

# VEHICLE DYNAMICS

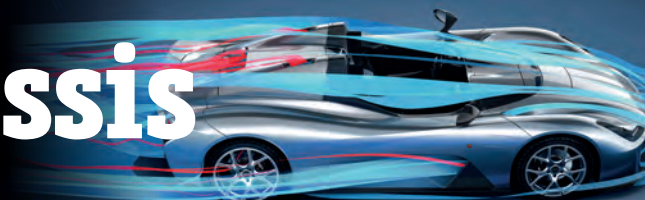
## INTERNATIONAL

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



## Developing the world's finest chassis

Premier chassis maker Dallara has created its first car: the Stradale



### Additive manufacturing

Advances in 3D printing are influencing dynamics setups – and this is just the beginning...

### Ford CLASS

A highly innovative suspension component could see Ford introduce weight-saving composites to C-segment dynamics

### Awards time!

Our expert jury has selected the cars, technologies and talent deserving of the 2018 Vehicle Dynamics International Awards



## Development Tool of the Year: **VI-grade DiM250**

The jury was highly impressed with this dynamic driving simulation technology, which reproduces vehicle movements and accelerations, using a unique design with nine actuators. The resulting 9DOF goes beyond the basic six actuators design of a simple hexapod, providing a larger workspace while maintaining high stiffness. This makes the system suitable for low as well as high frequencies, which is useful for chassis design, enabling engineers to investigate both vehicle dynamics and ride and comfort on the same compact motion platform.

DiM250 is also a useful tool for developing ADAS and meeting the challenges faced by autonomous vehicle development teams, thanks to its extended workspace that allows them to feel steady-state accelerations for longer (and therefore more realistic) timeframes.

In December, 2017 Honda R&D Europe became the first OEM to install this technology worldwide, chosen as it provides a common development platform for R&D activities, where all teams involved can work together in one single collaborative environment, with particular attention to ADAS simulation.

Further success came in April 2018 when Mercedes-AMG announced that it will install a DiM250 motion platform at its site in Affalterbach, Germany. The driving simulator, equipped with an AMG car cockpit, will be installed in the second half of 2018 and will be used to virtually optimize the dynamic behavior of all passenger vehicles developed and marketed by Mercedes-AMG.



Joo-Sik Choi, editor, *Autocar Korea*:  
“Technical advances are being made in response to the growing importance of ADAS technology”

### List of jurors

- Joo-Sik Choi, *Autocar*, Korea
- Robert Bielecki, *Oponeo*, Poland
- Christophe Congrega, *L'Automobile Magazine*, France
- Brian Cowan, freelance, New Zealand
- Carl Cunanan, *CI*, Philippines
- Padraic Deane, managing editor, *Automotive Publications*, Ireland
- Tarcísio Dias de Araújo, *Mecânica Online*, Brazil
- Nicol Louw, *Car*, South Africa
- Marco Marelli, freelance, Italy
- Frank Markus, *Motor Trend*, USA
- Roberto Nasser, *O Globo*, Brazil
- Graham Johnson, *Vehicle Dynamics International*, UK
- Jim Kenzie, *Toronto Star*, Canada
- Nikos Kounitis, *4Wheels*, *Auto Bild Hellas*, Greece
- Marc Noordeloos, freelance, USA
- Sergio Oliveira de Melo, *El Informador*, Mexico
- Tomaz Porekar, *Avto Magazin*, Slovenia
- Alvaro Sauras Alonso, *Autofacil* and *CAR&Tecnica*, Spain
- Mohamad Sheta, *Al-Masry Al-Youm* newspaper, *Auto Arabia*, Middle East Auto News Agency
- Gábor Szécsényi, *Az Autó* and *Retro Mobil*, Hungary
- Oleg Vasilevsky, *Auto Bild*, Ukraine
- Hormazd Sorabjee, *Autocar*, India
- Jürgen Zöllter – freelance, Germany

### How the judging process for the Vehicle Dynamics International Awards works

Nominations are received from VDI's expert readership of chassis and dynamics professionals, and from the editorial team. From that list of entries, between four and seven finalists are shortlisted for each category, and this shortlist is evaluated by our international, independent judging panel of automotive journalists to decide the winners.

### Highly commended:

IPG Automotive CarMaker

### Runners-up:

AB Dynamics' advanced Vehicle Driving Simulator (aVDS)

Altair MotionSolve multibody systems solver

AB Dynamics K & C Inspect

GeneSys Elektronik ADMA-Slim miniaturized ADMA-Slim GNSS/inertial system