암모니아수를 이용한 이산화탄소 흡수탑에서 동특성 연구

김유정, 이광복[1], 유정균, 박종기[1], 박종호[1], 고창현[1],
홍원희, 김종남[1,*]
KAIST; [1]한국에너지기술연구소
(jnkim@kier.re.kr*)

The performance of carbon dioxide absorption of ammonia solution was evaluated experimentally in a bench-scale absorber packed with high-efficiency Gauze packing ($a=700 m^2/m^3$). The absorption experiments were conducted under atmospheric pressure, using a feed gas mixture containing 10% carbon dioxide. The absorption performance was presented in terms of the carbon dioxide removal efficiency and working capacity of absorbent. The mass transfer coefficient ($K_G a_v$) was obtained as a function of the process operating parameters including CO_2 partial pressure, liquid load, gas feed rate, temperature, and solvent concentration.