

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

Name and surname, degree, title: Marek Kieliszek, Dr hab. inż., prof. SGGW	
Academic discipline/disciplines	food and nutrition technology, biotechnology, microbiology
Professional development (degrees and titles) in chronological order	30.03.2022 University professor, Institute of Food Sciences (formerly: Faculty of Food Sciences), Warsaw University of Life Sciences 05.07.2019 Habilitation, Institute of Food Sciences (formerly: Faculty of Food Sciences), Warsaw University of Life Sciences 12.06.2015 PhD, Institute of Food Sciences (formerly: Faculty of Food Sciences), Warsaw University of Life Sciences 12.06.2009 Postgraduate studies, Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University, Krakow, Molecular biology
Most important publications/ patents in the last 3 years (maximum 10)	Kieliszek M., Sapazhenkava K. (2025) The promising role of selenium and yeast in the fight against protein amyloidosis. <i>Biological Trace Element Research</i>. doi:10.1007/s12011-024-04245-x Kieliszek M. (2023) Selenium in the prevention of SARS-CoV-2 and other viruses. <i>Biological Trace Element Research</i>, 201, 655-662. doi:10.1007/s12011-022-03208-4 Kieliszek M., Kot A. M., Kolotylo V. (2023) Bioaccumulation of selenium and production of carotenoids by the yeast <i>Rhodotorula mucilaginosa</i>. <i>Biocatalysis and Agricultural Biotechnology</i>, 53, 102903. doi:10.1016/j.bcab.2023.102903 Kieliszek M., Piwowarek K., Kot A. M., Wojtczuk M., Roszko M., Bryła M., Trajkovska-Petkoska A. (2023) Recent advances and opportunities related to the use of bee products in food processing. <i>Food Science & Nutrition</i>, 11(8), 4372-4397. doi:10.1002/fsn3.3411 Kieliszek M., Serrano Sandoval S. N. (2023) The importance of selenium in food enrichment processes. A comprehensive review. <i>Journal of Trace Elements in Medicine and Biology</i>, 79, 127260. doi:10.1016/j.jtemb.2023.127260 Kieliszek M., Bano I., Zare H. (2022) A comprehensive review on selenium and its effects on human health and distribution in middle eastern countries. <i>Biological Trace Element Research</i>, 200(3), 971-987. doi:10.1007/s12011-021-02716-z Kieliszek M., Waśko A., Michalak K., Kot A. M., Piwowarek K., Winiarczyk S. (2022) Effect of selenium and methods of protein extraction on the proteomic profile of <i>Saccharomyces</i> yeast. <i>Open Life Sciences</i>, 17(1), 1117-1128. doi:10.1515/biol-2022- Kieliszek M., Bano I. (2022) Selenium as an important factor in various disease states: a review. <i>EXCLI Journal</i>, 21, 948-966. doi:10.17179/excli2022-5137 Kolotylo V., Piwowarek K., Synowiec A., Kieliszek M. (2025)

	Optimization of fermentation conditions for microbial transglutaminase production by <i>Streptoverticillium cinnamomeum</i> KKP 1658 using response surface methodology (RSM). <i>Folia Microbiologica</i>, doi:10.1007/s12223-024-01223-7 Kolotylo V., Piwowarek K., Kieliszek M. (2024) Production of microbial transglutaminase by <i>Streptoverticillium cinnamomeum</i> KKP 1658. <i>EXCLI Journal</i>, 23, 655-671. doi:10.17179/excli2024-7033
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	Supervisor function: 19.11.2021 – Resolution of the Discipline Council of Food Technology and Nutrition of the Warsaw University of Life Sciences – on the confirmation of the supervisor of MSc Eng Wioletta Sęk, doctoral thesis topic: "The effect of selenium and the anhydrobiosis process on the physiological activity of yeast cells". Expected defense date: September 2025 Supervisor function: 19.11.2021 – Resolution of the Discipline Council of Food Technology and Nutrition of the Warsaw University of Life Sciences – on the confirmation of the supervisor of MSc Eng Vitaliy Kolotylo, doctoral thesis topic: "Optimization of transglutaminase production by microorganisms in variable culture conditions". Expected defense date: September 2025
Achievements in the area of projects/grants (in the last 5 years)	Grant "Preludium Bis 2" obtained in 2021 entitled: "The effect of selenium and the anhydrobiosis process on the physiological activity of yeast cells". UMO-2020/39/O/NZ9/00639 financed by the National Science Center. Project manager. Project implemented (2021-2025). Participation in the scientific project: "Development of a line of innovative full-value substitutes for meat products based on plant raw materials with the use of functional additives". LIDER/27/0105/L-11/19/NCBR/2020 financed by the National Center for Research and Development. Scientific expert. Project implemented (2021-2023)
Subject area of the research project for which the candidate student is being recruited	1. Studies on the influence of selenium on physiological and metabolic functions of lipolytic yeast cells 2. Studies on the toxicity and mutagenicity of selenium compounds in different yeast groups 3. The phenomenon of anhydrobiosis in yeast: comparison of adaptation and response to dehydration in different yeast species
<u>Contact details:</u> Institute E-mail address Telephone number	Institute of Food Sciences Warsaw University of Life Sciences Department of Food Biotechnology and Microbiology marek_kieliszek@sggw.edu.pl 22-593-7662