

Candidate supervisor's information summary form

Name and surname, degree, title: Agnieszka Bus, PhD	
Discipline/ disciplines of science	Environmental engineering, mining and energy
Professional development (degrees and titles) in chronological order	2008 r. – MSc in Environmental Protection 2013 r. – PhD in Protection and Environmental Development 2019 r. – Habilitation degree in technical science
Most important publications/patens over the last 3 years (maximum 10)	<p>BUS A., KARCZMARCZYK A.: P-binding mineral materials to enhance phosphate removal using nature-based solutions in urban areas, 2020, <i>Desalination and Water Treatment</i>, 205, 198-207</p> <p>KARCZMARCZYK A., BARYŁA A., FRONCZYK J., BUS A. MOSIEJ J.: Phosphorus and metals leaching from green roof substrates and aggregates used in their composition, <i>Minerals</i>, 10, 3, 2020, 1-11</p> <p>A.BUS., A. SZELAĞOWSKA: Green Water from Green Roofs—The Ecological and Economic Effects, <i>Sustainability</i>, 2021, 13, 4, 1-14</p> <p>KARCZMARCZYK A., BUS A., BARYŁA A.: Assessment of the efficiency, environmental and economic effects of compact type on-site wastewater treatment plants — results from random testing, <i>Sustainability</i>, 2021, 13, 2, 1-15</p> <p>BUS A., KARCZMARCZYK A. BARYŁA A.: Phosphorus reactive materials for permeable reactive barrier filling – lifespan estimations, 2022, <i>Desalination and Water Treatment</i>, 245, 9-15</p> <p>BUS A., Implementation of P-Reactive Layer for Improving Urban Water Quality: Kinetic Studies, Dimensioning and Economic Analysis, 2022, <i>Sustainability</i>, 2022, vol. 14 (15), 9151</p> <p>BUS A., KARCZMARCZYK A. BARYŁA A.: Nature-based solutions enhanced by reactive materials for the protection of urban water bodies, <i>Desalination and Water Treatment</i>, 2023, vol. 281, 70-77</p> <p>Patent P. 403571, „Filtr do usuwania zanieczyszczeń, zwłaszcza z małych cieków i zbiorników wodnych” (Bus A. 50%, Karczmarczyk A. 50%).</p>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	-
Project/grants achievements (from the last 10 years)	International project: Ecotechnology for Sustainable Development (EcoSuD). Implementation period: 2011-2013.

	<p>Coordinator: KTH Royal Institute of Technology, Stockholm. Funding Source: Svenska Institute (SI) National project: Influence of biological membrane development on phosphate removal through flow-controlled mineral filters. Implementation period: from 1.07.2017. Project implemented as part of cooperation with the Polish Association of Natural Bathing Waters</p> <p>505-10-052700-P00436-99: Assessment of the effectiveness of the reactive barrier model for removing diffuse pollution, implementation period: 2017-2018, source of financing: Warsaw University of Life Sciences</p> <p>National project: Innovative technologies and a system for monitoring, forecasting and operational planning of drainage activities for precise water management INOMEL BIOSTRATEG3 / 347837/11 / NCBR / 2017 drainage facility. Participation in the project: 2019-2020</p>
<p>Topic – research problem – for which the candidate supervisor seeks a doctoral student</p>	<p>Reclamation of surface waters</p> <p>Application of ecological engineering methods to improve water quality</p> <p>Ecosystem services and economic efficiency of pro-ecological investments</p>
<p><u>Contact details:</u> Faculty/Institute E-mail address Tel.</p>	<p>Agnieszka Bus</p> <p>Faculty of Civil and Environmental Engineering, Institute of Environmental Engineering</p> <p>e-mail: agnieszka_bus@sggw.edu.pl</p> <p>tel. 22 5935099</p>