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Adsorption features of hydrocarbon vapors on the surface of the carbon adsorbent modified by polyvinylpyrrolidone monolayer

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Abstract

In this paper by the reverse gas-adsorption chromatography method, there were defined thermodynamic characteristics of adsorption (TCA) of a number of hydrocarbons on the carbon graphite-solid support Carbopack Y (CpY) modified by polar polymer polyvinylpyrrolidone (PVP). Analysis of the TCA showed that PVP is adsorbed in the form of globules on the surface of the carbon adsorbent CpY. The intervals between these may be the centers of localization for the appropriate size of the adsorbed molecules.