عنوان مقاله:

Experimental and Theoretical Study on the CH4 Adsorption by granular and microporous activated carbon

محل انتشار:

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خلاصه مقاله:

Adsorbed natural gas ANG by granular activated carbon GAC has been widely investigated as an alternative to CNG and LNG technologies for storage and transporation of natural gas . In present work a theoretical and experimental study was conducted to accurately determine the amount of adsorption of CH4by GAC. to carry out the experiments , the volumentric method was sued up to 4 MPa at constant temperature of 298K. also various adsorption isotherm medols were used to model the experimental data collected from the experiments. the accuracy of the results obtained from the adsorption isotherm models was compared and the values for the regressed parameters were reported. the results shows that the amount of CH4 adsorbed dependent on the physical characteristics of activated carbons, moreover the toth, two - term TVFM and sips isotherm models shows good agreement with the experimental .data

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا: