



Contribution ID: 412

Type: Poster

MATHEMATICAL MODELLING AND SPECIAL MONITORING TECHNIQUES FOR AIR POLLUTION CHARACTERISATION IN LARGE INDUSTRIAL REGION

Tuesday, 3 October 2017 16:30 (1h 50m)

Moravia-Silesian region on the Czech-Polish border is one of the most polluted areas in Europe. This region is suffering from long-term increased values of air pollution concentrations. Air pollution has negative consequences to human health, ecosystem and economy.

The mathematical air pollution dispersion modelling provides information about distribution of air pollution and influence of individual pollution sources. The mathematical models are supplemented by moss survey biomonitoring and airborne measurements.

The first moss survey was focused on determination of the air pollutants sources. It was done during October 2015. Samples were collected on 41 sites. Area of interest was based on the first results and subsequently was extended in next year. There was collected another 44 samples sites. Samples were analysed by neutron activation analysis and other chemical methods. Since 2014, the survey of ground layer of atmosphere is performed using unmanned airship with equipment for the continual sampling of concentrations. The survey results are processed using the GIS technology to characterisation spatial and statistical properties.

Primary author: Mr SVOZILÍK, Vladislav (JINR)

Presenter: Mr SVOZILÍK, Vladislav (JINR)

Session Classification: Poster session

Track Classification: Life Science