Volvo Cars Thesis Work Proposal

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Title
Fluid and thermodynamic underhood simulations

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<td>Gothenburg, Sweden</td>
<td>Product Development Vehicle Engineering - Environment and Fluid dynamics centre/Computational Fluid Dynamics</td>
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Description of thesis work
The aim of the thesis work is to develop methods for predicting surface temperature on the exhaust system, both hot end (manifold, turbo etc) and cold end (muffler, tail pipe etc). This is important since the exhaust system typically radiate on other components in their proximity. These components have temperature requirements that must be fulfilled. The method development will include coupling cfd-software with radiation-software as well as simple models for 1-D flow inside the exhaust system.

Suitable Student background
Computational fluid mechanics, heat transfer and thermodynamics

Starting date | Number of students
Autumn 2012 | 1

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