracted driving has become a deadly epidemic on America's roads, and teens are especially vulnerable be-

cause of their inexperience behind the wheel and, often, peer pressure," said Transportation Secretary Ray LaHood.

The Department of Transportation says nearly 5,500 people in the U.S. were killed in distracted driving accidents in 2009.

LaHood and Consumers Union President Jim Guest announced a partnership to help parents, teachers and teens battle distracted driving.

A guide for parents and educators is being made available online and will be distributed to schools and volunteer groups. A public service announcement is being sent to TV stations, and a video meant for retail stores is expected to reach as many as 100 million people.

CHARGING FORWARD TOGETHER

SAE 2011 World Congress

The Essential Automotive Technology Event

April 12-14, 2011
Cobo Center
Detroit, Michigan, USA

Plan your Attendance Today

Download the event brochure at www.sae.org/congress for the most current information on:

- Technical Sessions
- Management Program Keynote Speakers
- Networking Opportunities
- Innovators Only Exhibitor Profiles

And So Much More... Register by March 25 and Save!

Host Company



Tier One Strategic Partner



SAE International

www.sae.org/congress