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Multicomponent Langmuir-Freundlich equation for the prediction of adsorption equilibria of CO₂/N₂/O₂ mixtures over ZMS 13X

Publication date:	30.12.2014
Publication title:	Multicomponent Langmuir-Freundlich equation for the prediction of adsorption equilibria of CO₂/N₂/O₂ mixtures over ZMS 13X
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Journal information:	Prace Naukowe Instytutu Inżynierii Chemicznej Polskiej Akademii Nauk
Tags:	carbon dioxide abatement , adsorption equilibria , gaseous mixtures , zeolite molecular sieves

Abstract: Experimental results are presented which concern the adsorption equilibria of gaseous mixtures containing carbon dioxide, nitrogen and oxygen over zeolite molecular sieves 13X Grace which may be used in the separation of CO₂ from flue gases. Experimental results are compared with the results of calculations using the Langmuir-Freundlich equation. Good agreement is found between the experiment and calculations. It is shown that the Langmuir-Freundlich equation can be used for the calculation of gas-solid equilibria in systems containing mixtures of CO₂, N₂, O₂ and zeolite molecular sieves 13X Grace.

Attachments:

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Metryczka

Published by:	Artur Wojdyła
Published at:	18.09.2025 14:04
Number of views:	113