

Institute of Chemical Engineering

Adres artykułu: <https://iich.gliwice.pl/en/article/investigation-of-co2-n2-separation-efficiency-on-silms-based-on-ceramic-support>

Investigation of CO₂/N₂ separation efficiency on SILMS based on ceramic support

Publication date:	30.12.2020
Publication title:	Investigation of CO₂/N₂ separation efficiency on SILMS based on ceramic support
Authors:	Adam Rotkegel , Zenon Ziobrowski
Journal information:	Prace Naukowe Instytutu Inżynierii Chemicznej Polskiej Akademii Nauk
Tags:	absorption , carbon dioxide , ionic liquids

Abstract: The experimental results of carbon dioxide and nitrogen separation on ceramic membranes impregnated with ionic liquids [Emim][Ac] (1-ethyl-3-methylimidazolium acetate) and [Emim][Tf₂N] (1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide) are presented. Ceramic membranes made by Inopor were investigated in 20-60°C and in the pressure range 1-7 bar. The ionic liquid was introduced into ceramic support by coating and soaking. It was found, that prepared SILMs are characterized by small mass fluxes and high selectivities.

Attachments:

[Zeszyt-24-2020](#) pdf, 3.25 MB

Created at:	04.08.2025
Published by:	Artur Wojdyła
Published at:	05.08.2025 11:41
Number of downloads:	70

Tagi: absorption, carbon dioxide, ionic liquids

Metryczka

Published by:	Artur Wojdyła
Published at:	05.08.2025 14:35
Number of views:	68