

TESTING TECHNIQUES OF EQUIPMENT FOR REMOVAL OF TOXIC COMPOUNDS FROM THE AIR COMING FROM INDUSTRIAL AND DOMESTIC APPLICATIONS

Goal of the project

The project objective is to eliminate toxic pollutants from the air from industrial and residential applications using a purifying lamp.

Short description of the project

In order to eliminate toxic pollutants in the air from industrial and residential applications in project were carried out a series of tests using a purifying lamp (ORIN) that has the capacity to remove the toxic compounds (VOC, H₂S, NH₃).

The gases were monitored in a certain range time using a gas analyzer type MultiRAE SYSTEMS.

Project implemented by

- Faculty of Industrial Chemistry and Environmental Engineering.
- Department of Applied Chemistry and Engineering of Inorganic Compounds and Environmental.

Implementation period

01.10.2015-01.10.2016

Main activities

- Tests on the elimination of toxic compounds from the air using an electric device which produces negative ion purifier.

Results

1. To eliminate toxic compounds (VOC, H₂S, NH₃) in the air, it used a test cabin with size of 0.5 m³ which was introduced pollutant this is ventilation some time for homogenization (15mins).
2. From experimental data obtained notes that all toxic compounds studied has been a significant decrease to pollutant content in the air in time.

Applicability and transferability of the results

The results are consistent with the legislative framework in force.

Research Centre

Research Centre for Environmental Science and Engineering

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Research team

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