

ReVeRe – Chalmers’ New Lab for Advanced Research on Vehicle Dynamics, Active Safety and Autonomous Vehicles

Fredrik von Corswant, PhD, MSc, Senior Project Manager at SAFER,
fredrik.von.corswant@chalmers.se, +46 725 11 52 02

Abstract

There is a continuously increasing demand for safer and more efficient transports, in recent years, also combined with a rapid development of automated vehicles. To speed up development and enable cutting edge research there is a need for closing the loop by connecting the development of theoretical models, simulations and real-traffic driving.

ReVeRe (Research Vehicle Resource) is a new research infrastructure at Chalmers providing a complete platform for such vehicle-related research. In addition to providing researchers with the tools and equipment for test track verifications, ReVeRe will be a meeting place for researchers, industry and students.

ReVeRe will be housed in a 400 square meters facility at Lindholmen (close to Chalmers Lindholmen Campus in Gothenburg, Sweden). Also a smaller 60 square meters branch lab facility is available at the Johanneberg Campus. The physical research platform includes, among other things, one Volvo XC90 (2015) SUV and one Volvo FH (2016) truck. Both vehicles will be equipped with advanced control functions for steering, acceleration etc, various sensors as well as data logging equipment.

The project has received financial support from Region Västra Götaland and is developed in collaboration with Volvo Cars, AB Volvo and SAFER. The formal inauguration of ReVeRe is planned for November 19th 2015.

Key words

Research lab, research infrastructure, autonomous vehicles, active safety, test track