小管徑氣液兩相流中質量傳送之研究

The study aims at relationship between mass transfer and gas-liquidtwo-phase flow in a small diameter tube, and discusses the influenceof liquid superficial velocity, gas superficial velocity, and flowpattern on the dissolution rate of soluble-wall. The comparisonbetween the mass transfer rates in single liquid phase flow and ingas-liquid two-phase flow were also discusses. Experimental resultsshow that the dissolution rate of urea in the gas-liquid two-phasesystem is significantly larger than that in single liquid-phasesystem.