## Dourra to be Honored for Innovation with Ed Cole Award

sein Dourra has been named the winner of the 2012 Edward N. Cole Award for Automotive Engi-

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

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 algorithm

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 and currently leads Chrysler's advanced powertrain controls team. He helped pioneer the industry's first electronic transmission controls.

Dourra also earned a patent on

Chrysler Technical Fellow Hus- making possible precise control 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 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 (Chrysler Technical Center) in Auburn Hills, where he currently



Hussein Dourra

leads the advanced powertrain controls team.

"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 in Detroit.

## Parents Night Out

Residents and corporate citizens can contact the Auburn Hills Recreation Center and sign up their child for Parents Night Out, March 16, 6-10 p.m. For grades 1-7. \$8 residents. \$12 non-residents. includes games, pizza.

## **Excellence In Education Set** For AH Palace

For the 17th consecutive year the Palace of Auburn Hills is hosting the Auburn Hills Chamber of Commerce's "Excellence in Education" program on Monday, March 11.

Thirty students and teachers are slated for recognition during the invitation-only event, which is designed to promote the link between business, education and the community. More than 125 guests are expected to attend, including parents. students, teachers and community leaders.

Students honored through Excellence in Education are chosen by the 13 public and private school principals within Auburn Hills on the basis of character, community service, academics and involvement in extra-curricular activities. As part of the program, each student honoree will name a teacher who has had a significant impact in his or her life.

"Excellence in Education is a special event that Palace Sports & Entertainment is proud to host each year, bringing people together who are making an impact," said Dennis Sampier, vice president of community relations. "The students and teachers are game changers with their contributions in the classroom and in the community.'

To contact the chamber go to info@auburnhillschamber.com or call 248-853-7862.



