Åskådliggörande av aerosolpartiklar
Ett informationsprojekt på Universeum

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Abstract

Lately, particles have become of great concern due to their adverse health effects. Both physical and chemical properties of particles are of great importance in determining their health damaging contribution. It is acknowledged that combustion processes, especially traffic related emissions, contribute to total particulate air pollution. There are also other sources of particles e.g natural ones like particles from sea spray.

A Swedish Univeristy has three main obligations. One is to do research, one to teach students and one to related exchange knowledge with the surrounding society.
This thesis work was done in collaboration with the science center “Universeum”. It is a first step towards presenting aerosol research conducted at environmental physics at Universeum. Universeum is a science center built to give youth knowledge about science among other things and engage them to search for more knowledge. The main task of this work was to find an experiment arrangement that was engaging for youth. The experimental part of the exhibition was suggested to be three closed tanks, one equipped with a smoke generator, one filled with saltwater and airbubbles rising thru it and one that continuously was filled with outside air. To measure particles in these tanks a MetOne unit is used and controlled by a LabView program. This program also controls which tank the MetOne will measure the particles from. Using this experimental facility the visitors at Universeum will gain knowledge and interest in the field of aerosol research.

The presentation will show the basic pedagogic thoughts; the main feature and the possibilities with the suggested experimental set-up.

-The presentation will be in English
Welcome!