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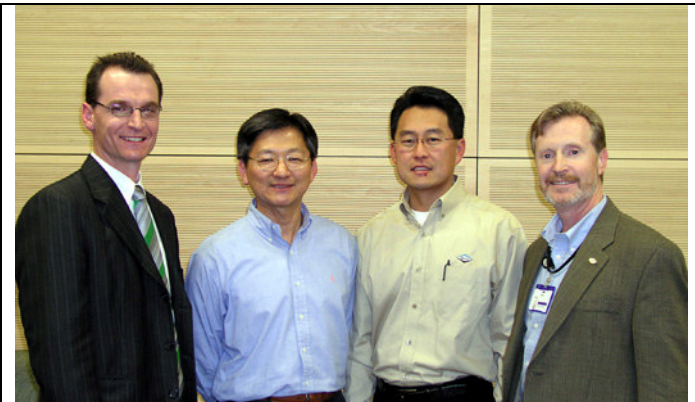
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Jerrie Fiala, Editor: [jerrie.fiala@wmich.edu](mailto:jerrie.fiala@wmich.edu)

## Global engineering topic dominates CAViDS Vehicle Engineering Day

Working globally – its benefits and its problems – was the topic of Vehicle Engineering Day at WMU, held Fri., Nov. 2, at the CEAS Parkview Campus. **Dana Corp.**, **Eaton Corp.**, and **MANN+HUMMEL USA** – all members of the CEAS Center for Advanced Vehicle Design and Simulations (CAViDS) Consortium – brought displays, participated in presentations, and engaged in open discussions about their experiences with global engineering. All three companies have major divisions headquartered in the Kalamazoo area.

“Global engineering means working together with engineers around the world,” said **Dr. William Liou**, a Department of Mechanical and Aeronautical Engineering (MAE) professor who directs CAViDS. See Web page information at <http://www.wmich.edu/engineer/cavids/>



CAViDS members (from left) **Charles Vaillant**, **Dr. William Liou**, **Mark Choe**, and **Dale Kwasniewski** played key roles in the reviewing global engineering at the first Vehicle Engineering Day

An audience of more than 120 listened to keynote speakers **Charles Vaillant**, Director of Engineering and Program Management at **M+H**; **Dale Kwasniewski**, Engineering Manager Truck Components at **Eaton**; and **Mark Choe**, Director of Engineering Services and Technology of the Commercial Vehicle Systems Division at **Dana**. They reviewed their companies' need to be global and described the benefits and problems associated with a global economy.

“We have to be global to serve our customers,” Vaillant said of M+H USA, a specialist in filters that has 10,000 employees in 24 countries. He is linked with managers around the world who meet monthly to learn from each other. “If they have a problem, I have a problem,” he said.

According to Kwasniewski, Eaton, a truck axle and transmission manufacturer with 59,000 employees in 125 countries, serves diverse markets that require “24/7 product development to meet customer demands,” he said. Having customer expectations that vary by region

### CAViDS Vehicle Engineering Day Company Representatives and Product Displays



means that “the demand for quality varies by region, and you need silver, gold, and platinum standards,” he said

Kwasniewski's involvement with the centralized engineering involves Eaton's centers of excellence situated around the world and connected via the Web. “Engineers around the world can work together to design projects that meet global needs,” he said. “With that comes the need for us to understand customs and cultures around the world.”

Choe said that Dana, a global producer of axles and drivshafts with 35,000 employees in 28 countries, has to be where the customer is “to save costs on materials and labor.” He described 24/7 in terms of how engineers at the local plant work until 5 and then send their project to India,” he said. “That adds to the value of the entire organization. Being global means we can be flexible with labor and materials, and we can be where customers are to meet their unique needs.”

According to the speakers, global engineering means today's engineers need communication skills that include cultural understanding and respect. “The more experience engineers have with different cultures, the better equipped they'll be to work in this global economy,” Choe said.

Vaillant said that the ability to communicate and collaborate will make the difference between “the best and the rest, and the best will be the ones who can communicate most effectively.”

Dana representative **Leonard Stoehr**, a product development engineer in Dana's off-highway group and a recent WMU mechanical engineering alumnus, said working on a project with an engineer in India is “a neat process that keeps the project interesting.”

**CEAS Dean Tim Greene** thanked the three companies for bringing equipment and presentations. “Our four cornerstones of the college are engagement, innovation, leadership and globalization,” he said. “Today's focus is important because we need to know how to work in this new global engineering world.”