



Joanna Mankiewicz-Boczek

PROFESSOR AND HEAD OF LABORATORY OF MOLECULAR ECOHYDROLOGY – ERCE PAS · PROFESSOR – UNIVERSITY OF LODZ

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🌐 <https://www.uni.lodz.pl/pracownicy/joanna-mankiewicz-boczek> | Scopus bibliometric data: citations 2491 ·

documents 87 · h-index 27 |  Joanna-Mankiewicz-Boczek

Currently held positions

European Regional Centre of Ecohydrology of the Polish Academy of Sciences

Łódź

PROFESSOR AND HEAD OF LABORATORY OF MOLECULAR ECOHYDROLOGY

UNESCO Chair on Ecohydrology and Applied Ecology, Faculty of Biology and Environmental Protection

University of Lodz

PROFESSOR

Scientific profile and collaborations

My scientific activities are closely related to the use of molecular biology in a broad range of basic and applied environmental research, including: **1) water biomonitoring**, **2) ecotoxicology of aquatic and soil ecosystems** and **3) assessment of the impact of cyanobacterial harmful algal blooms (cyanoHABs)** on ecosystem condition and health aspects, including antibiotic resistance. Furthermore, in my research, together with my team, I focus on **the search on beneficial microorganisms for mitigating the effects of cyanoHABs**, including algicidal bacteria capable of degrading cyanobacterial cells and cyanotoxin-degrading bacteria. In the context of prevention, I focus on **the search, in the natural environment, to find microorganisms responsible for the transformation and/or accumulation of nitrogen and phosphorus compounds** for the further development of biotechnological solutions for ecohydrology and NBS (nature-based solutions).

Collaboration:

Republic of Korea, Daejeon, Korean Research Institute of Biosciences and Biotechnology, prof. Ahn, Chi-Yong

Singapore, National University of Singapore, Department of Civil and Environmental Engineering, prof. Gin Yew-Hoong, Karina

USA, Troy, U.S. Geological Survey, New York Water Science Centre, dr Jennifer L. Graham

Itali, Perugia, University of Perugia, Dep. of Pharmaceutical Science, prof. Gianluigi Cardinali

Greece, Thessaloniki, International Hellenic University, prof. Anastasia Imsiridou

Selected publications

- 2024 **Algicidal bacteria against cyanobacteria: Practical knowledge from laboratory to application** [\[link\]](#)
- 2017 **The removal of nitrogen compounds from farming wastewater – The effect of different carbon substrates and different microbial activators** [\[link\]](#)
- 2014 **Role of Environmental Factors and Toxic Genotypes in The Regulation of Microcystins-Producing Cyanobacterial Blooms** [\[link\]](#)

Research grants

Principal Investigator: 7 grants: KBN, NCN

Project Supervisor: 2 grants: NCN

Member of Committee or MC Substitute: 2 grants: COST ACTION

Co-Investigator: 15 grants: KBN, NCN, MNiSW, NCBiR, The European Commission's project

Obtained patents

3 patents given by Polish Patent Office

International research stays

Greece Thessaloniki, International Hellenic University

Finland Helsinki, University of Helsinki

Belgium Liege, University of Liege

Norway Bergen, University of Bergen