

Modelling ultrasonic sensor for gas bubble profiles characterization of chemical column

Abstract

In this paper, we present a modelling and experimental work to characterize gas bubble profiles in chemical column using a pair of ultrasonic sensor. The gas bubble profiles from 2.90 mm to 7.50 mm diameter are of interest in this study. The modelling concerns ultrasonic investigation via transmission-mode technique. The modelling estimation was compared with the experimental data and the gas bubble profile characterizations from the chemical column were deduced.

Keywords

Bubble column; Gas bubble; Ultrasonic measurement; Ultrasonic sensor