



EVALUATION OF AIR QUALITY IN AIRPORT AREAS BY NUMERICAL SIMULATION

Francisc Popescu^{1*}, Ioana Ionel¹, Camelia Talianu²

¹University "Politehnica" Timisoara, Department of Mechanical Machines Technology and Transportation, Chair of Thermodynamics Thermal Machines and Road Vehicles, 1 Mihai Viteazu Blvd., Timisoara 300222, Romania

²National Institute of R&D for Optoelectronics, Laser Remote Sensing Department, 409 Atomistilor Street, P.O. Box MG-5, RO-77125, Magurele, Ilfov, Romania

Abstract

The paper focuses on the description and demonstration of how numerical simulation applied as pollutants dispersion modeling in airport areas is a solution for solving complex problems concerning air quality issues and status strategies or perspectives for sustainable urban development, including traffic areas. The paper describes a methodology used to evaluate the concentration of major pollutants in an international airport environment, by means of mathematical analysis and informs about the validation possibility of the results and tool, by direct measurements. The software used is one that has global coverage and international acceptance, ISC3View developed by United States Environmental Agency. The case study was conducted for the International Airport "Traian Vuia" from Timisoara, during different representative episodes of several days in 2008 and 2009, thus also the fleet functioning as well the general air pollution issues such as emission factors are shortly introduced.

Key words: air quality, environment, pollutant dispersion

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* Author to whom all correspondence should be addressed: e-mail: ingfrancisc@gmx.net, Phone:+40755072020, Fax :+40256403669