



RESEARCH ON NaCl SALINE AEROSOLS II. NEW ARTIFICIAL HALOCHAMBER CHARACTERISTICS

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Abstract

This study presents the correlation between the characteristics of some new artificial surface halochambers with multiple users, which concern several latest inventions of its authors, and the lifespan evolution of the NaCl solions, under static and dynamic conditions. The study aims at evaluating the aerosol concentration using corroborated data from the laser particle counter, type SIBATA GT 321, and the differential conductometry method, under three operating modes of halochambers: after 240 h after its being set to operation (static duty), after 48 h of ventilation with warm air (dynamic operating duty) and after other 24 h after ventilation end (static operation duty). These halochambers generate NaCl solions implying for physical dispersion into the atmosphere of the nanostructures from the surface parallelepipedic blocks or micro-crystals obtained by the recrystallized NaCl and from rock salt, by the erosion process and taking over of micro-crystals by conventional aerial currents under static conditions and by vent blowers under dynamic conditions. The aerosol level obtained by these halochambers is higher to that presented by the literature for salt mines and dynamic devices for aerosols.

Key words: halochamber, NaCl solions, solion lifespan, solion sources

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