

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

Name and surname, degree, title: Szymon Glowacki, PhD, DSc, Eng.	
Academic discipline/disciplines	Mechanical engineering
Professional development (degrees and titles) in chronological order	MSc - 1994 PhD – 2000 DSc – 2018
Most important publications/ patents in the last 3 years (maximum 10)	<p>Vlasenko Tetiana, Hutsol Taras, Glowacki Szymon, Vlasovets Vitaliy [i in.]: Ensemble learning based sustainable approach to rebuilding metal structures prediction, Scientific Reports, 2025, vol. 15, nr 1, s.1-16. DOI:10.1038/s41598-024-84996-8</p> <p>Tryhuba I., Tryhuba A., Hutsol T., Cieszewska A., Andrushkiv O., Glowacki Sz., Bryś A., Slobodian S., Tulej W., Sojak M.: Prediction of Biogas Production Volumes from Household Organic Waste Based on Machine Learning, Energies, 2024, 17(7), 1786. DOI: 10.3390/en17071786</p> <p>Kukharets S., Jasinskas A., Golub G., Sukmaniuk, O., Hutsol T., Mudryk K., Čėsna J. Glowacki Sz., Horetska I.: The Experimental Study of the Efficiency of the Gasification Process of the Fast-Growing Willow Biomass in a Downdraft Gasifier, Energies, 2023, 16(2), 587. DOI:10.3390/en16020578</p> <p>Kukharets V., Hutsol T., Kukharets S., Glowacki Sz., Nurek T., Sorokin D.: European Green Deal: The Impact of the Level of Renewable Energy Source and Gross Domestic Product per Capita on Energy Import Dependency, Sustainability, 2023, 15(15), 11817. DOI: 10.3390/su151511817</p> <p>Sojak M., Glowacki Sz., Tulej W., et al.: The Expert System Supporting Decision-Making in the Process of Vegetable Pests Extermination During Vegetation Period, Agricultural Engineering, 2023, 27(1), 331-348. DOI: 10.2478/agriceng-2023-0024</p> <p>Tryhuba I., Hutsol T., Tryhuba A., Agata Cieszewska A., Kovalenko N., Mudryk K., Glowacki Sz., Bryś A., Tulej W., Sojak M.: An Approach to Assessing the State of Organic Waste Generation in Community Households Based on Associative Learning, Sustainability, 2023, 15(22), 15922. DOI: 10.3390/su152215922</p>

	<p>Głowacki Sz., Salamon A., Sojak M., et al.: The Use of Brewer's Spent Grain after Beer Production for Energy Purposes, <i>Materials</i>, 2022, 15(10), 3703. DOI: 10.3390/ma15103703</p> <p>Tulej W., Głowacki Sz.: Analysis of Material-Characterization Properties of Post-Production Waste—The Case of Apple Pomace, <i>Materials</i>, 2022, 15(10), 3532. DOI: 10.3390/ma15103532</p> <p>Tulej W., Głowacki Sz.: Modeling of the Drying Process of Apple Pomace, <i>Applied Sciences-Basel</i>, 2022, 12(3), 1434. DOI: 10.3390/app12031434</p>
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	<p>Defended doctoral theses:</p> <p>2022 - Weronika Tulej, Material and energy potential of apple pomace.</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	Modification of the technology for the production of solid biofuels in the form of pellets and analysis of the combustion process of the resulting fuel, with particular emphasis on the emission of exhaust gases.
<p><u>Contact details:</u></p> <p>Institute</p> <p>E-mail address</p> <p>Telephone number</p>	<p>Institute of Mechanical Engineering</p> <p>szymon_glowacki@sggw.edu.pl</p> <p>5934616</p>