



RESEARCH ON NaCl SALINE AEROSOLS

I. NATURAL AND ARTIFICIAL SOURCES AND THEIR IMPLICATIONS

Ion Sandu^{1*}, Marin Chirazi¹, Maria Canache², Ioan Gabriel Sandu³,
Marius Tiberiu Alexianu¹, Andrei Victor Sandu^{3,4}, Viorica Vasilache¹

¹ „Al.I.Cuza” University of Iași, 11 Carol I Blvd., 700506, Iași, Romania

² Bolotău School, Zemeș, County Bacău, Romania

³ „Gheorghe Asachi” Technical University of Iași, 71 Mangeron Blvd., 700050, Iași, Romania

⁴ Romanian Inventors Forum, 3 Sf. Petru Movilă Str., 700089, Iași, Romania

Abstract

This paper is the first of a series of new researches on the NaCl aerosols, which includes the bibliographical analysis and synthesis regarding the structure, the form and the sizes of the particles of the NaCl aeroions in correlation with the production procedures. There are also analyzed some practical applications pointed out both by some ancient Greek and Roman texts and by the present-day literature; at the same time there is underlined the existence, even from Antiquity, of an *ethnoscience* which led to the current knowledge in the *halotherapy* field. Concerning the artificial sources of the aerosols employed in the multiple-usage halochambers, there have been taken into consideration the most well-known procedures which are based on the *mechanical separation* or *erosion*, followed by the *physical dispersion* in the atmosphere; on the *breaking of the gas bubbles* in the sparging with air or other inert gases by means of the supersaturated saline solutions; on the *atomization of the saturated saline solutions* in the vacuum centrifugal air separators and the *carrying-away of the superficial particles* resulted from solvolyses and the consecutive anhydrizations of the structures from the surface of the halite blocks. These procedures will be included in the subsequent research.

Key words: aerosols, ethnoscience, halotherapy, NaCl, particle size, sources

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* Author to whom all correspondence should be addressed: e-mail: sandu_i03@yahoo.com