Conference Topic: Brake and tyre wear, non-combustion emissions

Reducing particle exposure level at metro stations

Teresa Moreno⁵, Christof Asbach⁶, <u>Katie Kedwell¹</u>

¹MANN+HUMMEL GmbH, Ludwigsburg, Germany, ⁵IDAEA-CSIC, Barcelona, Spain, ⁶IUTA, Duisburg, Germany,

At underground metro stations, dust emissions from the train brakes are a main contributor to poor air quality. But what could be a good tracer for that? We will present and discuss physical and chemical analyses of particles emitted by a metro disc brake used in Lisbon Metro and of PM2.5 inhaled by passengers at the platform of one a demo stations of this metro system. This enables us to trace the air quality at the metro back to brake emissions. Finally, we will give an outlook on the next steps for demonstrating the application of stationary air purifiers to improve air quality at metro stations. This progress of the AeroSolfd project will be shown on one separate poster.