**Candidate supervisor's information summary form**

| Name and surname, degree, title:<br>**Marek Kalenik, Ph.D., D.Sc., Eng.** | |
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| Discipline/ disciplines of science | 1. Environmental engineering, mining and energy<br>2. Civil engineering and transport |
| Professional development (degrees and titles) in chronological order | 1995 - master of science in environmental engineering; Faculty of Land Reclamation and Environmental Engineering; Warsaw University of Life Sciences<br>1999 - doctor of agricultural sciences in the discipline of environmental management; Faculty of Land Reclamation and Environmental Engineering; Warsaw University of Life Sciences<br>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 |
| Most important publications/patens over the last 3 years (maximum 10) | 1. Wichowski P., Kalenik M., Lal A., Morawski D., Chakecki M.: Hydraulic and Technological Investigations of a Phenomenon Responsible for Increase of Major Head Losses in Exploited Cast-Iron Water Supply Pipes. Water 2021, 13(11), 1604-1623. https://doi.org/10.3390/w13111604.<br>2. Kalenik M., Chalecki M.: Investigations on the effectiveness of wastewater purification in medium sand with assisting opoka rock layer. Environment Protection Engineering 2021, Vol. 47, No. 1, 53-65; DOI: 10.37190/epe210105<br>3. Kalenik M., Morawski D.: Tubular aerator with filling. Patent number/law: Pat.235924. Aplication number: P.413870. Aplication date: 08.09.2015. Registration date: 25.06.2020. Patent publication: [WUP 16.11.2020]<br>4. Kalenik M., Chalecki M., Wichowski P.: Real Values of Local Resistance Coefficients during Water Flow through Welded Polypropylene T-Junctions. Water 2020, 12(3), 895-910; doi: https://doi.org/10.3390/w12030895<br>5. Kalenik M., Chalecki M.: Model Investigations of Flow Rate and Efficiency of Air Lift Pump with PM 50 Mixer and Circumferential Mixer. Rocznik Ochrona Środowiska 2020, vol. 22, 456-474.<br>6. Kalenik M.: Real values of local resistance coefficient during flow of water through welded polypropylene elbows. Ochrona Środowiska 2019, Vol. 41, No. 1, 23-30. |

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| | 7. Wichowski P., Siwiec T., Kalenik M.: Effect of the Concentration of Sand in a Mixture of Water and Sand Flowing throught PP and PVC Elbows on the Minor Head Loss Coefficient. Water 2019, 11(4), 828-845; doi: https://doi.org:10.3390/w11040828.<br>8. Kalenik M.: Study of effectiveness of sewage treatment in medium sand with a supportive small coal layer. Acta Scientiarum Polonorum-Formatio Circumiectus 2019, 18(3), 57-70.<br>9. Kalenik M., Chalecki M.: Investigations on the effectiveness of wastewater purification in medium sand with assisting clinoptilolite layer. Environment Protection Engineering 2019, Vol. 45, No. 2, 117-126. |
| Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order | |
| Project/grants achievements (from the last 10 years) | Wichowski P.P., Siwiec T., Kalenik M., Stańko A.G.: Investigation of the influence of pipe abrasion on hydraulic conditions of sewage flow in pressure pipelines. Project no: N N523422637. Completion date: 14.10. 2009 -13.01. 2012. Warsaw University of Life Sciences. Grant of the Ministry of Science and Higher Education. The project is financed by the Ministry of Science and Higher Education. I was the main contractor for the project. My percentage share is 25%. |
| Topic – research problem – for which the candidate supervisor seeks a doctoral student | 1. Investigation of hydraulic working conditions of airlifts used in rapid filters with a self-regenerating bed.<br>2. Investigation of the influence of the addition of sludge from washing the rapid filters on chemical and strength properties of concrete. |
| <u>Contact details:</u><br>Faulty/Institute<br>E-mail address<br>Tel. | Faculty of Civil and Environmental Engineering/Institute of Environmental Engineering/Department of Hydraulics and Sanitary Engineering<br>marek_kalenik@sggw.edu.pl<br>609 391 931 |