

عنوان مقاله:

CFD Simulation of Dynamic Mass Transfer from Taylor Bubble in Circular Capillary

محل انتشار:

سومین کنفرانس ملی کاربرد CFD در صنایع شیمیایی (سال: 1390)

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خلاصه مقاله:

In this paper, the mass transfer from Taylor bubble in circular capillaries was simulated by a VOF based mass transfer model. In this model the mass transfer in both gas and liquid is considered and this method is suitable for flows with mass transfer resistance in both phases. The accuracy of presented mass transfer model was investigated both analytically and experimentally. The results show that the developed model supplies an adequate basis for investigation of mass transfer process in gas-liquid multiphase system.

کلمات کلیدی:

Mass Transfer, Taylor bubbles, CFD, VOF, Circular Capillaries

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