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Physical and chemical properties of the modified vermiculite

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Abstract

Vermiculite from Kovdorskiy (Karelia), modified by acid, chitosan, were investigated by positron annihilation spectroscopy, density measurement, dye adsorption, the nitrogen adsorption BET and porosimetry.

It was shown that the density of vermiculites after acid treatment varies compared to the density of the initial samples, depending on the concentration of acid. The density increases with the increasing acid concentration. Internal volume of the micropores and the value of maximum adsorption of brilliant green change is directly proportional to the density of modified vermiculite.