Sustainable Hybrid Lightweight Automotive Structure Solutions

Alan Banks Ford Motor Company

The presentation will highlight the work that Ford Motor Company are undertaking to research how automotive structures can be manufactured economically and at scale. The work will focus on the material choices, the manufacturing processes, the weight saved and the sustainability effects of the entire systems.

As well as defining the design parameters, focus will be given to the social-economic impacts of the full life-cycle analysis that highlight how the automotive sector can not only account for their part in global warming but can make a positive impact and lead the technology for the whole composites industry to reduce greenhouse gas emissions and become better citizens without compromising performance or customer expectations.

The presentation will demonstrate how lightweighting technology can be used as an enabler for electrification and zero emission vehicles as well as fururing for connected autonomous vehicles.