



STUDY OF ADSORPTION EQUILIBRIUM OF SOME WET AIR- COMPOSITE MATERIAL SYSTEMS

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Abstract

Equilibrium data of water vapor adsorption from wet air on several materials were experimentally determined at temperature values of 313 and 333 K and air relative humidity values ranged between 30 and 90 %. Experimental data were correlated with Langmuir and Freundlich models. The obtained results emphasize the significant difference between the water retained on the adsorbent materials impregnated with various salt solutions, and on classic adsorbents.

Key words: activated carbon, adsorption equilibrium, calcium chloride, porous media, silica gel

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