Environmental Engineering and Management Journal

June 2014, Vol.13, No. 6, 1341-1348 http://omicron.ch.tuiasi.ro/EEMJ/



"Gheorghe Asachi" Technical University of lasi, Romania



VARIATION OF ANNUAL, SEASONAL, NOCTURNAL AND DIURNAL CONCENTRATIONS OF GASEOUS AND PARTICULATE POLLUTANTS IN SIX AREAS OF BUCHAREST, ROMANIA

Gilda Rusu-Zagar^{1*}, Catalin Rusu-Zagar¹, Andrei Iorga¹, Octavian Iorga¹, Laurentiu Zagar², Mihaela Mocanu³

¹INCDPM "Alexandru Darabont", Bucharest, Romania, ²Institute of Advanced Technology, Bucharest, Romania ³ "Dimitrie Cantemir" University, Bucharest, Romania

Abstract

The importance of air pollution for health results from the major role the air plays in preserving life. The air pollution is one of the most serious problems of the current society, both temporally and spatially. The air pollution of the environment is strongly influenced by meteorological factors because of a complex combination of emission processes, transport, chemical transformations and the removal of pollutants through wet and dry processes. This study established a database on ozone and particulate matter concentrations for the period 2005-2007 and has analyzed the concentrations of gaseous pollutants and especially of tropospheric ozone, considered one of the most active pollutants, and the particulates mass concentrations. The data from the six urban stations in Bucharest were analyzed in order to investigate the tropospheric ozone concentrations, the seasonal changes and the pollution trend for a 3 years period in the six areas of Bucharest.

Key words: environment, pollution, trophospheric ozone, working environment

Received: December 2013; Revised final: June, 2014; Accepted: June 2014

^{*} Author to whom all correspondence should be addressed: E-mail: gildarusuzagar@yahoo.com; Phone: +40 724247555; Fax: +40 213157822