Wet deposition in the Mexico City Metropolitan Zone

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This work covers a period of sampling and analysis of wet deposition of the consecutive years 2003 to 2009. The present research identified and evaluated the chemical composition of wet deposition of 2665 samples collected. Eventually, all the stations in the Mexico City Metropolitan Zone (MCMZ), present acidity characteristic (pH lower than 5.6) the behavior of the values of acidity, increased from the North to the South region in the MCMZ; potential values increased from the North to the South, the annual pH values volume weighted to "PAR and "LOM", sampling stations were 4.15 and 4.26 respectively to 2006. The pH values decreased from 2003 to 2006; year 2007 to 2009 had a tendency to increase.

The physicochemical parameters of pH and conductivity were evaluated, both in the field and in the laboratory; the concentration of soluble ions Na^+, NH_4^+, K^+, Mg^{2+}, Ca^{2+}, SO_4^{2-}, NO_3^- and Cl^-, with the ions SO_4^{2-} and NO_3^-, the most abundant (50% to 60% compared to anions and 30% to 40% compared to the total mass).

Distributions of SO_4^{2-}, NO_3^- and Cl^-, in kilograms (kg) per hectare, increased from the stations located in the Southwest, reaching maximum values of 47.39 Kg / ha(2007), 49.37 Kg / ha(2008) and 17.69 Kg / ha(2006) respecively.

In an effort to maintain control programs and quality assurance in the analysis of samples, the laboratory of SCA-CCA-UNAM is part of the Global Atmosphere Watch Precipitation Chemistry Program of the World Meteorological Organization since 2009.

It is recommended that Latin American countries for sampling and analysis follow the strict protocols, so that the results obtained will be comparable at the international level.

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