

Candidate supervisor's information summary form
 maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title: Marek Kalenik, Ph.D., D.Sc., Eng., prof. Uczelni	
Scientific discipline/ disciplines	<ol style="list-style-type: none"> 1. Environmental engineering, mining and energy 2. Civil engineering, geodesy and transport
Professional development (degrees and titles) in chronological order	<p>2022 - professor SGGW; Institute of Environmental Engineering</p> <p>2018 - habilitated doctor in the field of technical sciences in the discipline of environmental engineering; specialization: hydraulics, water supply and sewage systems; Faculty of Civil and Environmental Engineering; Bialystok University of Technology</p> <p>1999 - doctor of agricultural sciences in the discipline of environmental management; Faculty of Land Reclamation and Environmental Engineering; Warsaw University of Life Sciences</p> <p>1995 - master of science in environmental engineering; Faculty of Land Reclamation and Environmental Engineering; Warsaw University of Life Sciences</p>
Most important publications/ patents in the last 3 years (maximum 10)	<ol style="list-style-type: none"> 1. Barbusiński K., Szelaż B., Białek A., Kalenik M., Bakalár T.: An innovative method of predicting the maximum flow in stormwater sewage systems using soft-sensors. Archives of Environmental Protection 2025, 51(3), 54-73. DOI 10.24425/aep.2025.156009. 2. Świętochowski K., Andraka D., Kalenik M., Gwoździej-Mazur J.: The Hourly Peak Coefficient of Single-Family and Multi-Family Buildings in Poland: Support for the Selection of Water Meters and the Construction of a Water Distribution System Model. Water 2024, 16, 1077 - 1091. https://doi.org/10.3390/w16081077. 3. Chmielowski K., Halecki W., Masłoń A., Bąk Ł., Kalenik M., Spychała M., Bedla D., Pytlowany T., Paśmionka I. B., Sikora J., Sionkowski T.: The Efficiency of a Biological Reactor in a Domestic Wastewater Treatment Plant Operating Based on ABS (Acrylonitrile Butadiene Styrene) Material and Recycled PUR (Polyurethane) Foam. Sustainability 2024, 16, 1149 – 1162, https://doi.org/10.3390/su16031149. 4. Dąbrowska S., Gałka M., Kubrak E., Kubrak J., Kalenik M., Kiczko A.: Capture of plastic litter by sluice gate and trash racks. Archives of Environmental Protection 2024, 50(3), 18-25. DOI:10.24425/aep.2024.151682. 5. Kalenik M., Morawski D.: System for clearing acid-resistant steel Ringa and metod of clearing them. Patent/exclusive right number: Pat. 246162 B1. Application number: P. 442322. Submission date: 20.09.2022. Date of granting the right: 17.09.2024. Patent publication [WUP 50/2024:09.12.2024]. 6. Świętochowski K., Świętochowska M., Kalenik M., Gwoździej-

	<p>Mazur J.: Analysis of the Use of a Low-Power Photovoltaic System to Power a Water Pumping Station in a Tourist Town. <i>Energies</i> 2023, 16, 7435-7448, https://doi.org/10.3390/en16217435.</p> <p>7. Kalenik M., Chalecki M., Wichowski P., Kiczko A., Chmielowski K., Świętochowska M., Gwoździej-Mazur J.: Real values of local resistance coefficients during water flow through a pipe aerator with filling. <i>Journal of Water and Land Development</i> 2023, 59 (X–XII), 174-182, DOI: 10.24425/jwld.2023.147242.</p> <p>8. Kalenik M., Wichowski P., Chalecki M., Kiczko A.: Efficiency of wastewater purification in medium sand with a lightweight expanded clay aggregate assisting layer. <i>Journal of Water and Land Development</i> 2023, 57 (IV–VI), 30-38, DOI: 10.24425/jwld.2023.145333.</p> <p>9. Chmielowski K., Halecki W., Masłoń A., Bąk Ł., Kalenik M., Spychała M., Niedziółka A., Łaciak M., Roman M., Mazurkiewicz J.: Use of Shredded Recycled Plastic as Filter Bed Packing in a Vertical Flow Filter for Onsite Wastewater Treatment Plants: Preliminary Findings. <i>Sustainability</i> 2023, 15, 1883-1897, https://doi.org/10.3390/su15031883.</p> <p>10. Wichowski P., Kalenik M., Rutkowska G., Malarski M., Czajkowska J., Franus W.: Properties of products obtained in the process of solidification and stabilization of fly ash resulting from thermal treatment of sewage sludge. <i>Cement Lime Concrete</i> 2023, 28(6), 389-408, doi:https://doi.org/10.32047/CWB.2023.28.6.3.</p>
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	
Achievements in the area of projects/grants (in the last 5 years)	Kalenik M., Morawski D.: Pipe aerator with filling. Project in the program "Innovation Incubator 4.0" (Agreement no MNISW/2020/358DIR) implemented as part of a non-competitive project "Support for scientific research management and commercialization of B+R results in scientific units and enterprises" under the Smart Growth Operational Program 2014-2020 (Action 4.4). Completion date: 01.07.2021-28.02.2022. SGGW Warsaw.
Subject area of the research project for which the candidate student is being recruited	<ol style="list-style-type: none"> Investigation of hydraulic working conditions of airlifts used in rapid filters with a self-regenerating bed. Investigation of the influence of the addition of sludge from washing the rapid filters on chemical and strength properties of concrete.
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