

Adsorption of methane on Anthracite-based activated carbons

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The storage gratuity of Natural gas(NG) have been more than fossil fuel. The recent activated carbon were focused by researcher to alternative fuel. Adsorbed natural gas (ANG) storage systems offer several advantages including the reversible operation with higher working density under ambient temperature and pressure comparing with conventional methods such as liquefied natural gas(LNG) and compressed natural gas (CNG) storages. In this work, the anthracite-based and pitch activated carbons are prepared for adsorption of methane. Adsorption equilibrium isotherms of methane on the activated carbon monolith (ACM) are measured at pressures range of from 0 to 30 atm and different three temperatures range such of 298, 308 and 318 K in a volumetric adsorption apparatus.