

Volvo Cars Thesis Work Proposal

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Title		
Computational modeling of liquid film creation and flow on vehicle surfaces		
* Location	* Category/SubCategory	
Göteborg	Produktutveckling Komplet Bil/Product Development Vehicle - - Environment and TASE/Contamination and Water Tightness	
Description of thesis work		
Background: The flow of water on solid surfaces is of interest in many situations for the car manufacturer. For instance, dirty water contaminates the glass surfaces of the vehicle and degrades vision. One other example is ingestion of water in to the air intake system when driving in harsh conditions. The thesis work contains of an evaluation of the liquid film models available in Fluent and Star CD for some of the applications described above. The work aims to deliver a method that can be used in project work at Volvo Cars. The thesis worker is also expected to carry out simplified experiments to indicate the predictive capabilities of the computational model.		
Suitable Student background		
Education and interest in computational fluid dynamics, mathematics, fluid mechanics and physics. Two-phase competence is considered as a bonus.		
Starting date	Number of students	
07-08-01	1	
Tutor / Contact person	Contact E-mail	Telephone
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