

# Institute of Chemical Engineering

Adres artykułu: <https://iich.gliwice.pl/en/article/investigation-of-co2-and-n2-separation-on-silms-based-on-ceramic-al2o3-support>

## Investigation of CO<sub>2</sub> and N<sub>2</sub> separation on SILMS based on ceramic Al<sub>2</sub>O<sub>3</sub> support

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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][BF<sub>4</sub>] ((1-ethyl-3-methylimidazolium tetra fluoroborate) 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 method. It was found, that prepared SILMs are characterized by small mass fluxes and high selectivities.

## Attachments:

[Zeszyt-25-2021](#) pdf, 6.38 MB

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# Metryczka

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