## **Application Examples**



**Tobacco Smoke**/ E-Cigarette Vapors: whole aerosol and gas phase

## **Aerosol Sources**

**AirTox Monitor** 



**Environmental Aerosol**: industrial emissions, exhaust gas form combustion processes, viruses, environmental pollutants in general, allergens



**HICE:** combustion derived aerosols from ship

diesel and automative engines as well as from wood stoves





**C**<sup>3</sup>: aerosol generated from cutting process of carbon concrete composite





## **Carbon Fibre Cycle:**

investigation of release and toxicity during the thermal and mechanical treatment of carbon fiber composite materials in the recycling process



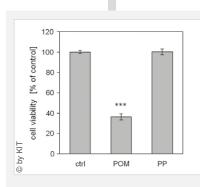
**Automated** Exposure Station – **Standard Version** 



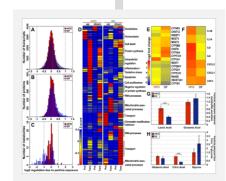
Automated Exposure Station – **Standard Version** 



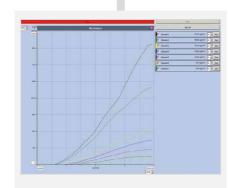
## **Test Results**



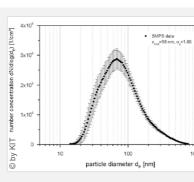
**Basic Assays**: cell viability, cytotoxicity see also VITROCELL<sup>®</sup> Assay Guide

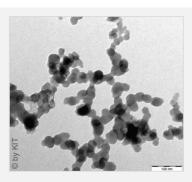


**Omics-Analysis**: metabolomics, transcriptomics, proteomics, micro-RNA



**Dose monitoring:** online dose determination





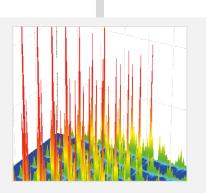
**Physical Aerosol Characterization**: number size distribution, morphology







NanoMILE: investigation of nanoparticles



Chemical Characterization: mass spectrometry