ISOTOPIC COMPOSITIONS OF PARTICULATE MATTER $PM_{2.5}$ DETECTED DURING MILAGRO CAMPAIGN IN THE SUPERSITE T1.

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Abstract:

During the Campaign MILAGRO, several filters of Teflon were collected in site T1 (TECAMAC), using the PQ200 sampler of 2.5 micrometer fine particles and measured by means of HPGe nuclear detector at the Research Center for Advanced Materials SC (CIMAV). The objective of the present work is to determine by means of the multivariate analysis, if the isotopic contents of the aerosols (^{238}U, ^{232}Th and ^{40}K) are dependant or not form the originating plume of the metropolitan zone of the Mexico Valley (ZMVM). The results of the research indicate that there isn't a high correlation between the specific activities of the natural isotopes in the study with the wind direction or its strength. Therefore, the conclusion is that the natural radioactive contents of the particulate matter in air are a complete local dependency.