

# Institute of Chemical Engineering

Adres artykułu: <https://iich.gliwice.pl/en/article/sequestration-of-carbon-dioxide-by-mineral-carbonation-process-using-fly-ash-from-lignite-fluidized-bed-combustion>

## Sequestration of carbon dioxide by mineral carbonation process using fly ash from lignite fluidized bed combustion

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<b>Authors:</b>	<a href="#">Manfred Jaschik</a> , <a href="#">Krzysztof Warmuziński</a> , <a href="#">Jolanta Jaschik</a>
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**Abstract:** The preliminary studies of indirect aqueous carbonation process using fly ash from lignite fluidized bed combustion are presented. Leachate after the dissolution of waste of pH=13 contained  $0.0535 \text{ mol} \cdot \text{l}^{-1}$  of  $\text{Ca}^{+2}$ . The experimental research were conducted for a mixture of nitrogen and carbon dioxide, with about 13% of  $\text{CO}_2$ . After 9 minutes of conducting the process a 50 % conversion of calcium was attained, and almost 100% of carbon dioxide supplied to the reactor was captured.

## Attachments:

[Zeszyt-19-2015](#) pdf, 5.37 MB

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Tagi: mineral carbonation, sequestration of co2, industrial waste, fly ash, precipitation, calcium carbonate

## Metryczka

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