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

Name and surname, degree, title: Małgorzata Ziarno, dr hab. inż., prof. SGGW	
Academic discipline/disciplines	Food Technology and Nutrition
Professional development (degrees and titles) in chronological order	<ul> <li>1995 Professional title: Master of Science in Agricultural Engineering, Faculty of Food Technology, Warsaw University of Life Sciences (SGGW)</li> <li>1999 Degree of Doctor of Engineering in Agricultural Sciences, in the field of Food Technology and Nutrition, Faculty of Food Technology, Warsaw University of Life Sciences (SGGW)</li> <li>2009 Degree of Doctor Habilitatus in Agricultural Sciences, in the discipline of Food Technology and Nutrition, Faculty of Food Sciences (currently the Institute of Food Sciences), Warsaw University of Life Sciences (SGGW)</li> </ul>
Most important publications/ patents in the last 3 years (maximum 10)	<ol> <li>Mituniewicz-Małek, A.; Ziarno, M.; Dmytrów, I.; Szkolnicka, K. Survivability of Probiotic Microflora in Fermented and Non-Fermented Mare's Milk: A Comparative Study. Appl. Sci. 2025, 15, 862. https://doi.org/10.3390/app15020862</li> <li>Ziarno, M.; Zaręba, D.; Kowalska, E.; Florowski, T. The Effect of Varying Oat Beverage Ratios on the Characteristics of Fermented Dairy–Oat Beverages. Appl. Sci. 2025, 15, 3219. https://doi.org/10.3390/app15063219</li> <li>Kozlowska, M.; Ziarno, M.; Zawada, K.; Kowalska, H.; Derewiaka, D.; Chobot, M.; Ścibisz, I. Evaluation of Some Quality Parameters of Pumpkin Seeds and Oil After Roasting with Marjoram. Foods 2025, 14, 172. https://doi.org/10.3390/foods14020172</li> <li>Ziarno M., Zaręba D., Ścibisz I., Kozlowska M. 2024. In Vitro Cholesterol Uptake by the Microflora of Selected Kefir Starter Cultures. Life 2024, 14, 1464. https://doi.org/10.3390/life14111464</li> <li>Zaręba D., Ziarno M. 2024. Tween 80™-Induced Changes in Fatty Acid Profile of Selected Mesophilic Lactobacilli. Acta Biochim. Pol. https://doi.org/10.3389/abp.2024.13014</li> <li>Ziarno M, Cichońska P, Kowalska E, Zaręba D. 2024. Probiotic-Enriched Ice Cream with Fermented White Kidney Bean Homogenate: Survival, Antioxidant Activity, and Potential for Future Health Benefits. Molecules; 29(13), 3222. https://doi.org/10.3390/molecules29133222</li> <li>Cacak-Pietrzak G., Sujka K., Księżak J., Bojarszczuk J., Ziarno M., Studnicki M., Krajewska A., Dziki D. 2024. Assessment of Physicochemical Properties and Quality of the Breads Made from Organically Grown Wheat and Legumes. Foods, 13, 1244. https://doi.org/10.3390/foods13081244</li> <li>Cichońska P., Kostyra E., Piotrowska A., Ścibisz I., Roszko M., Ziarno M. 2024. Enhancing the Sensory and Nutritional Properties of Beanbased and Lentil-based Beverages through Fermentation and Germination. LWT, 116140, https://doi.org/10.1016/j.lwt.2024.116140</li> <li>Ziarno M., Zaręba D., Ścibisz I., Kozłowska M. 2024. Texture and water&lt;</li></ol>

	holding capacity of oat drinks fermented with lactic acid bacteria, bifidobacteria and Propionibacterium. International Journal of Food Properties, 27 (1), 106-122. https://doi.org/10.1080/10942912.2023.2294704  10. Ścibisz I.; Ziarno M. 2023. Effect of yogurt addition on the stability of anthocyanin during cold storage of strawberry, raspberry, and blueberry smoothies. Foods, 12(20), 3858; https://doi.org/10.3390/foods12203858
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	<ul> <li>Doctoral thesis supervisor: MSc Eng. Dorota Zaręba. Warsaw University of Life Sciences (SGGW); Institute of Food Sciences, defense held on July 9, 2012 – with honors.</li> <li>Doctoral thesis supervisor: MSc Eng. Joanna Żylińska. Warsaw University of Life Sciences (SGGW); Institute of Food Sciences, defense held on October 21, 2016.</li> <li>Doctoral thesis supervisor: MSc Eng. Patrycja Cichońska. Warsaw University of Life Sciences (SGGW); Institute of Food Sciences, defense held on February 18, 2025.</li> <li>Doctoral thesis supervisor: MSc Eng. Ewa Kowalska. Warsaw University of Life Sciences (SGGW); Institute of Food Sciences, planned defense date: end of 2025.</li> </ul>
Achievements in the area of projects/grants (in the last 5 years)	<ul> <li>2019 – 2020 Development of a production technology for fermented plant-based beverages constituting an alternative to dairy yogurts. Project number POIR.01.03.01-00-0086/17.</li> <li>2020 – 2023 Conducting research on a novel type of butter with improved spreadability parameters and an extended shelf life. ARiMR (Agency for Restructuring and Modernisation of Agriculture) contract number 00012.DDD.6509.00036.2019.05.</li> <li>2022 – 2024 Development of a UHT milk production process to reduce milk microflora and its impact on the final product, while simultaneously minimizing negative environmental impact, confirmed by the reduction of the carbon footprint for the final product. European Agricultural Fund for Rural Development, Rural Development Programme for 2014 – 2020, Measure 16 "Cooperation".</li> </ul>
Subject area of the research project for which the candidate student is being recruited	The study aims to enhance the viability and efficacy of probiotic strains <i>L. plantarum</i> and <i>L. casei</i> through microencapsulation using soybean protein, and to evaluate their application in functional food systems, particularly in chocolate-based products. The project integrates knowledge from microbiology, food technology, and nutrition science, with a focus on improving gut health and overall well-being through innovative food solutions.
Contact details: Institute E-mail address Telephone number	Institute of Food Sciences malgorzata_ziarno@sggw.edu.pl ph. +48 22 593 76 66