

The Science Truck High level research coming into the school

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1. Introduction – Brief Presentation

Technical maximum performances often have a large fascination for children and young people. Unfortunately however it can be observed that only a few of them consider it possible that they will manage to work in this field of activity in later times. The own knowledge and efficiency are estimated as not sufficient for such a way. The Science Truck of the RWTH Aachen (Technical University) offers a new opportunity to get to know and try modern research by small experiments and at the same time get to know young people, who think themselves being capable of making science. They give tips and assistance, how the students can find an orientation during school time to be active in science/technical research later on. All exhibits are presented by university students, who are quite close in age to the visitors, so that a large

identification is still possible. The whole project is organized by students and can be requested by schools.

Possible participation to science fair:

Poster and/or ppt.presentation :

Pictures and description of the several exhibits:

- *(synthetic materials in medicine;*
- *biosensor for verification of phenolic components;*
- *immobilization of yeast and use for fermentation;*
- *illustration of the action of an liquid buffer;*
- *anchoring in sand;*
- *designing a bridge (computer-simulation);*
- *function-model of a new Otto-motor (Opel);*
- *Why do nappies suck so much liquid? (What about the context with synthetic materials?);*
- *recuperator and fluidized bed;*
- *separating materials with different conductivity;*
- *smokeless fuels;*
- *miracle box of raw materials;*
- *sound absorption of TRITEC;*
- *energy-absorption of foamed aluminium;*
- *optimization of forming problems, methods of simulation;*
- *thermochemistry;*
- *transfer of speech, portable radio*