Dafo Vehicle Fire Protection participating in new research project on electric and hybrid vehicle fire risks

A growing number of electric and hybrid vehicles are driving on our roads. Knowledge on the risks associated with these vehicles with new energy carriers is limited.

A vehicle fire is often extremely intense and can have significant safety and environmental consequences. The risk of vehicle fires, when considering the prevalence of road tunnels and underground garages, means that questions concerning rescue operations and societal costs are becoming increasingly important.

Dafo Vehicle Fire Protection is therefore contributing to a new research project funded by Sweden's innovation agency Vinnova – Strategic vehicle research and innovation (FFI), where risks posed by lithium-ion vehicle batteries will be addressed and investigated.

RISE Research Institutes of Sweden initiated this project on 7 May focusing on how fire risks posed by lithium-ion batteries in vehicles should be managed.

"With this new project – in which RISE, Scania, the Swedish Association of Vehicle Workshops (SFVF), NEVS and Fogmaker are also participating – we will map the fire risks associated with lithium-ion batteries and mitigating the consequences of fires in electric and hybrid vehicles. The big increase in electric vehicles and the transition to renewable fuels means that this is a very important and exciting project," says Johan Balstad, Business Area Manager, Dafo Vehicle Fire Protection AB.

Balstad continues "Fire risks related to battery spaces, including specific risks when charging and procedures for handling electric vehicles and batteries after a crash, bearing in mind the risk of fire at a later stage, will be studied. This work will lead to future safety solutions, including system design and battery placement. Our focus of this project will be to investigate the extent to which fixed/integrated fire suppression systems, that are widely used to protect engine compartments on heavy vehicles, can be applied to vehicles powered by li-ion batteries, as well as how the systems should be designed. We hope that it will be possible to leverage existing resources to reduce the fire risks – as an example, 94% of all public transport buses in Sweden already have fixed fire suppression systems installed."