

## عنوان مقاله:

Nonequilibrium Stage Modeling of Carbon Dioxide Absorption by Partially Carbonated Ammonia Solution

## محل انتشار:

دوازدهمین کنگره ملی مهندسی شیمی ایران (سال: 1387)

تعداد صفحات اصل مقاله: 11

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## خلاصه مقاله:

A nonequilibrium dynamic stage model has been presented for reactive absorption of carbon dioxide by amines solutions. The model has been developed based on unsteady film modeling that considers mass transfer between gas and liquid phases in both directions. The model has been validated against experimental data of carbon dioxide reactive absorption in partially carbonated ammonia solution. The experimental data has been obtained from a pilot plant absorption column. The model equations were discretized in column height direction using method of lines. A comparison of the experimental and simulation results demonstrated their good agreement.

## کلمات کلیدی:

Carbon dioxide (CO<sub>2</sub>); dynamic simulation; nonequilibrium stage model; reactive absorption

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/58019>

