

Candidate supervisor's information summary form

Zbigniew Marek Lechowicz, Prof. DSc. Dr Eng	
Academic discipline/disciplines	Civil Engineering, Geodesy and Transport
Professional development (degrees and titles) in chronological order	1982 – Doctor of Science, Faculty of Land Reclamation and Environmental Engineering, SGGW, geotechnics 1993 – Habilitation, Faculty of Civil and Environmental Engineering, Technical University of Gdańsk, 2004 – Professor of Sciences, Faculty of Civil and Environmental Engineering, Technical University of Gdańsk
Most important publications/ patents in the last 3 years (maximum 10)	1. FUKUE M., LECHOWICZ Z. , MULLIGAN C.N., TAKEUCHI S., FUJIMORI Y., EMORI K. 2025: Properties and Behavior of Sandy Soils by a New Interpretation in MICP. Materials, 18(4), 809. https://doi.org/10.3390/ma1804080 . 2. HALIM N., LECHOWICZ Z. , LIPÍŃSKI M. 2025: Stability Analysis of Mamak Dam Behavior Under Different Water Levels in the Reservoir. Acta Scientiarum Polonorum, Architectura, 24, 1-15. https://doi.org/10.22630/ASPA.2025.24.1 . 3. HALIM N., LECHOWICZ Z. , LIPÍŃSKI M. 2024: Seepage Analysis of Mamak Dam, Indonesia: A Case Study. Acta Scientiarum Polonorum, Architectura, 23, 384–397. doi.org/10.22630/ASPA.2024.23.30 . 4. SULEWSKA M.J., LECHOWICZ Z. 2024: Determination of the characteristic values of the undrained shear strength of organic soils according to Eurocode 7. Archives of Civil Engineering, vol. LXX, 1, 39-52 DOI: 10.24425/ace.2024.148899. 5. LECHOWICZ Z. , GOŁAWSKA K. 2023: Evaluation of deformation and strength parameters of organic soils for the design of geotechnical structures. Acta Polytechnica CTU Proceedings, 45:53–58, https://doi.org/10.14311/APP.2023.45.0053 . 6. FUKUE M., LECHOWICZ Z. , FUJIMORI Y., EMORI K., MULLIGAN C.N. 2023: Inhibited and Retarded Behavior by Ca ²⁺ and Ca ²⁺ /OD Loading Rate on Ureolytic Bacteria in MICP Process. Materials, 16, 3357. https://doi.org/10.3390/ma16093357 . 7. LECHOWICZ Z. , SULEWSKA M.J. 2023: Assessment of Undrained Shear Strength and Settlement of Organic Soils Under Embankment Loading Using Artificial Neural Networks. Materials, 16, 125. https://doi.org/10.3390/ma16010125 .
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	<i>Supervision of PhD theses completed:</i> 1. Timoth Mkilima, Tanzania, Africa, Ph.D. Student of the L.N. Gumilyov Eurasian National University (Kazakhstan) “Aspects of embankment dam stability considering the effect of land use changes and climatic conditions in catchments” (prof. Z.

	<p>Lechowicz – Foreign Scientific Advisor approved by Ministry of Education of Kazakhstan), 05.07.2022.</p> <p>2. Grzegorz Wrzesiński: Stability analysis of an embankment with influence of principal stress rotation on shear strength of subsoil. (in Polish) Civil Engineering, Warsaw University of Life Science - SGGW, 2016.</p> <p>3. Paweł Galas: Determination of undrained shear strength based on seismic dilatometer test SDMT. (in Polish) Civil Engineering, Warsaw University of Life Science - SGGW, 2013.</p> <p>4. Dariusz Kiziewicz: Evaluation of shear strength of cohesive soils with use of non-standard stress path. (in Polish) Civil Engineering, Warsaw University of Life Science - SGGW, 2012.</p> <p>5. Dariusz Wojtasik: An analysis of the behaviour of geotextile–soil system in filtration process, (in Polish) Environmental Improvement, Warsaw University of Life Science - SGGW, 2004.</p> <p>6. Jakub Batory: Application of probabilistic methods in stability analysis of embankment on organic subsoil. (in Polish) (Environmental Improvement), Warsaw University of Life Science - SGGW, 2004.</p> <p>7. Jacek Bąkowski: Stability analysis of embankment on organic subsoil. (in Polish) Environmental Improvement, Warsaw University of Life Science - SGGW, 2003.</p> <p>8. Artur Osiński: Change in shear strength of cohesive soils due to chemical stabilisation (in Polish) Environmental Improvement, Warsaw University of Life Science - SGGW, 2002.</p> <p>9. Simon Rabarijoely: Use of dilatometer tests to determine the mechanical parameters of organic soils loaded by embankment (in Polish) Environmental Improvement, Warsaw University of Life Science - SGGW, 2000.</p> <p><i>Research Care over doctoral thesis:</i></p> <p>2. Beata Gajewska: Analysis of the behavior of the embankment on soft subsoil improved with columns with reinforcement of the transmission layer. (in Polish) Civil Engineering, Warsaw University of Life Science - SGGW</p>
Achievements in the area of projects/grants (in the last 5 years)	
Subject area of the research project for which the candidate student is being recruited	I am looking for a PhD student with laboratory and field research skills, good knowledge of English, computer programs for numerical analysis and analysis of research results.
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