Research and monitoring emitted air pollutants from flue gases

Goal of the project:
Identification, evaluation and monitoring of air pollutants, NO, NO_2, NOx, CO, CO_2, O_2, NH_3, VOC, Zn, particles and thermodynamic parameters from several sources at Berg Banat Fagaras zinc platting plant.

Short description of the project:
The project consists in quarterly measurements of air pollutants resulted from the zinc platting main activity of the BERG BANAT Fagaras branch plant. Thru these measurements the plant operator tunes its equipments both for productivity and quality of its products and environmental protection.

Project implemented by:
Faculty of Mechanical Engineering, Department of Mechanical Machines, Equipment and Transportation

Implementation period:
February 2012 – December 2013

Main activities:
Quarterly measurements episodes for air pollutants NO, NO_2, NOx, CO, CO_2, O_2, NH_3, VOC, Zn, particles. Thermodynamics parameters of flue gases and residuals are also monitored to optimize the zinc platting procedures.

Results:
An extensive database for main air pollutants for large zinc platting plants.

Fields of interest:
Zinc Platting emissions, Thermodynamics, Environmental engineering, Environmental protection, Combustion.

Financed through/by:
BERG BANAT, Fagaras brach

Research team:
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Research centre:
Research Centre for Thermal Machines and Equipments, Transportation and Environmental Pollution Control

Aplicability and transferability of the results:
Through this research typical air pollutant concentrations where identified and measured, and the results are applicable to any large zinc platting facility.

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