

Name and surname:	Wojciech Łaba
Academic Degree:	dr hab. inż. (DSc.)
Institute/Department:	Department of Biotechnology and Food Microbiology
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ORCID:	0000-0002-2068-3641
UPWr Base of Knowledge - link:	https://bazawiedzy.upwr.edu.pl/info/author/UPWrrec9c14212a7d41c9abeb744947d075e0/
Researchgate:	
Personal website / Working group website:	
Participation in projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	„Inkubator Innowacji 2.0” realizowany w ramach projektu pozakonkursowego pn. „Wsparcie zarządzania badaniami naukowymi i komercjalizacji wyników prac B+R w jednostkach naukowych i przedsiębiorstwach” w ramach Programu Operacyjnego Inteligentny Rozwój 2014-2020 (Działanie 4.4) – kierownik zadania Ocena możliwości pozyskania bioaktywnych peptydów na drodze hydrolizy białek młóta browarniczego w hodowli bakterii proteolitycznych. Miniatura 3. 2019/03/X/NZ9/00052 - kierownik projektu
Do you plan to engage support of second supervisor or auxiliary supervisor?	YES
	Auxiliary supervisor
Name and surname:	Aleksandra Zambrowicz
Academic Degree:	dr hab. inż. (Dr. Eng.)
Faculty, Institute/Department:	Katedra Rozwoju Funkcjonalnych Produktów Żywnościowych
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UPWr Base of Knowledge - link or most important publications from last 3 year (JCR) / patents from last 3 years (maximum 5):	https://bazawiedzy.upwr.edu.pl/info/author/UPWr80ba382d5214beca49c3dbdc10814ac/
Researchgate:	
Personal website / Working group website:	
Projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	Projekt badawczy z firmą Regis pt. „Naturalne substancje aromatyczne uzyskane z surowców mięsnych poddanych hydrolizie enzymatycznej” 2017- 2023 projekt nr POIR.01.01.01-00.1293/17, kierownik prac na UPWr. Projekt badawczy z firmą Basso „Przeprowadzenie prac badawczo-rozwojowych nad zasadniczymi zmianami produktów i technologii produkcji w Basso Sp. z o.o.” 2020-2023, kierownik prac na UPWr. Projekt badawczy dla naukowców po doktoracie- „Mistrz” pt. „Analiza procesu generowania immunostymulujących peptydów z żółtka jaja oraz ich charakterystyka” 2022-2023, kierownik.
PhD topic:	Valorization of high-protein agro-industrial byproducts using proteolytic bacteria
Research discipline in Doctoral School:	Nutrition and Food Technology
Short description of the research problem to be solved in the PhD (minimum 1000 characters):	The subject of the study will be the extraction and processing of the protein fraction contained in agri-food waste, including oilseed cakes. The huge supply of protein in this waste requires rational management and biotechnological methods appear to be an excellent alternative to traditionally used methods of valorization of high-protein waste, providing pro-ecological benefits and increasing the biological value of the obtained products. The processes within the research tasks will be based on the concept of simultaneous extraction and hydrolysis of proteins under cultivation of proteolytic bacteria, including potentially probiotic bacteria of the Bacillus genus. The study will include the optimization of these processes in order to obtain the desired efficiency and functional or biological properties of the obtained hydrolysis products. The products of waste protein hydrolysis will be extensively characterized and assessed for potential applications, including: as an ingredient in industrial yeast cultures or as a functional protein supplement.
Professional skills for PhD candidate (e.g. master program, specializations, softwares, language, analytical techniques, minimum 500 characters):	The candidate is required to have completed higher education in biotechnology, microbiology or related fields. The candidate should be fluent in English, at least at the B2 level. The candidate should have knowledge of basic biochemical techniques and analyses, including conducting enzymatic reactions, determining enzymatic activity, protein and peptide related techniques, purification of proteins. The candidate should be proficient in basic microbiological techniques. The candidate is required to be capable of statistical data processing, as well as the application of statistical modelling and optimization techniques. Full availability is required.
a) Project title:	0
b) Agreement number:	0
c) Number of months in the project to support PhD student (in months; starting from 1st of October 2024):	0
Project website:	