

عنوان مقاله:

The use of CNT in liquid phase to improve CO₂ absorption in a bubble column metsys

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

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نویسندگان:

Leyla Saeednia - *Department of Chemical engineering, College of Engineering, Shahid Bahonar university of Kerman, Kerman, Iran International Center for Science, High Technology and Environmental Science, Mahan, Kerman, Iran*

Hassan Hashemipour - *Department of Chemical engineering, College of Engineering, Shahid Bahonar university of Kerman, Kerman, Iran International Center for Science, High Technology and Environmental Science, Mahan, Kerman, Iran*

Dariush Afzali - *International Center for Science, High Technology and Environmental Science, Mahan, Kerman, Iran*

خلاصه مقاله:

The main objective of this paper is to study the enhancement of the absorption rate of carbon dioxide by adding CNT to the liquid phase. The absorption process is carried out in a bubble column reactor and in room temperature. The effect of CNT concentration in liquid phase is also investigated as a key parameter. The mechanism of the nanofluid enhancing bubble absorption is discussed accordingly. The results show that the mass fraction of CNTs has an optimum value to the effective absorption ratio of the nanofluid. The 0.07% CNT nanofluid increase the rate of absorption two times in comparison with the distilled water

کلمات کلیدی:

nanofluid, gas absorption, nanoparticles, absorption rate

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