

Hybrid, Alternative Drivetrains

TAKE CENTER STAGE AT CTI SYMPOSIUM

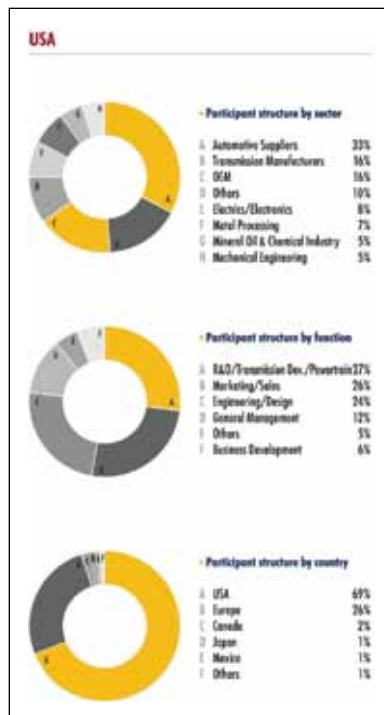
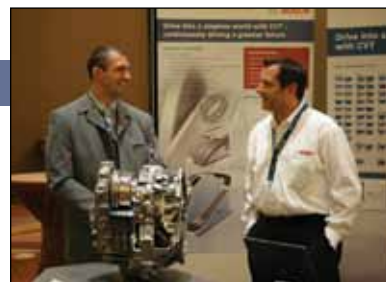
As the automotive industry continues to reinvent itself, new transmission technologies are at the forefront of this effort, and there is a whirlwind of new developments being detailed at the German Car Training Institute's Automotive Transmissions and Drive Trains Symposium North America.

The symposium consists of over 30 presentations, including both plenary and parallel sessions on a wide range of subjects. "The presentations are a mixture of transmissions [that] are newly developed and in a concept status, close to production or new into production," says Nadja Thomas, a spokesperson for the Car Training Institute (CTI).

Some of the major new technology topics being presented include dual clutch transmissions—like Fiat Powertrain's dry dual clutch—automatic transmissions, transmissions for alternative drivetrains—like ZF's new eight-speed hybrid—and engine downsizing. Alternative drive concepts will be discussed in respect to future development requirements, opportunities for market success, certification and patent situations. Reports on technology in ongoing development will be presented, including Toyota's plug-in hybrid vehicles and Mitsubishi's fleet testing of battery quick charging and other experiences with its zero emissions Mitsubishi Innovative Electric Vehicle (iMiEV).

The two-day program was developed based on dialogue with CTI's target audience and the CTI advisory board, and it has evolved since the annual event was first held in 2007. This North American event builds on experiences of the mother event held in Berlin each year. The launch of a North American counterpart seemed like a natural progression. "CTI decided to support the international exchange of experiences in this special field of automotive engineering by adding another opportunity beside the European Symposium, which already exists since nine years," Thomas says.

The program has changed from previous years in respect to trends the industry reflects. Transmissions for alternative drivetrains weren't discussed last year at all, and the most significant example of the program's evolution is the addition of drivetrains to the event's title. "Due to the fact that the development focus in automotive manufacturing is currently more on the optimization of the overall system of engine and transmission as well as the strong inter-



Participant structure of the 2009 Car Training Institute's North American Transmission Symposium and Exhibit.



(Photos courtesy Euroforum)

est in alternative drivetrain technologies and their requirements for transmission development, the concept of a two-day transmission symposium with a special hybrid day as add-on was given up," Thomas says. "The topics around alternative drives are now an integral part of the symposium. The consideration of alternative drives is no longer limited to HEVs (hybrid electric vehicles). The new event title accommodates this change."

One highlight of the program is a panel discussion, at the end of the second day, discussing competing strategies for fuel-efficient vehicles and who makes the race. Participating on the panel is a range of executives and technical leaders from Toyota, BorgWarner, Ford Research, GM and FEV Engine Technology Inc. The panel was formally added to the program after an unplanned version was a hit in 2009. "After the spontaneously set up panel discussion last year, we have decided to make it a part of the program," Thomas says. "Panelists are representatives of OEMs and suppliers discussing the challenges and requirements they see for the market success of fuel-efficient technologies and customer satisfaction."

Major manufacturers from Europe, Asia and the United States attend the symposium, including ZF, Getrag, BMW, Daimler, Fiat Powertrain, Ford, GM and Toyota. Over 150 participants attended the event in 2009. Participants come from a range of backgrounds, from transmission manufacturers and OEMs to mineral and chemical industry representatives.

Automotive suppliers are the most dominant presence when categorized by industry sector, comprising 33 percent of all participants.

In addition to the conference program, a small trade exposition takes place featuring a dozen or so manufacturers, including Ernst Grob AG.

"The exhibition opens for visits by the participant in the morning prior to the first presentations," Thomas says. "All breaks are taking place in the exhibition area. As well, the poster presentations during the lunch breaks are given in the exhibition area."

The fourth International CTI Symposium and Exhibition, "Automotive Transmissions and Drive Trains North America," takes place June 8–9, at the Four Points by Sheraton Ann Arbor Hotel, Ann Arbor, MI. For more information, visit www.transmission-symposium.com.