

## Chrysler's Dourra Honored for Engineering Innovations

Chrysler Technical Fellow Hussein Dourra has been named the winner of the 2012 Edward N. Cole Award for Automotive Engineering.

The award goes to a Society of Automotive Engineers member whose lifetime accomplishments are seen as original, innovative and significant by award committee members.

"Hussein exemplifies the drive and passion we seek to instill in our engineers," said Bob Lee, Chrysler vice president and head of engine, powertrain and electrified propulsion systems engineering. "We are extremely proud of his achievements and deeply grateful for the contributions he has made to the company and our industry."

"It was a really good award for me at the end of 30 years of innovation and patents and working with the OEMs in the industry," Dourra said. "To have received the award from among all the other members, that was really a great achievement. I was very happy."

This is not the first time Dourra, who joined Chrysler in 1982, has been honored for his engineering achievements. In 2007, he was the first beneficiary of the company's Technical Fellow program. The title is reserved for recognized industry experts.

In 2008, he shared the Walter P. Chrysler Technology Award, given to holders of Chrysler's most outstanding patents. Dourra was honored for his work on an algo-

rithm making possible precise control of multiple shift elements.

The breakthrough sparked the evolution of a six-speed automatic transmission while saving the company about \$360 million over the typical development costs. Dourra explained that, instead of building a new six-speed transmission from scratch, a process that could cost up to \$1 billion, the engineering team took the four-speed transmission already in production and built on it to make the six speed, adding the more precise controls he made possible.

Chrysler also became the first North American auto maker to introduce a six-speed automatic transmission for front-wheel drive vehicles.

Dourra said his approach to engineering uses physics and a model-based approach.

"Utilizing this approach across powertrain engineering will result in consistent and robust solutions," he said. "This approach is useful for all powertrain functions (not just transmission). As far as the multiple shift element controls, it required a unique system adaptation which can be used when drivability is extremely sensitive to actuator controls."

Dourra holds 22 U.S. patents and five international patents. He leads Chrysler's advanced powertrain controls team. He helped pioneer the industry's first electronic transmission controls.

Dourra also earned a patent on an algorithm that helps monitor critical operational parameters such as a clutch temperature. It is now being used in the Ram 1500 pickup.

And the innovations keep coming. Chrysler is on track this year to launch the world's first vehicle equipped with a nine-speed automatic transmission. The company was first to produce vehicles with eight-speed automatic transmissions and remains the only North America automaker to offer this transmission.

Dourra, 55, is a graduate of Wayne State University, with a Ph.D in engineering and master's degrees in electrical and computer engineering and business administration. He also earned a bachelor of science in electrical engineering from Lawrence Technological University, where he also serves as a guest instructor for graduate-level studies.

"The satisfaction is unbelievable ... to (get) an idea from a concept, that nobody thought of before, and to be able to implement it, put it in the vehicle and get it into production - it's a feeling I can't describe. I'm so passionate about this kind of work," Dourra said.

The Edward N. Cole Award was created to honor the memory of the former General Motors Corp. president and CEO who sought to inspire engineers and enhance the profession's reputation.

Dourra works at Chrysler Group headquarters, a.k.a. CTC



Hussein Dourra

(Chrysler Technical Center) in Auburn Hills, where he currently leads the advanced powertrain controls team. He summed up his engineering philosophy.

"We need engineers at the powertrain base to start thinking of a physics-based approach to solutions ... You have a much more robust solution and more precise calibration," he said. "Chrysler is moving in that direction and I think they are leading in that area."

Dourra will receive his award during the SAE 2013 World Congress, which will be held April 16-18 at Cobo Center, Detroit. Chrysler is the host company.

### Got News?

If you have solid business news for this paper, please contact us at News@DetroitAutoScene.com.

## Cadillac Car Sales Gains Show High Rate of Conquests

Cadillac sales were up 20 percent in February, the fifth consecutive month of growth. Overall retail sales for the brand marked the best February level since 2006, with individual retail purchasers accounting for 91 percent of all sales. Through the first two months of 2013 Cadillac sales are up 32 percent.

More than six of 10 Cadillac customers in February traded in something other than a prior model Cadillac, evidence the luxury brand is attracting new customers with its expanding product line.

"As we continue to grow, it's positive to see new customers coming to Cadillac for the first time," said Chase Hawkins, U.S. vice president of Cadillac sales. "That momentum is being driven in particular by the new ATS sport sedan, which had its strongest month since launch."

Sales of the new ATS in February were 22 percent higher than in January.

In February, almost eight of 10 ATS buyers traded in something other than a Cadillac, and 58 percent of ATS buyers had non-General Motors' trade-ins, or had no trade-in at all.

ATS, named 2013 North American Car of the Year, hit the market last fall and competes in the compact sport sedan segment, the highest-volume category in the luxury auto industry.



**JEFFERSON CHEVROLET**  
Detroit's Original Chevy Dealer



**Your Only Valet GM Dealer**

Only 6 Blocks From Downtown & GM RenCen  
SERVICE PICK-UP & DELIVERY TO DOWNTOWN EMPLOYEES

**\$29.95** OIL CHANGE & TIRE ROTATION  
with \$10.00 mail-in rebate  
VALET PICK-UP OR SHUTTLE PICK-UP/DELIVERY

2013 Chevrolet  
**Traverse** LS



Stk: T4043

**\$0** SECURITY DEPOSIT

**24** Mo. Lease  
20,000 Miles

**Only \$176** /mo.

\$595.00 Due At Signing\*

2013 Chevrolet  
**IMPALA**



GMS \$26,685  
Stk: 6113

**EVA/REBATE \$8,000<sup>00</sup>**

**Only \$18,107\*\*** MSRP \$26,685

**866-225-1775**  
[www.jeffersonchevrolet.com](http://www.jeffersonchevrolet.com)  
**2130 E. JEFFERSON AVENUE**  
6 Blocks East of the GM RenCen • Detroit

SALES HOURS: Mon & Thur 8:30am-8pm; Tue, Wed, Fri 8:30am-6pm  
SERVICE HOURS: Mon-Fri 7am-6pm  
CLOSED SATURDAY & SUNDAY

\*\*Based on GM employee pricing just add tax title and plates. All rebates to dealer. Includes \$500.00 GM match which requires \$500.00 cash down.  
\*Based on GM pricing with approved lease credit S.A. tier with ALLY FINANCIAL, 24months/20,000miles Just add tax, title and plates.  
All rebates to dealer INCLUDES GM LEASE LOYALTY or CONQUEST LOYALTY.



**AL DEEBY**  
"Your Hometown Dealer."

THE 2013 SHOWCASE EVENT

THE ONLY TIME RAM TRUCK MONTH

**2013 CHRYSLER 300 CV8**

Hemi, Leather  
Stk#C1322026



**24 MONTH LEASE**

**\$169\*** /mo. MSRP \$39,190

**2013 DODGE CHARGER R/T**

Hemi, Wheel & Tune Group  
Stk#C1324033



**24 MONTH LEASE**

**\$129\*** /mo. MSRP \$32,685

**AL DEEBY** CHRYSLER DODGE  
Jeep RAM OPEN SATURDAY

8700 DIXIE HWY., CLARKSTON, EXIT 93 OFF I-75

**1-877-547-4083** [www.aldeebly.com](http://www.aldeebly.com)

**SHOWROOM HOURS:**  
MONDAY 9-9  
TUESDAY 9-6  
WEDNESDAY 9-6  
THURSDAY 9-9  
FRIDAY 9-6  
SATURDAY 9-3



ACCREDITED BUSINESS

All Deebly makes car buying a fun and easy process with no hassles or gimmicks. All rebates to dealer. Deals apply to stock units only. Must be a Chrysler employee, military and TDM. Chrysler 300 requires \$2,285.42 down, Charger requires \$2,245.85 down plus taxes, title, plates, CVR rebate. Security deposit waived on S or A tiered approved credit. All leases calculated at 10k miles per year. Vehicle shown may not represent actual vehicle. Prices subject to change without notice. See dealer for details. Exp. 03/31/13.