

# Institute of Chemical Engineering

Adres artykułu: <https://iich.gliwice.pl/en/article/designing-of-cometabolic-microbial-degradation-of-1-4-dioxane-literature-studies-and-experiments>

## Designing of cometabolic microbial degradation of 1,4-dioxane: literature studies and experiments

<b>Publication date:</b>	30.12.2019
<b>Publication title:</b>	<a href="https://iich.gliwice.pl/en/article/designing-of-cometabolic-microbial-degradation-of-1-4-dioxane-literature-studies-and-experiments">Designing of cometabolic microbial degradation of 1,4-dioxane: literature studies and experiments</a>
<b>Authors:</b>	<a href="#">Bożena Janus</a> , <a href="#">Hanna Kolarczyk</a> , <a href="#">Agnieszka Gąszczak</a> , <a href="#">Elżbieta Szczyrba</a>
<b>Journal information:</b>	Prace Naukowe Instytutu Inżynierii Chemicznej Polskiej Akademii Nauk
<b>Tags:</b>	<a href="#">1,4-dioxane</a> , <a href="#">monooxygenase</a> , <a href="#">cometabolic biodegradation</a>

**Abstract:** Major methods of 1,4-dioxane degradation were described and different bacterial strains using that xenobiotic as a source of carbon and energy were presented. Microbial growth tests during 1,4-dioxane degradation in metabolic and cometabolic processes were conducted. The tests of the inducibility of monooxygenase, the main enzyme of 1,4-dioxane biodegradation pathway, were also provided.

## Attachments:

[Zeszyt-23-2019](#) pdf, 2.84 MB

<b>Created at:</b>	04.08.2025
<b>Published by:</b>	Artur Wojdyła
<b>Published at:</b>	05.08.2025 11:26
<b>Number of downloads:</b>	123

Tagi: 1,4-dioxane, monooxygenase, cometabolic biodegradation

# Metryczka

<b>Published by:</b>	Artur Wojdyła
<b>Published at:</b>	05.08.2025 14:04
<b>Number of views:</b>	123