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

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Authors:	Adam Rotkegel, Zenon Ziobrowski
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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:

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