POS45. EXPERIMENTAL MODELS FOR MONITORING THE EMISSIONS OF POLLUTANTS IN THE LEATHER INDUSTRY

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Abstract

Leather processing industry is an industry with a great pollution potential. Environmental effects include not only the amount and concentration of classic pollutants, but also the use of certain chemical substances such as biocides, surfactant agents and organic solvents.
Air emissions can occur in various stages of the processing; typical pollutants resulted from these activities are organic compounds, ammonia, hydrogen sulfide, particulate matter and specific odor due to emissions of different compounds in air.
This paper presents the development, validation and implementation of an integrated system for monitoring and reducing the emissions of pollutants from tanneries and shoes industry, the main objective of the project is a solution to reduce the impact on the environment for a sustainable development and production.
In order to monitor and reduce the level of air pollution, three specific sensors for determining the concentration of H_2S, NH_3 and volatile organic compounds into the air were installed inside the pilot station. Preliminary results show that small changes in the technological process and substances used can lead to a significantly decrease in pollution levels.

Keywords: *leather, pollution, emissions, organic compounds*