

## New Ecotec Engines to Power GM's Small Vehicles Globally

The days in which different units of GM developed different powertrains for different parts of the world are gone.

A new generation of Ecotec small-displacement engines has streamlined General Motors' global powertrain portfolio.

The engines feature a modular architecture that broadens their adaptability to global markets and reduces manufacturing complexity, said GM powertrain spokesperson Tom Read.

The new engines were developed for global use and will power many of the automaker's highest-volume small cars and compact crossovers.

One of those vehicles is the next-generation Chevrolet Cruze specifically tailored for China. It launches in 2014 as a 2015 model.

By 2017, more than 2.5 million new Ecotec engines are projected to be built annually in at least five manufacturing locations around the globe: Flint, (U.S.); Shenyang, China; Szentgotthárd, Hungary; Toluca, Mexico; and Changwon, South Korea.

The Flint facility alone represents an investment of more than \$200 million in technology and tooling to support the engines' production.

"Transportation solutions vary

around the world and GM is committed to developing engines matched to the needs of the regions where they're sold," said Steve Kiefer, GM vice president, Global Powertrain Engineering.

"The new engine family is designed to achieve segment-leading refinement and efficiency, and will make its way into five GM brands and 27 models by the 2017 model year."

The new Ecotec portfolio will include 11 engines, with three- and four-cylinder variants ranging from 1.0L to 1.5L – including turbocharged versions – and power ratings ranging from 75 horsepower to 165 horsepower.

Torque will range from 70 lb.-ft. to 184 lb.-ft.

The architecture is also designed to support hybrid propulsion systems and alternative fuels.

The first production applications include a 1.0L turbocharged three-cylinder for the new Opel Adam two-door in Europe, and 1.4L turbocharged and 1.5L naturally aspirated four-cylinder engines for the 2015 next-generation Chevrolet Cruze in China.

The turbocharged variants enable the engines to deliver the power and torque of larger-dis-



Two of GM's new 4-cylinder Ecotec engines on the left with new 3-cylinder Ecotec. They represent GM's development of global powertrains.

placement engines with the efficiency of smaller engines.

For example, the turbocharged 1.0L three-cylinder used in the Opel Adam two-door makes as

much power as the naturally aspirated 1.6L four-cylinder it replaces – with an estimated 20

CONTINUED ON PAGE 2

## Chrysler Appoints Lux to Powertrain

Chrysler has appointed Jeffrey Lux as head of Transmission Powertrain, effective immediately.

As part of Chrysler's Leadership Team, Lux is responsible for the design, development and release of all transmission and driveline systems for the automaker, as well as supporting efforts to coordinate Powertrain activities on a global basis.

CONTINUED ON PAGE 3



Chrysler's Jeffrey Lux

CONTINUED ON PAGE 3

## FIRST Robotics Occupies Students with Differening Talents

by Jim Stickford

The aim of FIRST Robotics contests are twofold – give students hands-ons science experience and help educate the next generation of engineers.

Gail Alpert, president of FIRST in Michigan, the organization that handles the competitions in the state, said that FIRST got its start in Manchester, N.H., back in 1992.

Michigan saw its first FIRST groups in 1995.

"The contests started in '92 with just a handful of teams," Alpert said. "I've been involved since 2000. I am not an engineer.

I'm actually a realtor and an attorney.

"My son Jeffrey," she said, "was a member of the team, Las Guerrillas, out of the International Academy in Bloomfield Hills. He had originally wanted to become a doctor, but his participation in the FIRST competitions steered him toward mechanical engineering."

Alpert said the FIRST Robotics competition combines "the excitement of a varsity sport with hands-on training in science and technology to help high school students discover how rewarding a career in engineering or technology can be."

Remote-controlled robots, piloted by students go head-to-head in short games on the floor of a sports arena, battling it out to earn points during a two-minute round, Alpert said.

Alpert said the goal is for three teams, or an alliance, to try to pass a ball back and forth between their robots and try to score points against another alliance of three teams. She said the competition is kind of a mix of basketball and soccer, but with robots.

Students on FIRST teams learn from and play with the "pros" – professional engineers who donate their time to work side-by-

side with students to help design and build the sophisticated competition robots.

This gives FIRST students an insider's view of a career in science, engineering and technology not possible in a normal classroom setting. Plus, every student on a FIRST robotics team can turn "pro" by becoming engineers themselves.

Alpert said that Michigan, through the support of companies like GM, Ford and Chrysler – as well as with support from Gov. Rick Snyder – is well-represented within FIRST.

CONTINUED ON PAGE 6

## SHAP Adding 800 New Employees For Chrysler 200

by Jim Stickford

As the saying goes, nothing succeeds like success.

For the workers at the Sterling Heights Assembly Plant (SHAP), that means the hiring of an additional 800 hourly employees to support the production of the 2015 Chrysler 200.

The announcement was made during a visit by Chrysler CEO Sergio Marchionne to the plant on March 14.

During the event celebrating production of the new mid-size 200, Marchionne confirmed the hiring of 800 additional employees at the facility that had been originally slated to close in 2010.

Joined by UAW President Bob King, Marchionne told the audience – which included Macomb County Executive Mark Hackel, Sterling Heights Mayor Richard Notte, other community leaders and employees – that the plant is an example of how far the automaker has come since June 2009.

Marchionne called SHAP's story one of rags to riches. In June 2009, as a new company emerged, it was announced that



SAE CEO David Schutt

## World Congress Will Focus On Technologies

by Jim Stickford

Society of Automotive Engineers CEO David Schutt gave members of the Detroit automotive press corps a preview of what will be at the group's 2014 World Congress, which will be held in Cobo Center April 8-10.

Schutt spoke to the Automotive Press Association at a special luncheon March 18 at the Detroit Athletic Club.

He described the organization, its makeup and purpose, then added that the SAE has scientific papers going back to 1906, an invaluable resource to members doing research.

"We're a global organization because that's where the automotive industry is going these days," Schutt said. "We offer life-long learning programs aimed at the professional engineer and STEM programs aimed at children."

CONTINUED ON PAGE 5



Cardinal Mooney High School's Robosapiens line up after winning the Center Line district FIRST Robotics recent contest.

## GM Does It Right, Says PR Specialist

by Jim Stickford

GM's response to the recall controversy is an example of how a large company should act when facing a problem, said David Johnson, CEO of the public relations firm Strategic Vision in Atlanta.

Johnson gives GM credit for having the courage to do what should be done.

"First, let me say that we have no business with GM," Johnson said. "I am just looking at the situation from the outside as a PR professional."

Johnson said that in cases like this, PR professionals will often run into lawyers who want to say nothing.

"Lawyers are thinking of things like admitting culpability, negotiating settlements and legal responsibility," Johnson said.

"PR people will be thinking of things like getting out in front of the story, and how to reach the targeted audience with a message that will help cool down the situation.

"In this case, the targeted audiences are employees, investors and consumers. The PR people will want a company to be active and get out as much information as soon as possible to shape the narrative."

Consumers, Johnson said, will be expecting three things:

- Admission that something went wrong;
- Evidence that the company has fixed, or at the very least, is seriously looking at the problem;
- Finally, and very importantly, an apology.

"GM has done all of that," Johnson said. "They've been smart.



Mary Barra

"One of the biggest mistakes I see companies make in a crisis is that the information they give out is done through press releases or through a spokesperson. This gives the company the impression of being cold and heartless.

"(GM CEO Mary) Barra has given a public statement, she has given GM a face. One of the things she said in her public statement is that she is a mother herself. People can relate to that, and she appears not to be a person who cares only about profits. She gave the company a human face and that's what GM needs right now."

All these actions have gone a long way toward shifting the narrative of the story, Johnson said. Instead of it being about how people are talking about GM recalling a lot of cars because of bad publicity, it's about how the company, and Barra in particular, is taking responsibility for what has happened and how they at GM are addressing the problems they are facing."

Johnson added, "This is in the

news. "It's being covered by the national media, but I imagine it's a much bigger story in Detroit.

"People across the country are watching a lot of news stories, and this is only one of them. There is the missing plane. CNN has practically become the missing plane network. The crisis in the Ukraine is on the front pages more."

So when people do see and hear about this story, having the narrative shaped by Barra's actions is what is ideal, Johnson said.

"Here in Atlanta, the media is talking about how Barra is different from other auto executives," Johnson said. "Presumably, if you ask the average person on the street what stories he or she is following the most, the answer probably won't be the GM recall.

"They might say the economy or the jobs situation or the NCAA basketball tournament. But if you were asking someone who is currently thinking about buying a car, then the story would probably rate higher."

The next thing GM should do, Johnson said, is reach out to the victims. Often in cases like this, where people have died, the victims' families say that no one from the company reached out to them. And that hurts the company in the long run.

"What they shouldn't do," Johnson said, "is what Chevron did earlier this year. An oil well in Pennsylvania exploded and killed a worker." Smoke enveloped the town for a few days.

"The company," Johnson said, "gave everyone (in town) coupons for free pizza. And what's worse, the coupons expire in May.

"That's what's called adding insult to injury."

## GM's Jeff Boyer Appointed VP, Global Vehicle Safety

General Motors CEO Mary Barra named a new vehicle safety leader whose first priority will be to quickly identify and resolve product safety issues.

Jeff Boyer was named March 19 to the newly created position of vice president, Global Vehicle Safety, effective immediately.

Boyer, who has spent nearly 40 years in a wide range of engineering and safety positions at GM, will have global responsibility for the safety development of GM vehicle systems, confirmation and validation of safety performance, as well as post-sale safety activities, including recalls.

Boyer will provide regular and frequent updates on vehicle safety to Barra, senior management and the GM Board of Directors.

"Jeff's appointment provides direct and ongoing access to GM leadership and the Board of Directors on critical customer safety issues," said Barra.

"This new role elevates and integrates our safety process under a single leader so we can set a new standard for customer safety with more rigorous accountability. If there are any obstacles in his way, Jeff has the authority to clear them. If he needs any additional resources, he will get them."

"Nothing," said Boyer, "is more important than the safety of our customers in the vehicles they drive. Today's GM is committed to this, and I'm ready to take on this assignment."

Boyer, 58, will report to John Calabrese, vice president of Global Vehicle Engineering and become a



Jeff Boyer

member of the Global Product Development staff, led by Mark Reuss, executive vice president, Global Product Development, Purchasing and Supply Chain.

Boyer began his GM career in 1974 as a co-op student and has held several senior engineering, safety and process leadership positions, including the role of a total vehicle integration engineer. His most recent position since 2011 was executive director of Engineering Operations and Systems Development.

Before that, Boyer served as executive director of Global Interior Engineering and Safety Performance, where he was responsible for the performance and certification of GM vehicle safety and crashworthiness.

He holds a Bachelor of Science in Electrical Engineering from Kettering University and a Master of Business Administration from Michigan State University.

## GM Expects Safety Recalls to Cost \$300M

As a result of GM CEO Mary Barra's request for a comprehensive internal safety review following the ignition switch recall, General Motors is conducting three separate recalls of U.S. production and vehicle sales.

The recalls consist of:

- 303,000 Chevrolet Express and GMC Savana from the 2009-2014 model years with gross vehicle weight under 10,000 pounds;
- 63,900 Cadillac XTS full-size sedan from the 2013 and 2014 model years and 1.18 million Buick Enclave and GMC Acadia models from the 2008-2013 model years;
- Chevrolet Traverse from the 2009-2013 model years, and Saturn Outlook from the 2008-2010 model years.

"I asked our team to redouble our efforts on our pending product reviews, bring them forward and resolve them quickly," said Barra. "That's what today's GM is all about."

The Express and Savana vans do not comply with a head impact requirement for unrestrained occupants, requiring a rework of the passenger instrument panel material, GM spokesperson Jim Cain said.

Unsold vehicles have been placed on a stop delivery until

development of the solution has been completed and parts are available, Cain said, adding that customers will be notified at that time. Repairs will be made at no charge to customers.

In the XTS, a brake booster pump can create positive pressure within the wiring harness attached to the pump relay, said Greg Martin, another GM spokesperson. This pressure, he said, can lead to overheating, melting of plastic components and a possible engine compartment fire.

GM is aware of two engine compartment fires in unsold vehicles at dealerships and two cases of melted components, Martin said.

With respect to the Enclave, Traverse, Acadia and Outlook, the vehicles are equipped with a Service Air Bag warning light in the driver

information center, Martin said.

Ignoring the Service Air Bag warning light will eventually result in the non-deployment of the side impact restraints, which include driver and passenger seat-mounted side air bags, front center air bag (if equipped), and the seat belt pretensioners.

"This announcement underscores the focus we're putting on the safety and peace of mind of our customers," Barra said. "We are conducting an intense review of our internal processes and will have more developments to announce as we move forward."

GM expects to take a charge of approximately \$300 million in the first quarter primarily for the cost of the repairs for the three safety actions and the previously announced ignition switch recall.

## GM Introduces New Ecotec Engines

CONTINUED FROM PAGE 1

percent improvement in efficiency.

In fact, Read said, the new Ecotec family is on the leading edge of efficiency, with the new 1.4L turbo up to five percent more efficient than the 1.4L turbo engine it will replace.

The new Ecotec engines also deliver segment-challenging refinement, said Read.

Noise intensity, he added, is up to 50 percent quieter than Volkswagen's EA211 1.4L four-cylinder and up to 25 percent quieter than Ford's 1.0L turbo three-cylinder.

The new Ecotec engines represent a clean-sheet design and engineering process, Read said.

Technologies such as central

direct fuel injection, continuously variable valve timing, turbocharging and variable intake manifold airflow help achieve efficiency goals.

"The new Ecotec architecture represents the most advanced and efficient family of small-car gas engines in GM's history," said Tom Sutter, global chief engineer.

"Along with performance and efficiency targets, we've also aimed for segment-leading refinement with low noise and vibration – and we've hit the bull's-eye."

Modularity in parts – such as four-cylinder and three-cylinder blocks – that share bore spacing, bore diameter, liners and other dimensions, reduces complexity while increasing the flexibility to quickly adapt the architecture for new applications, Sutter said.

### Considering a Pension Payout?

Visit [KaydanWealthManagement.com](http://KaydanWealthManagement.com) for a complimentary white paper discussing seven decision factors to help you determine whether to continue pension benefits or take a lump sum payout.

**KAYDAN**  
WEALTH MANAGEMENT

An Independent Firm

329 W. Silver Lake Road, Fenton, MI 48430 // Ph. 810-593-1624 // 800-638-6900 // Fx. 810-593-1643

[www.KaydanWealthManagement.com](http://www.KaydanWealthManagement.com)

Securities offered through Raymond James Financial Services, Inc., member FINRA/SIPC.

Scan for  
shortcut to  
white paper



### Detroit Auto Scene

31201 Chicago Road South  
Warren, Michigan 48093

586-939-6800

Contact us:  
[Info@DetroitAutoScene.com](mailto:Info@DetroitAutoScene.com)

Deadline: Thursday 5:00 p.m.  
for the next edition of Monday

William Springer II, publisher  
Lisa A. Torretta, operations  
Jim Stickford, news

Detroit Auto Scene is a registered  
trademark of Springer Publishing Co.

[www.DetroitAutoScene.com](http://www.DetroitAutoScene.com)

## Viper Fans Cry Foul as Chrysler Requests School-Used Cars be Destroyed After Use

As the saying goes, no good deed goes unpunished.

Dodge has come under fire for requiring the Vipers the company donated to schools be destroyed when the schools were finished with the vehicles.

Explaining Chrysler's position, Mike Driehorst, editorial director of Online Media for Chrysler wrote a blog that discussed the issue.

"There's nothing like car culture passion," Driehorst wrote. "We see it every day, and a lot of people have witnessed it since (recently) when reports of Chrysler Group asking schools to 'crush' early Dodge Vipers within the next couple of weeks.

"While we very deeply appreciate – and can relate to – the passionate outpouring to #SaveTheVipers, we do need to clear the air about what's going on and what we did. So, let's set the record straight.

"About 10 years ago, Chrysler Group donated a number of Dodge Viper vehicles to various trade schools for educational purposes. As part of the donation process, it is routine, standard procedure – and stipulated in our agreements – that whenever vehicles are donated to institutions for education purposes that they are to be destroyed when they are no longer needed for their intended educational purposes."

Driehorst added that with advancements in automotive technology over the past decade, it is unlikely that these vehicles offer any educational value to students.

"We definitely understand and appreciate the historical significance of the Viper," Driehorst wrote. "And, we are sure to maintain any of the legendary models and designs for historic purposes. It's our heritage, so, of course we take great pride in preserving it. Chrysler Group maintains all of the legendary models and designs we produce and manufacture to help preserve our heritage."

However, none of the vehicles at the schools fit into this category, Driehorst wrote.

To recap, he continued, the Vipers in question have no significant historical value, have not been involved in any accidents and serve no educational purpose – which is what they were designed to do at first.

This answer did not satisfy angry Viper lovers. Driehorst's blog had a comments section. One replier wrote, "Would it kill you to spare these cars? Crushing them is a public relations black eye but it would be a PR home run if you decided to let the schools keep them, or auction them off and give the proceeds to the schools.

"Let these cars live out their

golden years in some collector's climate-controlled garage where they only come out for car shows to delight spectators. Crushing muscle cars of any era leaves a very sour taste in the mouths of car lovers, especially Mopar addicts."

Other comments were less kind, with posters saying that Chrysler was being stupid and they would never buy another product again.



This 2004 Viper is an example of the type of car donated to schools.

## SHAP Adding 800 New Employees for Chrysler 200

CONTINUED FROM PAGE 1

the plant would close in December 2010.

He said community leaders and employees rallied together to "rewrite the plant's fate."

"This celebration has been a long time coming for the workforce here at Sterling Heights," said King. "They have proven that American autoworkers lead the world in building quality products.

"What has been achieved here is a testament to the collaborative spirit that exists between the UAW and Chrysler."

With the two new facilities, the plant is now one of the most flexible and state-of-the-art in the company with nearly five million square feet of manufacturing space, Marchionne said.

As a result, SHAP is now capable of building multiple vehicles

on two unique architectures.

With the launch of the Chrysler 200, SHAP has added another 800 jobs as a result of insourcing of several critical processes, the additional content of the new 200 and the implementation of World Class Manufacturing (WCM), Marchionne said. Total employment at SHAP has grown to nearly 2,800, more than double what it was in 2009.

"We are here today because so many of you believed that the only difference between the possible and the impossible is that the impossible has never been done before," Marchionne told the employees.

"At the end of the day, our decision to invest in SHAP came down to the level of commitment shown by each of you that works here. You have demonstrated a passion to deliver great

products for our customers."

Since June 2009, Chrysler Group has announced investments of nearly \$5.2 billion and added 13,400 hourly employees.

Speaking to reporters, Marchionne said that Chrysler would make the same kind of commitment to its other facilities where employees and government officials showed the same level of commitment that was shown for the SHAP facility.

And, he said, most Chrysler plants now have the flexibility that SHAP does, in terms of being able to build more than one architecture. That trend will only get stronger in the future, he said.

And, Marchionne said, the quality of the vehicle built at SHAP is truly world-class. "This plant now has the best equipment and the best workers in the world," he said.

## Lux Named Chrysler Powertrain Head

CONTINUED FROM PAGE 1

Lux joins Chrysler from General Motors, where he held a series of engineering positions with increasing responsibility since 1986.

Most recently, he served as executive director, Powertrain New Product Launch.

His professional background also includes:

- 2012, executive director of Global Powertrain Quality, General Motors;
- 2010, vice president, GME Powertrain Engineering, General Motors Europe, Rüsselsheim, Germany;
- 2009, global chief engineer, FWD Hybrid Electric Drive Units, General Motors;
- 2006, global chief engineer, Global Front Wheel Drive 6 Speed Automatic Transmissions, General Motors;
- 2003, director, Powertrain Engineering, Pan Asian Technical Automotive Center (PATAC), Joint Venture of General Motors and SAIC;

- 1998, Development Systems manager, V6 Engines, General Motors;
- 1996, engineering manager – Australia, General Motors Corporation, Delphi Automotive Systems, Melbourne, Australia;
- 1993, engineering manager – Applications, General Motors Corporation, Delphi Automotive Systems, Tokyo, Japan;
- 1989, Project Engineer, General Motors;
- 1986, Associate Project Engineer, General Motors.

**ROLLBACK PRICES ARE BACK 11 a.m. - 4 p.m.**

*Be in and out in 45 minutes. The Lelli family wants everyone to come and experience fine dining...*

**Housemade Pasta dishes starting at \$9.95**

**Lelli's Restaurant**  
855 N. Opdyke 248-373-4440  
In Auburn Hills

→ BUSINESS LUNCHEONS → DINNER 4 pm-10 pm

FINE DINING SINCE 1933; NORTHERN ITALIAN CUISINE

**REGISTER TODAY!**



creating new possibilities

THE ESSENTIAL AUTOMOTIVE TECHNOLOGY EVENT

# 2014 WORLD CONGRESS

April 8-10, 2014  
Cobo Center  
Detroit, Michigan USA

**Announcing Keynote Speakers:**

**Woong-chul Yang**, Vice Chairman, Hyundai Group LLC  
**Dr. Peter Phleps**, Senior Researcher/Futurist, ifmo  
**Myles Kovacs**, President/Co-Founder, DUB Magazine

Host Company



Tier One Strategic Partner



**LEARN MORE TODAY!**

[www.sae.org/congress](http://www.sae.org/congress)

## WARREN URGENT CARE

**8am-10pm • 7 Days a week • 365 Days a Year**

*"Bringing Quality Urgent Care To Your Neighborhood"*

*"We Care"*

**URGENT CARE FOR ACCIDENTS AND INJURY**

**ADULT & PEDIATRIC ILLNESS**

Digital X-Rays, EKG and Lab Work, On-Site Lab Service, Strep, Mono, Pregnancy & Urine Testing, Vaccinations, Sports & School Physicals, Occupational Medicine, Work-Related Injuries, Pre-Hire Physicals (BAT & Urine Screening)

**SPECIAL ON SPORTS PHYSICAL \$25.00 State-of-the-Art Facility**

**586-276-8200**

**31700 Van Dyke • Warren, MI 48093**

On Van Dyke Rd., between 13 & 14 Mile in St. John's Windemere Park

OTHER CONVENIENT LOCATIONS:

**Woodland Urgent Care**  
22341 W. 8 Mile Road  
Detroit  
**313-387-8700**

**N. East Macomb Urgent Care**  
43900 Garfield, Suite 121  
Clinton Township  
**586-868-2600**

**▶ FLU SHOTS ◀**

**ATTENTION**  
Chrysler, GM, Ford Employees, we're within 2 miles of your plants

**HAP & BCN**  
**NO Referrals Needed!**  
[www.warrenurgentcare.com](http://www.warrenurgentcare.com)

# GALEANA'S

Van Dyke Dodge-Ram

## DODGE RAM IN WARREN

**EASY TO GET TO...EASY TO DEAL WITH FOR OVER 50 YEARS!!!**

**NEW 2014 RAM 1500 BIG HORN**

24 MO. 1-PAY LEASE **\$2,699\*** JUST ADD TAX

24 MONTH LEASE **\$118.99\*** OR LESS \$456.13 DUE AT SIGNING

STK. #4-9310

2013 TRUCK OF THE YEAR

**NEW 2013 DODGE DART**

• RALLYE  
• 6XT SPECIAL EDITION  
• 8.4" TOUCH SCREEN MEDIA CENTER

24 MONTH LEASE **\$159.95\*** OR LESS \$1,971.00 DUE AT SIGNING

PURCHASE **\$14,998\***

STK. #3-2294

UP TO 41 TO MPG

**NEW 2014 DODGE CHARGER RT AWD**

BRRR! REMOTE START & HEATED SEATS INCLUDED!

24 MO. 1-PAY LEASE **\$3,499\*** JUST ADD TAX

24 MONTH LEASE **\$110.66\*** OR LESS \$1,897.50 DUE AT SIGNING

STK. #4-8172

**NEW 2014 DODGE GRAND CARAVAN**

30TH ANNIVERSARY EDITION

ROAD TRIP TIME!

24 MONTH LEASE **\$179.95\*** OR LESS \$1,931.35 DUE AT SIGNING

PURCHASE **\$16,935\***

STK. #4-6078

**NEW 2014 DODGE JOURNEY RT**

BRRR! REMOTE START, HEATED SEATS & HEATED STEERING WHEEL INCLUDED. NAVIGATION BACK-UP CAMERA!

24 MO. 1-PAY LEASE **\$2,999\*** JUST ADD TAX

24 MONTH LEASE **\$119.47\*** OR LESS \$45.14 DUE AT SIGNING

STK. #4-3229

**NEW 2014 DODGE DURANGO**

THE LAST OF THE REAL SUV'S

24 MONTH LEASE **\$199.95\*** OR LESS \$2,080.00 DUE AT SIGNING

PURCHASE **\$24,950\***

STK. #4-7091

24 MPG

28400 VAN DYKE, WARREN

**EASY TO GET TO EASY TO DEAL WITH FOR OVER 50 YEARS!!!**

JUST A HALF MILE NORTH OF I-696

2014 AWARD SEASON EVENT

TRUCK MONTH

SALE HOURS: MON. & THURS. 9AM-9PM  
TUES., WED. & FRI. 9AM-6PM • SATURDAY 9AM-3PM

28400 Van Dyke www.vandykedodge DODGE/RAM SALES LINE: 1-586-573-4000

\*The above purchase prices are plus tax, title, doc and destination. Includes Chrysler's standard rebates plus the least (but already) financing lease rebates. Lease payments are based on Chrysler Capital Tier 1 approval, 10,000 miles per year, and will have a \$395 disposition fee at lease termination. Lease payments are also based on Chrysler's standard rebates plus lease full and loyalty rebates. Security deposit is not required. One pay lease just add tax, due at signing includes first payment, taxes and fees, just add plates. Residency restrictions apply. \*or less if you qualify for an employee, supplier, military or friends discount your price could be lower. †See dealer for details. Expires 3/31/14

## Mopar Offers Hemi Gear To Mark Engine's 50 Years

by Jim Stickford

Sometimes good things come in large packages.

With 2014 marking the 50th anniversary of the introduction of the second-generation (Gen II) 426 Race Hemi engine to motorsports competition, Mopar, Chrysler's service, parts and customer-care brand, has created a special product line of merchandise to help celebrate the milestone.

Mopar kicked off the year-long commemoration of the legendary engine in January with the unveiling of a 50th anniversary logo that incorporates an elephant in reference to the engine's moniker, earned from the powerplant's imposing size, strength, power and longevity, said Chrysler spokesperson Beth Ann Bayus.

The logo also features the trademark Hemi-orange color that covered the engine and made it even more recognizable.

"This anniversary is a very big deal," Bayus said. "This was the engine that spawned all the rest. The Hemi engines used in today's cars can be traced back to this 426 Race Hemi."

Dale Aldo is the Motorsport Marketing manager for Mopar, or as Bayus likes to call him, the resident expert on all things Hemi.

"The reason why the logo for the anniversary gear has an elephant on it is because the engine was called an elephant by enthusiasts," Aldo said.

"In those days, everything had to have a nickname. The Pontiac GTO became the Goat. The reason why the 426 Racing Hemi was called the elephant was because it was a physically imposing engine."

In fact, Aldo said, it filled up the engine compartment.

"And if you can remember how spacious engine compartments were in those older cars, you know how impressive that is," Aldo said.

"We don't know who first started calling this particular engine the Elephant. While it was pro-

duced, the last one was made in 1971, it made a big impact on motorsports."

And, Bayus said, to celebrate and commemorate this historic Racing Hemi engine, Mopar has produced a line of gear featuring the Hemi 50th anniversary logo.

The items are available at WearMopar.com and include merchandise such as clothing, decorative lighting, clocks, a pub table, stools and much more.

All of the new Hemi 50th anniversary merchandise incorporates Racing Hemi Orange through color blocking, stripes and other fashion forward applications.

"We have many unique items to give fans another way to join us in celebrating the revolutionary engine that inspired a long line of quality products in our brand's portfolio and became such a vital part of Mopar's heritage," said Tricia Hecker, Mopar's Marketing director.

"We're really happy with the variety and selection of items we are offering to true fans of the iconic Hemi."

Here are some of the featured items in the new Hemi 50th merchandise line:

- Hemi 50th Anniversary Neon Sign - \$395.
- This neon sign comes in the shape of the 50th anniversary Hemi logo measuring 26 inches by 21 inches. The sign operates on regular 110-volt household current and is more efficient than incandescent bulbs and does not require any assembly or special wiring;
- Hemi 50th anniversary medallion and wooden display box - \$83.95;
- Ladies Athena V-neck T-shirt - \$26.95;
- Exclusive Hemi 50th Anniversary lightweight pullover hoodie - \$45.95;
- Adult color-block pullover hoodie - \$54.95;
- Hemi 50th Anniversary journal book - \$16.95;
- Hemi 50th Anniversary 17-inch wall mirror - \$72;
- Hemi 50th Anniversary men's Galeros jacket - \$51.95.

## GM's OnStar to Help Fleet Customers

General Motors is partnering with Telogis, Inc., to provide fleet customers a program to help control costs, increase safety and improve fleet operations.

The Telogis cloud-based platform will work with GM's OnStar system to provide fleet customers with information about vehicles, such as fuel consumption, vehicle location, best routes to take and vehicle problems.

The location intelligence software will be offered to GM fleet customers this spring, said General Motors spokesman Robert Wheeler.

The fleet customers, in turn, will contact Telogis to have the service turned on.

Telogis is integrating its location intelligence platform with GM OnStar's APIs (application program interfaces).

Through the new offering, commercial fleets can make decisions relating to vehicle location, odometer, fuel consumption and other maintenance information on their GM connected vehicles.

"The combination of OnStar's industry-leading, unique infrastructure and the Telogis platform will allow fleet managers to keep their vehicles running smoothly on the road," said Ed Peper, U.S. vice president of GM Fleet and Commercial.

"This is the next step in expanding our connected vehicle service offerings to help fleets

operate more efficiently and identify cost savings."

"By leveraging GM's OnStar connected services infrastructure," said Susan Heystee, executive vice president, Worldwide Sales at Telogis, "we make it easier for customers to access our comprehensive location intelligence platform directly through any GM OnStar-equipped commercial vehicles.

"GM customers have easy access to powerful analytics and connected intelligence that will transform the way their business is done outside the four walls."

Information from the field is transmitted from the vehicle using OnStar technology, Peper said.

The system requires no additional hardware or third-party installation costs, making it an attractive and cost-effective solution, he said, for commercial fleets to access location and vehicle intelligence, assisting fleets in lowering their total cost of ownership.

The Telogis platform is the first set of commercial applications to use OnStar's proprietary APIs since GM and OnStar announced in early 2013 an online portal, Peper said.

The portal, said Wheeler allows developers to work with GM in a secure and controlled manner to design, test and deliver relevant, customizable and seamlessly integrated automotive apps and services.

Zoo

Tech Center

I-696

Suburban Buick GMC of Ferndale

# SUBURBAN

Suburban Buick GMC of Ferndale

**877-913-5085**

21800 Woodward Ave.  
Ferndale, MI 48220

## GM EMPLOYEE PRE-OWNED HEADQUARTERS

2011 GMC YUKON DENALI • 39,000 Miles Silver • Loaded Up! • Chrome Wheels! - P0890	<b>\$41,500</b> ✓ CERTIFIED
2013 BUICK ENCLAVE • 21,000 Miles Gray • Third Row Seats • Conv. Group! Clean! - P0864	<b>\$29,995</b> ✓ CERTIFIED
2011 BUICK LACROSSE • 43,200 Miles CX • Black • 19 City/20 Hwy! - BE0042A	<b>\$14,995</b> ✓ CERTIFIED
2011 BUICK REGAL • 38,800 Miles CXL Turbo • Quicksilver • Leather Seats! - GE0263A	<b>\$16,895</b> ✓ CERTIFIED
2013 CHEVY MALIBU • 14,000 Miles Silver • Low Miles • Cloth Seats • Certified! - GE0299A	<b>\$16,995</b> ✓ CERTIFIED
2008 BUICK ENCLAVE • 76,000 Miles Gold Mist • Third Row Seats • FWD • Clean! - P0865	<b>\$17,995</b>
2013 GMC ACADIA DENALI • 14,000 Miles Lo-Lo-Loaded! • Black Metallic • Leather • Nav. - P0878	<b>\$43,500</b> ✓ CERTIFIED
2010 GMC ACADIA • 13,000 Miles Gold Mist • FWD • V6 • Low Miles! - P0876	<b>\$19,995</b> ✓ CERTIFIED
2007 CHEVY TRAILBLAZER • 114,000 Miles Need A Second Car? Local Trade-In! - PE0881A	<b>\$9,500</b>
2011 CHEVY CRUZE • 38,000 Miles Silver • Clean • Automatic • 24 City/35 Hwy! - P0885	<b>\$13,777</b> ✓ CERTIFIED

[www.SuburbanBuickGMCofFerndale.com](http://www.SuburbanBuickGMCofFerndale.com)

**877-913-5085**

If you don't see it, I'll get it! Ask for Bob Cornwell Jr. - Sales Manager

# SAE World Congress to Focus on Technology

CONTINUED FROM PAGE 1

Because the SAE is a technology-based organization, the six main topics or themes at the upcoming Congress will reflect that, Schutt said. One of the most important areas of discussion will be on connected vehicles.

He said that new partnerships between Detroit and Silicon Valley are being formed all the time. Connected technology includes vehicle-to-vehicle connections, vehicle-to-infrastructure connections and vehicles-to-grid connections.

Each kind of connection presents its own challenges in terms of elements like speed of connection and security of connection, Schutt said, adding that this is only going to get bigger and needs international standards that everyone can follow and work with.

Electric vehicles aren't going away, Schutt said, and the SAE will continue to work on setting standards for those vehicles. There will also be discussions on EVs in Detroit next month.

The question of battery research is very important to automakers, Schutt said, noting that questions of how batteries will be charged in the future will be a major topic at the Congress.

He said battery research deals

with items like infrastructure at both the individual, local and regional levels.

And, Schutt said, cyber security has come to the auto industry. Today's automobiles are connected to "the cloud" in ways that were inconceivable only a few years ago, he said, adding that this requires new thinking by automotive engineers and new technologies with new protocols that everyone can agree on.

Questions of autonomous driving and the standards and technology needed to make that reality will also be discussed at the Congress.

But this year's Congress will be more than about standards and technology, Schutt said. It will be about developing the next generation of automotive engineers, he added.

Andy Smart, the SAE's director of Industry Relations and Business Development, said that during the last recession, the auto industry took a big hit not only to its pocketbook, but to its reputation.

Simply put, Smart said, a lot of young engineers stopped looking at careers in the industry because it wasn't the "cool" place to be.

So part of what the SAE will be doing at the Congress is selling

the auto industry to the next generation, Smart said. And that, he added, will be only part of a longer-term effort to promote the industry.

As the auto industry truly becomes international after it developed regionally, the need for common standards will become more important, Schutt said. As the industry becomes ever more competitive, he added, the need for continuing education will be greater than ever before.

## Europe Car Sales Up in February

MILAN (AP) – European car sales grew for a sixth consecutive month in February but remained at a low level as the market recovered slowly from the financial crisis.

The European carmakers' association said that sales of new passenger cars in the EU grew 8 percent last month to 861,058 units. Carlos Da Silva of IHS Automotive said this compares with "dreadful" lows recorded in six years of contraction and "the overall situation remains more tense that it might appear." February's sales were at the second-lowest level ever for the month.

In major markets, only France saw sales drop, by 1.4 percent.

## Play is the Name of the Game at Chevy

Chevrolet has launched "What Do You #PlayFor?" – a new social and digital global campaign to inspire and bring football fans closer to the sport than ever.

The brand also will be unveiling a new initiative to make lasting impacts in developing areas where play and recreation is most needed, said Cristi Vazquez, Chevrolet's Advertising and Promotions spokesperson.

"The act of play is a fundamental human need that transcends cultures and impacts all ages," said Alan Batey, General Motors executive vice president, Global Chevrolet.

"Joyful play is the fuel of ingenuity and imagination for children and adults alike, driving a sense of what is possible.

"Through our partnership with Manchester United and One World Futbol Project, Chevrolet is harnessing the passion for play to bring everyone closer to the game. The message we're sending to football fans around the world is that at Chevrolet, we play for you."

Chevrolet used the Sunday, March 16, Premier League match between Manchester United and Liverpool FC to globally launch "What Do You #PlayFor?" – including asking the question on social media and sharing fans' answers in words and images at www.chevroletfc.com, Vazquez said.

"From the beginning of our partnership nearly two years ago, Chevrolet has followed through on its pledge of bringing fans closer to our Club and using football to do good around the world," said Richard Arnold, Manchester United group managing director.

"Chevrolet's 'What Do You Play For?' campaign will stimulate global discussion and engagement amongst Manchester United's 659 million followers worldwide and create meaningful change around the world."

Chevrolet and One World Futbol Project are collaborating to bring the "power of play" to children around the world by donating and distributing 1.5 million nearly indestructible footballs, or soccer balls, to organizations working in developing communities. According to a statement released by One World Futbol Project, One World Futbol balls have been delivered to more than 50



"What Do You #PlayFor?" is a new global campaign aimed at football.

countries affecting the lives of an estimated 21 million children.

Chevrolet and Manchester United also announced that well-known players affiliated with the club will be deployed this year to work with coaches and children in developing regions around the world.

Chevrolet is currently working in Bandung, Indonesia, to revitalize the community's pitch on behalf of Rumah Cemara, a local organization that uses peer intervention and football to increase the quality of life for people with HIV/AIDS and people who use drugs. The story is told through videos at www.chevroletfc.com.

"One World Futbol Project's goal is to bring the power of play to children everywhere in the world, especially those living in disadvantaged communities where play opportunities are scarce and where children play in harsh environments," said Tim Jahnigen, co-founder and chief innovation officer of One World Futbol Project.

"Chevrolet's commitment to creating a positive, lasting impact through play makes Chevrolet an ideal partner to support our mission to help youth around the world realize their potential through play."

Chevrolet is planning several additional announcements and fan engagements around the world this year regarding its Manchester United sponsorship, other partnerships, and the "What Do You #PlayFor?" campaign, including the July reveal of

the Chevrolet-branded Manchester United match shirt, where Chevrolet will ask fans to take part in a unique digital experience, Vazquez said.

Michael Bernacchi, professor of marketing at U-D Mercy, said the moves Chevy is making by using soccer as a promotion make sense.

"This is a way to connect with the public," Bernacchi said. "Especially with Hispanic buyers and with the Latin American markets."

Bernacchi said World Cup soccer games are coming up. This year's Cup is being hosted by Brazil. He said other world-wide brands, such as Anheuser-Busch, are beginning to debut their World Cup promotions.

"The buying power of the Hispanic community here in the U.S., and the economies of Latin America are becoming stronger," Bernacchi said. "The need for companies like GM to compete with these demographics and markets is strong. Any foothold that they can get is very important."

Using soccer as a way to connect with these potential buyers is just a good idea, Bernacchi said.

"I'm sure Chevy understands this and will use both traditional and the new social medias to help forge this connection," Bernacchi said.

"It's especially important to use social media, because that's where the young people are, both here and in Latin America."

# JOE LUNGHAMER'S CASH FOR CLUCKERS IS BACK!

ANY CAR 1999 OR NEWER, RUNNING NO SALVAGE TITLE  
**\$2,000 ON PURCHASE OR LEASE OF A NEW CAR**

'14 CHEVROLET VOLT



**\$219\***  
 Lease for 36 months



CALL  
**BRUCE LITVIN**  
 - 24/7 & 365 -  
 40 YEARS  
 OF QUALITY SERVICE

CELL # **1-586-405-5175**  
 blitvin@lunghamer.com

\*All payments plus tax, lic. transfer and dealer doc fee. No security deposit required. Must qualify for GMS GM employee purchase.

**1-888-665-5438**

**Joe Lunghamer**

CHEVY Drive Beautiful BUICK WE ARE PROFESSIONAL GRADE!

475 SUMMIT DRIVE • 248-292-2502 • 5825 HIGHLAND RD. (M59) • WATERFORD

www.wallyedgar.com · www.wallyedgar.com · www.wallyedgar.com · www.wallyedgar.com

Be treated with the respect you deserve.  
**TOP DOLLAR FOR YOUR TRADE & the Best Deal PERIOD!!**

**Wally Edgar** FIND NEW ROADS  
 Chevrolet Employee HO



JAY CHAISER x117  
 Fax: 248-391-0189  
 Cell: 248-821-8026  
 Email: jchaiser@wallyedgar.com

Sales Hours:  
 Mon. - Thur. 8:00 am - 8:00 pm  
 Fri. 8:00 am - 6:00 pm  
 Sat. 9:30 am - 3:00 pm  
 Sun. Closed  
 CHEVY DEALER CODE 44085



**2014 TRAVERSE**

**\$177\***  
 36 MONTH • 10K LEASE  
 \$999 DOWN



**2014 SILVERADO DOUBLE CAB**

**\$162\***  
 36 MONTH • 10K LEASE  
 \$999 DOWN



**2014 IMPALA**

**\$175\***  
 36 MONTH • 10K LEASE  
 \$999 DOWN

\*Lease payment examples based on GM Employee Discount price plus tax, title, plate and first month payment due at signing with all rebates including USA military rebate assigned to dealer. Lease responsible for excess wear and tear as well as exceeding contracted mileage. Security deposit may be required by lender. Due to advertising deadlines, price subject to change.

Located right off  
 I-75 on M-24,  
 2 minutes N. of the  
 Palace of Auburn Hills



**1-866-906-0279**  
**Wally Edgar**  
**Chevrolet**

Make us your Michigan P.E.P. Car Connection

www.wallyedgar.com · www.wallyedgar.com · www.wallyedgar.com · www.wallyedgar.com


**GM EMPLOYEE PRICING OR BELOW TO EVERYONE ON EVERYTHING!**  
**MORAN**  **CHEVY OPEN HOUSE EVENT**  
 Where You Always Get... **The Best Price... PERIOD!**

**2014 CRUZE**  
 • 2 Yr/24,000 Scheduled Maintenance INCLUDED!  
 • LS Equipment Package! • ECOTEC 1.8L VVT DOHC Engine!  
 • Automatic Transmission! • Power Locks & Windows!  
 • AM/FM/XM Radio w/CD! • Remote Keyless Entry!  
 • Rear Window Defogger!  
 • 35 MPG on the Highway!  
 Stk. #2E7337  
 MSRP \$19,180  
 NO 1ST PAYMENT OR SECURITY DEPOSIT!



Starting At **\$16,649** **The Best Price... PERIOD!** Lease For Only! **\$135**  
\$999 Down

**2014 MALIBU**  
 • 2 Yr/24,000 Scheduled Maintenance INCLUDED!  
 • LS Equipment Package! • 2.5L DOHC VVT Engine!  
 • Automatic Transmission! • Power Locks & Windows!  
 • AM/FM/XM Radio w/CD! • Remote Keyless Entry!  
 • Aluminum Wheels!  
 • 36 MPG on the Highway!  
 Stk. #2E7525  
 MSRP \$22,965  
 NO SECURITY DEPOSIT!



Starting At **\$18,749** **The Best Price... PERIOD!** Lease For Only! **\$169**  
\$999 Down

**"Push, Pull, Drag or Drive" \$2,000 GUARANTEED for Your Old Trade-In!**

**2014 EQUINOX**  
 • 2 Yr/24,000 Scheduled Maintenance INCLUDED!  
 • LS Equipment Package! • 2.4L DOHC Engine!  
 • Automatic Transmission! • Power Locks & Windows!  
 • AM/FM/XM Radio w/CD! • Remote Keyless Entry!  
 • 17" Aluminum Wheels!  
 • 32 MPG on the Highway!  
 Stk. #2E7819  
 MSRP \$25,315  
 NO SECURITY DEPOSIT!



Starting At **\$22,314** **The Best Price... PERIOD!** Lease For Only! **\$219**  
\$999 Down

**2014 TRAVERSE**  
 • 2 Yr/24,000 Scheduled Maintenance INCLUDED!  
 • 3.6L SIDI V6 Engine! • Automatic Transmission!  
 • AM/FM/XM Radio w/CD! • Power Locks & Windows!  
 • Remote Keyless Entry!  
 • 8 Passenger Seating!  
 • Bluetooth for Phone!  
 • 24 MPG on the Highway!  
 Stk. #E15231  
 MSRP \$31,670  
 NO SECURITY DEPOSIT!



Starting At **\$27,898** **The Best Price... PERIOD!** Lease For Only! **\$259**  
Just \$999 Down

Picture may not represent actual sale vehicle. All applicable rebates have been deducted from Sale Price/Payment and are subject to change by the manufacturer without notice and are plus title, tax and plate fees. All leases are 39 months/10,000 miles per year and are plus title, tax and plate fees. GM Employee Pricing to everyone excludes Corvette, SS, Silverado, 2015 Tahoe and 2015 Suburban. \$2000 minimum trade-in guarantee is on 2000 or newer vehicles. Certain restrictions may apply, see dealer for complete details. Sale ends 3/31/2014 @ 6:00PM.

**VIEW OUR ENTIRE INVENTORY ONLINE @ MORANCHEVY.COM**

**MORAN**  **The Best Price... PERIOD!**

35500 S. Gratiot Ave. Clinton Township, MI. 48035 (586)-791-1010  
 SHEILA ROTHENHAUSER srothenhauser@moranautomotive.com

4511 24th Ave. Fort Gratiot, MI. 48059 (810)-385-8500  
 RICH MILNE rmilne@moranautomotive.com

**MORANCHEVY.COM**

**FIRST Robotics Occupies Students with Many Talents**

CONTINUED FROM PAGE 1

"Ensuring that the next generation of Americans possesses critical science, technology, engineering, and math skills is vital to our country's economic well-being and national security," said Jody Trapasso, senior vice president of Chrysler's External Affairs.

"In addition to providing valuable lessons on STEM subjects, FIRST Robotics also helps students develop important life skills such as leadership, teamwork, and problem-solving."

"There are 2,716 FIRST teams around the world," Alpert said. "And in Michigan, there are 280 teams. That's 10 percent of the world total here in the state."

Alpert said Gov. Snyder has been a strong supporter of what FIRST has been doing. Last year, he pledged \$3 million to high schools throughout the state.

"The money has really paid off," Alpert said. "We got a lot of new teams from schools around Michigan that hadn't sent teams in the past. These are rural schools in the Upper Peninsula and some schools around Benton Harbor."

While it's fun to have competitions, the goal is to teach students about engineering, Alpert said. That's why one of the awards given is the "gracious professionalism" competitor award. It's given to the team that does the most to help other teams.

"The goal is to have all the teams' robots up and running," Alpert said. "If some team breaks an axle, all they have to do is ask for help and the other teams will do things like lend them another axle."

There will be more competitions this month, culminating in the state championship that will be held at Eastern Michigan University in early April, Alpert said. The top 32 teams in the state will go to the national championship in St. Louis in late April.

"The reason FIRST is so powerful," Alpert said, "is that we're training the next generation of engineers. These are the people businesses need and colleges want."

"FIRST has more than \$19 million in scholarships that it will give to participants next year. The FIRST members get hands-on mentoring from people in the business. They get guidance and learn what it takes to be an engineer."

One of the mentors is Scott Freeman, manager of Product Planning, Process and Tools for Chrysler. He is one of nine men-

tors on Cardinal Mooney's "Robosapiens" FIRST team.

"I have twins, Adam and Monica, who attend Cardinal Mooney," Freeman said.

"Adam is heading down the path to engineering and Monica is looking at industrial design. Last year, they joined the Robosapiens."

After talking with them about what they were doing, Freeman decided to become a mentor. In his second year, he said the reason they have nine mentors for one team is that the project involved so many different disciplines.

They get parts for a robot and they have to meet certain requirements in terms of size and power. But they can make additions and that means mechanical engineering comes into play.

They have to program the robot, which means computer engineering. The robot uses batteries, which means electrical engineering.

Teams also need sponsors to help pay for expenses and to promote what they're doing. That requires business expertise. The result, Freeman said, is a lot of mentors. There's plenty to occupy students with different talents and interests.

"What's surprised me most," Freeman said, "is seeing someone who maybe knows what a screwdriver is become good at using tools and pick up the knowledge needed to get the robots to work."

"These days, a lot of kids don't have the opportunity to get hands-on experience like they did in the past. It used to be you could work on a car in your garage with your dad."

That isn't the way things work these days, Freeman said. He said Alpert wasn't kidding when talking about how gracious the other teams are. He was very surprised his first year at just how helpful the other teams were. He said that's something to be admired and called the experience eye-opening.

The resources that some of the Robosapiens' mentors have proven to be very useful, Freeman said. Credit should be given to Phil Pelsos, owner of Triton Automation in Port Huron for making his work space available to students, and to Bill Drake, owner of Advanced Care Pharmacy for lending a hand on the business side of things.

"I suspect that once my children leave the competition, I'll remain a mentor," Freeman said. "I've seen people whose kids left high school 10 years ago who are still mentoring."

**EQ, State Offer Free Mercury Collection**

The Environmental Quality Company (EQ) has again partnered with the Michigan Department of Environmental Quality to collect and properly recycle mercury.

EQ will ensure proper recycling methods that will reduce the amount of mercury from entering the environment.

The Great Lakes Restoration Initiative Mercury Collection Project - the project affiliated with EQ and the state - provides free mercury collection services to residents and businesses in the state of Michigan, said Heather Wendt, program spokesperson. The free program will run through Sept. 30.

In 2013, EQ worked with the state's environmental group and set up a designated phone number and e-mail address that were specifically designed for this program.

During that time, EQ received 164 bucket requests and recycled 325 thermometers, 145 ther-

mostats, 520 industrial switches and fuses, and various relay switches and gauges, lab thermometers, manometers and hydrometers.

Wendt said participating in the the program is easy. Upon request, EQ will send a free collection bucket with a shipping box to a requester's door via common carrier.

Each bucket contains easy-to-follow return instructions, she said.

Once the bucket is filled with the mercury-containing device(s), it can safely be returned in the shipping box to the company.

Interested parties should call EQ for a free collection container at 877-960-2025 or email mercurybucket@eqonline.com, said Wendt.

For more information on the Mercury Collection Program, visit <http://greatlakesrestoration.us/> or the EQ website at [www.eqonline.com](http://www.eqonline.com).

**We guarantee the lowest price or it's free!**

**buff whelan chevrolet**  **586-274-0396**

**OVER 1,000 New Chevrolets in Stock!**  
**WE GUARANTEE THE LOWEST PRICES OR IT'S FREE!**

**2014 EQUINOX LS**  
 NO SECURITY DEPOSIT REQUIRED



2.4L DOHC 4 Cylinder with VVT 6 Speed Automatic  
 36 Month Lease/10,000 Miles  
**\$252\*** + Tax with \$0 Down  
 No Security Deposit Required

**2014 CRUZE 1LT**  
 NO FIRST PAYMENT OR SECURITY DEPOSIT REQUIRED



1.4L Ecotec VVT DOHC 4 Cylinder 6 Speed Automatic & More...  
 36 Month Lease/10,000 Miles  
**\$199\*** + Tax with \$0 Down  
 No Security Deposit Required • No First Payment

**2014 IMPALA LS**  
 NO SECURITY DEPOSIT REQUIRED



Ecotec 2.5L DOHC 6 Speed Automatic & More...  
 36 Month Lease/10,000 Miles  
**\$266\*** + Tax with \$0 Down  
 No Security Deposit Required

\*See dealer for details. All Rebates/Incentives have been deducted from sale price/payment and are subject to change by manufacturer without notice. GM Employee discount required except where noted. All leases are 10,000miles per year. + 1st payment, tax, title and plate fee due at signing unless otherwise noted. Offers expire 03/31/2014.

Free shuttle service to home, office or shopping.  
**buff whelan chevrolet**  
 WHERE THE DEALS MAKE THE DIFFERENCE, EVERY DAY SINCE 1970!  
 Van Dyke • South of 18 Mile • Sterling Heights

**Jeff Caul**  
**586-274-0396**  
 PEP QUOTES BY PHONE OR EMAIL:  
 JEFF CAUL AT JCAUL@BUFFWHELAN.COM

**CONVENIENT HOURS:**  
 Mon. & Thurs. 8:30 am - 9 pm  
 Tues., Wed., Fri. 8:30 am - 6:30 pm

**FIND NEW ROADS**  


**MOUND** **VAN DYKE** **18 MILE RD.** **SCHOENHERR** **METRO PKWY.**

**We guarantee the lowest price or it's free!**

# Students Honored for Science, Engineering

by Jim Stickford

STEM seems to be taking a step forward, if the results of the 57th annual Science and Engineering Fair of Metro Detroit is any indication.

When the grand prize finalists were announced, those students obviously knew what they were doing.

The event, which was held March 10-12 at Cobo Center in Detroit, is sponsored by the Science and Engineering Fair of Metropolitan Detroit.

Competition is separated into two groups – the Junior Division, which is sixth through eighth grades – and Senior Division, which covers high school.

Students are judged within their categories – a total of 13 categories based on scientific discipline.

Up to six students in the Junior Division and one student per school in the senior division may be selected to participate in the International Science and Engineering Fair, said Detroit Fair director Tim Fino.

More than 1,600 students from the tri-county area participated this year. Students producing seven projects in the Senior Division earned the chance to compete in the Michigan Science Fair April 5 at Kettering University.

Fino said there were more than one finalist in some categories.

Senior Division finalists were:

- Biochemistry – Andrew Lekarczyk and Sam Ilkka of the University of Detroit Jesuit High School. The juniors' project was about the utilization of bioluminescence for the diagnosis of Alzheimer's disease and related autopathies.

- Engineering – Nadim Bari of Cass Technical High School in Detroit. A senior, his project was about enhancing target efficiency of a laser by the integration of a stabilization system.

- Engineering – Daniel Jin, a senior at Rochester Adams High School. His project was about electronic anti-counterfeit protection using a pseudorandom binary sequence.

- Mathematics – Madhurima Das, a senior at Plymouth High School. His project concerned cancerous tumor identification from MRI imaging analysis.

- Physics – Vipul Nandigala, a junior at Walled Lake Western High. His project was about an application of Dean's Flow in micro channels for particle separation.

- Physics – Anirudh Sridhar, a senior at the International Academy – East Campus. His project dealt with increased efficiency in tip-enhanced raman spectroscopy (TERS).

- Zoology – Michael Shao, a junior at Detroit Country Day Upper. His project was about understanding the neural circuitry regulating cold sensation in *C. elegans*, which is a type of microorganism.

Junior Division finalists were:

- Team Project – Hiba Huseini, with Eman Azrak and Danya Obeid of Huda School & Montessori. The eighth graders' project was titled, "Shark Shock."

- Microbiology – Arushi Arora, an eighth grader at Novi Middle School, who submitted a project titled, "Colloidal Silver to the Rescue!"

- Mathematics – Avery Burch, a sixth grader from Ann Arbor Trail Magent School. The project was named, "The Mathematics of Tsunami."

- Behavioral/Social Sciences – Kaliyah Gunter, a sixth grade student at the Paul Robeson Malcolm X Academy. The project was titled, "Birds and Color Configuration."

- Chemistry – Jayna Jones, a seventh grader at Thurgood Marshall Elementary. The project was called "Potatoes, Kale and

Beets: A Recipe for Winter Roads."

- Environmental Studies – Eivette Martinez, a seventh grader at Gompers Elementary-Middle School. The project was called, "Using Daphnia to Monitor Water Toxicity."

- Physics – Matthew Milez, a sixth grader at Macomb Math, Science and Technology Center – Middle School. The project was simply called, "Soundproofing."

- Engineering – Mitchell Morris, a seventh grader at Our Lady of Good Counsel Middle School. The project was called, "The Effect of Buildings on GPS Accuracy."

- Earth and Space Sciences – Ryan Thomas, an eighth grader at Ivan Ludington Magnet Middle School. The project was called, "Hydraulic Fracturing and the Potential on Water Aquifers."

WE DO HOUSE CALLS OR COME SEE US... Before You Trade-In or Sell Your Car

## JIM DOUGLAS AUTO SALES



Buyer & Seller of Clean Vehicles Since 1975!

You'll Get Your Tax Break Plus 100's if not 1,000's More

248.332.8326

1153 Baldwin Rd • Pontiac • www.jimdouglasautosales.com

# ED RINKE CHEVROLET BUICK GMC

CHEVROLET TRUCK MONTH BUSINESS ELITE FIND NEW ROADS OnStar by GM total confidence CHEVY OPEN HOUSE EVENT CHEVROLET

"WE WILL GIVE YOU \$2,000 MINIMUM FOR TRADE"

LEASE A 1LT 4WD/DBL. CAB FOR \$227\* \$999 DOWN PURCHASE A 1LT 4WD/DBL. CAB FOR \$30,700\* NEW SILVERADO 2014 1LT/4WD/DBL. CAB

NEW MALIBU 2014 LEASE A 1LT FOR \$168\* \$999 DOWN PURCHASE A LS FOR \$18,235\*

NEW CRUZE 2014 LEASE A 1LT FOR \$133\* \$999 DOWN NO 1ST PAYMENT PURCHASE A LS FOR \$16,549\*

NEW EQUINOX 2014 LEASE A LS FOR \$216\* \$999 DOWN PURCHASE A LS FOR \$22,104\*

NEW TRAVERSE 2014 LEASE A LS FOR \$257\* \$999 DOWN PURCHASE A LS FOR \$27,848\*

NEW IMPALA 2014 LEASE A LS FOR \$223\* \$999 DOWN PURCHASE A LS FOR \$25,043\*

NEW CAMARO 2014 LEASE A 2LS FOR \$213\* \$999 DOWN PURCHASE A 2LS FOR \$23,227\*

WELCOME TO THE OPEN HOUSE EVENT GM FRIENDS & FAMILY DISCOUNT AVAILABLE TO EVERYONE 2 Years Maintenance & 2 Years OnStar

NEW 2014 SIERRA DBL CAB	GM EMPLOYEE LEASE FOR \$152* \$237* \$1,999 DOWN 24 MONTHS \$0 DOWN 24 MONTHS	GM EMPLOYEE PRICE \$31,605*
NEW 2014 VERANO	GM EMPLOYEE LEASE FOR \$139* \$224* \$1,999 DOWN 24 MONTHS \$0 DOWN 24 MONTHS	GM EMPLOYEE PRICE \$19,315*
NEW 2014 REGAL	GM EMPLOYEE LEASE FOR \$149* \$199* \$1,999 DOWN 24 MONTHS \$0 DOWN 24 MONTHS	GM EMPLOYEE PRICE \$24,997*
NEW 2014 LACROSSE	GM EMPLOYEE LEASE FOR \$247* \$290* \$1,999 DOWN 24 MONTHS \$0 DOWN 39 MONTHS	GM EMPLOYEE PRICE \$29,630*
NEW 2014 ENCLAVE	GM EMPLOYEE LEASE FOR \$245* \$297* \$1,999 DOWN 39 MONTHS \$0 DOWN 39 MONTHS	GM EMPLOYEE PRICE \$33,865*
NEW 2014 TERRAIN	GM EMPLOYEE LEASE FOR \$187* \$222* \$1,999 DOWN 24 MONTHS \$0 DOWN 39 MONTHS	GM EMPLOYEE PRICE \$24,210*
NEW 2014 ACADIA	GM EMPLOYEE LEASE FOR \$223* \$276* \$1,999 DOWN 39 MONTHS \$0 DOWN 39 MONTHS	GM EMPLOYEE PRICE \$30,698*
NEW 2014 YUKON XL DENALI	GM EMPLOYEE LEASE FOR \$529* \$596* \$1,999 DOWN 39 MONTHS \$0 DOWN 39 MONTHS	GM EMPLOYEE PRICE \$52,995* MSRP \$66,055 2 AVAILABLE AT THIS PRICE!

## EU Suppliers Fined For Market Fixing

BRUSSELS (AP) – The European Union has fined two EU and four Japanese companies a total of nearly \$1.4 billion for rigging the market of key components in the car and truck industry at the expense of consumers.

EU Antitrust Commissioner Joaquin Almunia said March 19 it was at least the third case of market rigging in the car industry that the EU had found so far. Another half-dozen investigations are ongoing.

Almunia said, "It is incredible to see that one more car component was cartelized." He hoped the fines will deter companies from such illegal behavior and help restore competition.

NO DOC FEES See us for your GM employee purchases. 1-877-451-7707 26125 Van Dyke at 10 1/2 Mile Rd. Visit our website: edrinke.com SHOWROOM HOURS: Mon. & Thurs. 8:30am-9:00pm; Tues., Wed., & Fri. 8:30am-6:00pm

Ray Stemple, Nicole Dodge, Jim Pfeiffer, Mark Stry. All prices and payments include GM rebates. Pictures may not actually represent actual vehicle. All leases are 10k miles per year. All leases are 36 month except for Silverado is a 24 month lease. Must qualify for USAA. No 1st payment required on Cruze. No security deposit on all leases with S & A tier credit approval. Due at signing is 1st pmt, title, plate, tax unless otherwise noted. \$2500 trade-in guarantee for 2003 or newer vehicle in drivable condition, less any reconditioning, no branded titles. See salesperson for details. Exp 03/24/2014.

See us for your GM employee purchases. 1-866-452-1300 24231 Van Dyke at 9 1/2 Mile Rd. Visit our website: edrinke.com SHOWROOM HOURS: Mon. & Thurs. 8:30am-9:00pm; Tues., Wed., & Fri. 8:30am-6:00pm

Dennis Thacker, Paul Makowski. All prices & payments include GM rebates. Pictures may not represent actual vehicle. Prices subject to change per GM incentives. Prices and payments are inclusive of active GM Employee Discount (Unless otherwise stated). Leases are 39 months, 10,000 miles per year w/ approved S Tier credit w/ \$999 due at signing, (unless otherwise noted). Prices & payments are plus tax, title, and plate fees. Refundable security deposit required on certain vehicles – to be determined by lender. Must qualify for lease loyalty with a current Buick Regal, Sierra purchase must qualify for Trade in rebate. Must qualify for USAA on Sierra. \*\*See salesperson for details. Expiration Date – 3/31/2014.

ED RINKE FAST FRIENDLY DISCOUNTS GM SERVICE CENTER MICHIGAN'S LARGEST SERVICE DEPT. PARTS BODY SHOP 866-452-1547 26125 Van Dyke @ 10 1/2 Mile Center Line, MI 48015 SERVICE HOURS: Monday & Thursday 6:30am-9:00pm; Tuesday, Wednesday & Friday 6:30am-6:00pm • Shuttle at 6:30am - Pick-up Both Ways • All Day starting at 6:30am.

Quick Oil Change EXPRESS LANE LUBE OIL FILTER \$23.95 Up to 5 qts. Fluid Level, Brake & Alignment Check Included. We use Genuine GM Oil & Filter No additional or hidden charges. Out the door pricing. Open Mondays & Thursdays until 8:30pm Excludes synthetic, Diesel & Med. Duty Trucks. Most GM cars & trucks. One coupon per customer. Must present coupon with order. Plus tax. Expires 3-31-14.

BODY SHOP 586-754-7000 ext 1231 INSURANCE WRECK AMENDED TRANSPORTATION AVAILABLE During Scheduled Repairs FREE OIL CHANGE With Each Major Repair WE REPAIR ALL MAKES & MODELS

# ATTENTION! Chrysler Employees and Chrysler Contract Employees \$1,000 Below Employee pricing\*

**Milosch's PALACE**  
CHRYSLER DODGE Jeep RAM

CHECK YOUR TRADE IN VALUE HERE →

Just Announced LEASE PULL AHEAD!  
SEE DEALER FOR DETAILS



YOUR OFFICIAL CHRYSLER JEEP • DODGE LEASE TURN-IN HEADQUARTERS

**2014 CHRYSLER 200 LIMITED**

24 MO. LEASE ONLY <b>\$98*</b> mo.	EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM <b>\$1995*</b>
---------------------------------------	---

**2014 CHRYSLER 300S AWD**

SALE PRICE  
**\$25,498\***

24 MO. LEASE <b>\$138*</b> mo.	EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM <b>\$3789*</b>
-----------------------------------	---

**2014 RAM CREW CAB 4X4**

TRUCK MONTH  
2013 2014  
FIRST EVER BACK-TO-BACK CHAMPION

OVER 15 AVAILABLE

24 MO. LEASE <b>\$157*</b> mo.	EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM <b>\$2989*</b>
-----------------------------------	---

**2014 JEEP GRAND CHEROKEE LAREDO 4X4**

24 MO. LEASE ONLY <b>\$169*</b> mo.	SALE PRICE <b>\$27,760*</b>
--	--------------------------------

**ALL NEW 2014 JEEP CHEROKEE LATITUDE 4X4**

24 MO. LEASE <b>\$179*</b> mo.	EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM <b>\$3989*</b>
-----------------------------------	---

**2014 DODGE JOURNEY SXT**

24 MO. LEASE ONLY <b>\$139*</b> mo.	EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM <b>\$4989*</b>
--	---

**2014 DODGE CHARGER R/T**

24 MO. LEASE <b>\$129*</b> mo.	EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM <b>\$3589*</b>
-----------------------------------	---

We make car buying fun at Milosch's Palace. Please call to schedule an appointment for a demonstration drive. All rebates to dealer. Deals apply to stock units only. Must be a Chrysler employee. \$1995 down, plus destination, taxes, title, plates. Must be Chrysler Employee. \$500 Military and TDM included. Lease calculated at 10,000 miles per year. Vehicle shown not actual vehicle. WAC. See dealer for details. \*\*Plus destination, taxes, title, plates, \$0 sec. deposit required. Includes Conquest Trade-in and must be Chrysler Employee. Programs subject to change. Expiration date is 3/31/2014

YOUR OFFICIAL CHRYSLER • JEEP • DODGE LEASE TURN-IN HEADQUARTERS

**Milosch's PALACE**  
CHRYSLER DODGE Jeep RAM

3800 S. Lapeer Rd., LAKE ORION

Call Toll Free: **800-710-3857**  
OPEN SATURDAY!

HOURS: Mon/Thurs 8:30am-8pm  
Tue/Wed/Fri 8:30am-6pm

New Saturday Hours: Sales 10am-3pm & Service 8am-2pm

SCAN ME