

Adsorption Equilibrium of H₂, CO and CO₂ on Zeolite 5A and Activated Carbon

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Adsorption experiments for H₂, CO and CO₂ on zeolite 5A and activated carbon were performed by static volumetric method. Experimental data were obtained at temperatures of 293.15, 303.15 and 313.15K and at pressures to 25 atm. The Langmuir, Langmuir-Freundlich and LRC(Loading Ratio Correlation) equation were used to correlate the experimental data. In spite of the relative simplicity of isotherms, the correlation between experimental and theoretical data is good. Single gas adsorbed amounts on zeolite 5A were compared with that on activated carbon.