

### Candidate supervisor's information summary form

Name and surname, degree, title: WOJCIECH SAS, Dr, PhD, MSc, Eng. Associate Professor	
Discipline/ disciplines of science	Civil Engineering and Transportation Environmental Engineering, Mining and Energy
Professional development (degrees and titles) in chronological order	<p>Doctoral degree – awarded on 12<sup>th</sup> December, 2001, granted with the resolution by the Council of the Faculty of Engineering and Environment Management at Warsaw University of Life Sciences (WULS) – SGGW, agricultural sciences in the field of Environment Management.</p> <p>Post doctoral degree – awarded on 30<sup>th</sup> November, 2018, granted with the resolution by the Council of the Faculty of Civil and Environmental Engineering at Warsaw University of Life Sciences (WULS) – SGGW, technical sciences in the field of Civil Engineering.</p>
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> <li>1. GŁUCHOWSKI A., GABRYŚ K., SOBÓL E., SADZEWICUS R., SAS W. 2020. Geotechnical Properties of Anthropogenic Soils in Road Engineering. Sustainability 2020, 12, 4843; doi:10.3390/su12124843.</li> <li>2. GŁUCHOWSKI A., SAS W. 2020. Impact of cyclic loading on shakedown in cohesive soils – Simple Hysteresis Loop Model. Appl. Sci. 2020, 10, 2029; doi:10.3390/app10062029.</li> <li>3. GŁUCHOWSKI A., SKUTNIK Z., BILINIAK M., SAS W., LO PRESTI D. 2020. Laboratory Characterization of a Compacted – Unsaturated Silty Sand with Special Attention to Dynamic Behavior. Appl. Sci. 2020, 10, 2559; doi:10.3390/app10072559.</li> <li>4. GŁUCHOWSKI A., SAS W., DZIĘCIOŁ J., SOBÓL E., SZYMAŃSKI A. 2019. Permeability and leaching properties of recycled concrete aggregate as an engineering material in civil engineering. Appl. Sci. 2019, 9, 81; doi:10.3390/app9010081.</li> <li>5. SAS W., DZIĘCIOŁ J., GŁUCHOWSKI A. 2019. Estimation of recycled concrete aggregate as water permeability coefficient as earth construction material with the application of an analytical method. Materials 2019, 12, 2920; doi:10.3390/ma12182920.</li> <li>6. GŁUCHOWSKI A., SOBÓL E., SZYMAŃSKI A., SAS W. 2019. Undrained Pore Pressure Development on Cohesive Soil in Triaxial Cyclic Loading. Appl. Sci. 2019, 9, 3821. doi:10.3390/app9183821.</li> <li>7. SOBÓL E., GŁUCHOWSKI A., SZYMAŃSKI A., SAS W. 2019. The new empirical equation describing damping phenomenon in dynamically loaded subgrade cohesive soils. Appl. Sci. 2019, 9, 4518; doi:10.3390/app9214518.</li> <li>8. KUCHARCZYK K., GŁUCHOWSKI A., MITURSKI M., SAS W., 2018. Influence on Load Frequency on Cohesive Soil Respond. Geosciences 2018. Doi.org./10.3390/geosciences8120468. ESCI – Web of Science (WoS)</li> <li>9. SAS W., 2018. Geotechnical characteristics of selected anthropogenic materials. SGGW Publishing, Warsaw, pages 1-185. ISBN 978-83-7583-788-9. In polish</li> </ol>

	10. SAS W., GABRYŚ K., SZYMAŃSKI A., 2017. Experimental studies of dynamic properties of Quaternary clayey soils. Soil Dynamics and Earthquake Engineering. ISSN 0267-7261. DOI/10.1016//j.soildyn.2014.01.31. JCR
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	Co-supervisor of MSc. eng. Andrzej Głuchowski. PhD since 26 of September 2018. Title of the thesis: Cohesive soil respond to cyclic loading in undrained conditions in polish. Co-supervisor of MSc. eng. Emil Soból. PhD since 26 of September 2018. Title of the thesis: Seismic wave damping in cohesive soils – in polish) Supervisor of MSc. eng. Marcin Biliniak since 2019. Supervisor of MSc. eng. Maciej Miturski since 2016.
Project/grants achievements (from the last 10 years)	1. COST ACTION TU1404 (MC Substitute TU1404 PL), 2015. The COST Association, Avenue Louise 149, 1050 Brussels, Belgium. Main Coordinator of Action Prof. Miguel Azenha, Portugalia. WULS– SGGW Coordinator – dr inż. Wojciech Sas. 2. Modelling the course of organic soil deformation. 2012 – 2016. Agreement No 3 P06S 002 23 with KBN Nr 0494/P06/2002/23. 3. Characteristics of the course of deformation in weak-bearing soils. 2008 – 2012. Agreement No N N506 397135, 3971/B/T02/2008/35.
Topic – research problem – for which the candidate supervisor seeks a doctoral student	1. Recognition of physical, mechanical and filtration properties of natural, compacted, stabilized and anthropogenic soils. 2. Determination of stress-strain characteristics and strength and deformation parameters of soil substrates in the range of small and medium deformation using static, cyclic and dynamic loads. 3. Solving special geotechnical problems such as: swelling soils, unsaturated soils, weak-bearing soils for the foundation of linear and cubic objects. 4. Problems of construction of earth structures (embankments) and construction of structural layers of roads, car parks and airports using natural and anthropogenic materials.
<u>Contact details:</u> Faculty/Institute E-mail address Tel.	Water Centre/Institute of Civil Engineering WULS - SGGW. <a href="mailto:wojciech_sas@sggw.edu.pl">wojciech_sas@sggw.edu.pl</a> , 697901759, 22 5935400.