

Adsorption Equilibrium of H₂, CO and CO₂ On Zeolite 5A

박주용, 양세일, 장성철, 이창하¹, 최대기*
한국과학기술연구원; ¹연세대학교
(dkchoi@kist.re.kr*)

Adsorption experiments for H₂, CO and CO₂ on zeolite 5A(CECA) were performed by static volumetric method in the pressure range of 0 to 20 bar at temperatures of 293.15K 303.15K and 313.15K. The Langmuir, Langmuir-Freundlich and DSL(Dual-Site Langmuir) 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. Adsorbed amounts of single gas on zeolite 5A were compared to Li-X zeolite(UOP)