

Candidate supervisor's information summary form

Name and surname, degree, title: Agnieszka Bus dr hab. inż.	
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., 2018: Kinetic studies on removing phosphate from synthetic solution and river water by reactive material in a form of suspended reactive filters <i>Desalination and Water Treatment</i>, 136: 237-244</p> <p>BUS A., MOSIEJ J., 2018: Kształowanie jakości wody odpływającej i dopływającej z kompleksu zbiorników Niewiadoma zlokalizowanego na rzece Cetyni. <i>Rocznik Ochrona Środowiska</i>, 20: 1793-1810.</p> <p>KARCZMARCZYK A., BUS A., BARYŁA A., 2018: Phosphate leaching from green roof substrates—can green roofs pollute urban water bodies? <i>Water</i>, 10 (2): 1-13.</p> <p>KARCZMARCZYK A., BUS A., BARYŁA A.: Influence of operation time, hydraulic load and drying on phosphate retention capacity of mineral filters treating natural swimming pool water, w: <i>Ecological Engineering</i>, vol. 130, 2019, ss. 176-183</p> <p>BUS A., KARCZMARCZYK A., BARYŁA A.: Permeable reactive barriers for preventing water bodies from a phosphorus-polluted agricultural runoff-column experiment, w: <i>Water</i>, vol. 11, nr 3, 2019, ss. 1-13</p> <p>BUS A., KARCZMARCZYK A., BARYŁA A.: Calcined eggshell as a P reactive media filter-batch tests and column sorption experiment, <i>Water Air and Soil Pollution</i>, vol. 230, 2019, ss. 1-11</p> <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>A.BUS., A. SZELAĞOWSKA: Green Water from Green Roofs—The Ecological and Economic Effects, <i>Sustainability</i>, 2021, 13, 4, 1-14</p> <p>Patent P. 403571, "Filter for removing pollutants, especially from small watercourses and reservoirs" (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)	<p>International project: Ecotechnology for Sustainable Development (EcoSuD). Implementation period: 2011-2013. Coordinator: KTH Royal Institute of Technology, Stockholm. Funding Source: Svenska Institute (SI)</p> <p>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>
Topic – research problem – for which the candidate supervisor seeks a doctoral student	<p>Reclamation of surface waters</p> <p>Application of ecological engineering to improve water quality</p> <p>Ecosystem services and economic efficiency of pro-ecological investments</p>
<p><u>Contact details:</u></p> <p>Faculty/Institute</p> <p>E-mail address</p> <p>Tel.</p>	<p>Agnieszka Bus</p> <p>Faculty of Civil and Environmental Engineering</p> <p>Institute of Environmental Engineering</p> <p>e-mail: agnieszka_bus@sggw.edu.pl</p> <p>tel. 22 5935099</p>