

<b>Name and surname:</b>	<b>Wojciech Łaba</b>
Academic Degree:	dr hab. inż. (DSc.)
Institute/Department:	Department of Biotechnology and Food Microbiology
e-mail address:	wojciech.laba@upwr.edu.pl
ORCID:	0000-0002-2068-3641
UPWr Base of Knowledge - link:	<a href="https://bazawiedzy.upwr.edu.pl/info/author/UPWrec9c14212a7d41c9abeb744947d075e0/">https://bazawiedzy.upwr.edu.pl/info/author/UPWrec9c14212a7d41c9abeb744947d075e0/</a>
Researchgate:	<a href="https://www.researchgate.net/profile/Wojciech-Laba">https://www.researchgate.net/profile/Wojciech-Laba</a>
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
Do you plan to engage support of second supervisor or auxiliary supervisor?	YES
	Auxiliary supervisor
<b>Name and surname:</b>	<b>Paulina Śliwka</b>
Academic Degree:	dr (Dr.)
Faculty, Institute/Department:	Department of Biotechnology and Food Microbiology
e-mail address:	paulina.sliwka@upwr.edu.pl
ORCID:	
UPWr Base of Knowledge - link or most important publications from last 3 year (JCR) / patents from last 3 years (maximum 5):	<a href="https://bazawiedzy.upwr.edu.pl/info/author/UPWr22f8e2cf0d054b7590386dc248760acd/">https://bazawiedzy.upwr.edu.pl/info/author/UPWr22f8e2cf0d054b7590386dc248760acd/</a>
Researchgate:	
Personal website / Working group website:	
Projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	MINIATURA 6 DEC-2022/06/X/NZ6/01648 (NCN) “Opracowanie kolekcji litycznych bakteriofagów przeciwko C. difficile i C. perfringens wywołującym zakażenia u psów i kotów”, kierownik projektu  2016-2021, LIDER_378L-614_NCBR_2015 (NCBiR) “Preparaty bakteriofagowe dla drobiu przeciw pałeczkom Salmonella, Campylobacter oraz ptasim patogennym Escherichia coli (APEC), wykonawca  JPIAMR UMO-2021_03_Y_NZ7_00138 (NCN) “Interventions to control the dynamics of antimicrobial resistance from chickens through the environment”, wykonawca (lipiec 2022–październik 2023), projekt w trakcie realizacji
PhD topic:	Optimization of the bacteriophage carrier production process
Research discipline in Doctoral School:	Biotechnology
Short description of the research problem to be solved in the PhD (minimum 1000 characters):	The increasing number of bacterial strains resistant to conventional drugs is one of the major challenges in contemporary medicine. The diminishing potential of classical antibacterial agents necessitates the search for new, alternative methods to combat these microorganisms. The effectiveness of bacteriophages, viruses that bind their developmental cycle to bacterial cells, in eliminating bacterial pathogens, has been the subject of numerous scientific reports.  The objective of the research undertaken in the doctoral thesis is the optimization of the conditions in the production process of two types of bacteriophage carriers (based on bacterial cellulose and alginate) and the assessment of their effectiveness. In the case of the cellulose-based carrier, the study model will focus on external applications (e.g., in skin infections), while for the alginate-based carrier, the model will consider oral administration in intracorporal infections. The effectiveness of bacteriophages in eliminating bacterial pathogens is well-documented in the literature; however, data regarding the production process of carriers for these viruses are extremely scarce. The assumption of the research is to develop methods for producing bacteriophage carriers that ensure effective immobilization of bacterial viruses and maintain their activity during therapeutic applications in humans and animals.
Professional skills for PhD candidate (e.g. master program, specializations, softwares, language, analytical techniques, minimum 500 characters):	A potential candidate for doctoral studies should have completed studies in the field of biological sciences or biotechnology, possess proficiency in basic microbiology techniques, and have extensive experience working with bacteria. Additional advantage would be experience in working with bacterial viruses. The candidate should demonstrate a good command of the English language. Moreover, they should exhibit skills in independent work organization, communication, and the ability to work effectively in a team.
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:	