

Sorption of methane rocks of gas deposits in the Henry region

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A theoretical and experimental study of the absorption of methane by rocks of gas deposits is carried out. An original approach to determining the physicochemical parameters of gas included in porous environment and to constructing isotherm of adsorption was proposed. The results base on phase equilibrium condition lead to the general form of the Henry law including one parameter. The proposed approach made it possible to develop a new effective thermodynamic method for calculating the sorption of the component natural gas in porous environment at supercritical temperatures and pressures typical of the conditions of natural gas recovery.