

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

Name and surname, degree, title: Assoc. Prof. Anna Bzducha-Wróbel, PhD. Dsc	
Academic discipline/disciplines	Food Technology and Nutrition
Professional development (degrees and titles) in chronological order	Habilitated doctor in the field of agricultural sciences in the discipline of food and nutrition technology - 2019 PhD in Agricultural Sciences in the field of food technology and nutrition - 2009
Most important publications/ patents in the last 3 years (maximum 10)	<p>1. Moloń M., Małek G., Bzducha-Wróbel A., Kula-Maximenko M., Molon A., Galiniak S., Skrzypiec K., Zebrowski J. (2025) Disturbances in cell wall biogenesis as a key factor in the replicative aging of budding yeast. Biogerontology, 26, 54, 1-18</p> <p>2. Popielarz D., Farkaš P., Bzducha-Wróbel A. (2025) Current Directions of Selected Plant-Origin Wastes' Valorization in Biotechnology of Food Additives and Other Important Chemicals. Foods, 14(6), 1-34</p> <p>3. Bzducha-Wróbel A., Farkaš P., Bieliková S., Čížová A., Sujkowska-Rybikowska M. (2024) How do the carbon and nitrogen sources affect the synthesis of β-(1,3/1,6)-glucan, its structure and the susceptibility of <i>Candida utilis</i> yeast cells to immunolabelling with β-(1,3)-glucan monoclonal antibodies? Microbial Cell Factories, 23 (1), s.1-16</p> <p>4. Bzducha-Wróbel A., Janowicz M., Bryła M., Grzesiuk I. (2024) Adsorption of Zearalenone by Aureobasidium pullulans Autolyzed Biomass Preparation and Its Detoxification Properties in Cultures of <i>Saccharomyces cerevisiae</i> Yeast. Toxins 16(2), 105</p> <p>5. Pycia K., Grzebieniarz W., Nowak N., Juszczak L., Kawecka A., Szwarzyński M., Mazur T., Bzducha-Wróbel A., Konieczna-Molenda A., Jamróz E. (2024) Application possibilities of triple-layer furcellaran film with hazelnut oil microemulsion for packing cod liver oil. Food Hydrocolloids, 147, Part B, 109428</p> <p>6. Bzducha-Wróbel A., Farkaš P., Chraniuk P., Popielarz D., Synowiec A., Pobiega K., Janowicz M. (2022) Antimicrobial and prebiotic activity of mannoproteins isolated from conventional and nonconventional yeast species—the study on selected microorganisms. World Journal of Microbiology and Biotechnology, 38(12), 1-14, article no. 256,</p> <p>7. Binati R.L, Salvetti E., Bzducha-Wróbel A. [i in.] (2021) Non-conventional yeasts for food and additives production in a circular economy perspective. FEMS Yeast Research, vol. 21, nr 7, s.1-18, Nr artykułu: foab052.DOI:10.1093/femsyr/foab052</p> <p>Anderluh M., Berti F., Bzducha-Wróbel A. [i in.] (2021) Emerging glyco-based strategies to steer immune responses. FEBS Journal, 288 (16), 47</p>
Experience in work with doctoral students (defended doctoral	3 doctoral programmes opened.

dissertations, initiated doctoral procedures) in chronological order	
Achievements in the area of projects/grants (in the last 5 years)	<p>1. "Structural and emulsifying properties of mannoproteins of Wickerhamomyces anomalus cultivated on brewers' hops hydrolysate", Short Term Scientific Mission (STSM) Grant (E-COST-GRANT-CA18229-15ef219d), COST Action CA18229, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, Portugal, 2023</p> <p>2. "Evaluation of the influence of growth conditions on Cyberlindnera jadinii ATCC 9950 cell wall glycans structural characteristic", projekt badawczy zrealizowany w Institute of Chemistry, Slovak Academy of Sciences w ramach stypendium National Scholarship Programme of the Slovak Republic for the Support of Mobility of Students, PhD Students, University Teachers, Researchers and Artists of the Government of the Slovak Republic, ID 36412, 2022.</p> <p>3. „Roślinna alternatywa produktów rybnych”. Projekt na grant przedwdrożeniowy realizowany w ramach programu MNISW "Inkubator Innowacyjności 4.0. Wykonawca projektu, 2022</p> <p>4. „Badania nad indukcją zwiększonej syntezy $\beta(1,3)/(1,6)$-glukanu w komórkach drożdży Candida utilis ATCC 9950 namnażanych w podłożach modelowych” Instytucja finansująca; Narodowe Centrum Nauki, MINIATURA 2, Nr Dec-2018/02/X/N09/03427. Kierownik projektu i wykonawca.</p> <p>5. „GluCan – technologia wytwarzania funkcjonalnych preparatów o wysokiej zawartości $\beta(1,3)/(1,6)$-glukanu drożdży Candida utilis o właściwości wiązania mykotoksyn”. Projekt na grant przedwdrożeniowy realizowany w ramach programu MNISW "Inkubator Innowacyjności +" Kierownik projektu i główny wykonawca.</p> <p>6. "Sustainable Network for agrofood loss and waste prevention, management, quantification and valorisation" (FoodWaStop). COST Action CA22134. 12.05.2023 – 12.05.2027</p> <p>7. „Innovation with glycans: new frontiers from synthesis to new biological targets” (INNOGLY). Akcja COST CA18103. Okres realizacji: 10.12.2018 – 07.04.2023.</p> <p>8. „Non-Conventional Yeasts for the Production of Bioproducts” (YEAST4BIO). Akcja COST CA18229. Okres realizacji: 07.11.2019 – 06.11.2023.</p>
Subject area of the research project for which the candidate student is being recruited	Innovative biotechnological use of non-conventional yeast aimed at obtaining bioactive and technologically functional substances, e.g. in food production.
Contact details: Institute E-mail address Telephone number	Institute of Food Sciences, Department of Food Biotechnology and Microbiology anna_bzducha_wrobel@sggw.edu.pl +48 22 593 76 56