

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

Name and surname, degree, title: Marzena Sujkowska-Rybkowska, D.Sc.	
Discipline/ disciplines of science	Biological Sciences
Professional development (degrees and titles) in chronological order	2001 – master degree 2006 – PhD in agricultural science 06.05.2021 - doctor with habilitation in the field of agriculture, in the discipline agriculture and horticulture
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> 1. Rusaczonok A, Czarnocka W, Willems P, Sujkowska-Rybkowska M, Van Breusegem F, Karpiński S, 2021. Phototropin 1 and 2 influence photosynthesis, UV-C induced photooxidative stress responses and cell death. <i>Cells</i> 10:200. 2. Nosek M, Gawrońska K, Rozpądek P, Sujkowska-Rybkowska M, Miszalski Z, Kornaś A, 2021. At the edges of photosynthetic metabolic plasticity—on the rapidity and extent of changes accompanying salinity stress-induced CAM photosynthesis withdrawal. <i>Intern J Mol Sci</i>, ISSN:1422-0067, Vol:22, 8426, doi:10.3390/ijms22168426. 3. Witoń D, Sujkowska-Rybkowska M, Dąbrowska-Bronk J, Czarnocka W, Bernacki M, Szechyńska-Hebda M, Karpiński S, 2021. Mitogen-activated protein Kinase4 impacts leaf development, temperature, and stomatal movement in hybrid aspen. <i>Plant Physiol.</i> 186(4):2190-2204. doi: 10.1093/plphys/kiab186. 4. Sujkowska-Rybkowska M, Rusaczonok A., Kochańska-Jezińska A, 2022. Exploring apoplast reorganization in the nodules of <i>Lotus corniculatus</i> L. growing on old Zn–Pb calamine wastes. <i>J Plant Physiol.</i> 268, 153561. doi.org/10.1016/j.jplph.2021.153561. 5. Oleńska E, Małek W, Sujkowska-Rybkowska M, Szopa S, Włostowski T, Aleksandrowicz O, Swiecicka I, Wójcik M, Thijs S, Vangronsveld J, 2022. An alliance of <i>Trifolium repens</i> - <i>Rhizobium leguminosarum</i> bv. <i>trifolii</i> mycorrhizal fungi from an old Zn-Pb-Cd rich waste heap as a promising tripartite system for phytostabilization of metal polluted soils. <i>Front Microbiol.</i> 13:853407. doi: 10.3389/fmicb.2022.853407. 6. Sujkowska-Rybkowska, M.; Rusaczonok, A.; Kasowska, D.; Gediga, K.; Banasiewicz, J.; Stępkowski, T.; Bernacki, M.J. Potential of rhizobia nodulating <i>Anthyllis vulneraria</i> L. from ultramafic soil as plant growth promoting bacteria alleviating nickel stress in <i>Arabidopsis thaliana</i> L. <i>Int. J. Mol. Sci.</i> 2022, 23, 11538. doi.org/10.3390/ijms231911538 7. Sujkowska-Rybkowska M, Rusaczonok A, Kochańska A (2022) Exploring apoplast reorganization in the nodules of <i>Lotus corniculatus</i> L. growing on old Zn–Pb calamine wastes. <i>Journal of Plant Physiology</i>, 268, 153561.

	<p>8. Sujkowska-Rybkowska M., Lisek A., Sumorok, B.; Derkowska, E.; Szymańska, M.; Sas-Paszt, L. (2023) Arbuscular Mycorrhizal Fungi as an important factor enabling the adaptation of <i>Anthyllis vulneraria</i> L. to Zn-Pb-polluted tailings. <i>Plants</i>, 12(11), 2092</p> <p>9. Grzyb M, Sujkowska-Rybkowska M, Mięka A (2024) Cell wall remodeling and callose deposition during the embryogenic transition in the tree fern <i>Cyathea delgadii</i> Stemb. <i>Plant Cell, Tissue and Organ Culture (PCTOC)</i> 156:30</p> <p>10. Bzducha-Wróbel A, Farkaš P, Bieliková S, Čížová A, Sujkowska-Rybkowska 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? <i>Microb Cell Fact.</i> 19;23(1):28. doi: 10.1186/s12934-024-02305-4.</p>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	None
Project/grants achievements (from the last 10 years)	<p>Principal Investigator Grant NCN (MINIATURA 3, DEC-2019/03/X/NZ9/00019 - 2019-2020)</p> <p>Co-worker Grant NCN (Sonata Bis 3, UMO-2013/10/E/NZ3/00748- 2014-2020) Grant NCN (Preludium, 2017/27/N/NZ3/00434) Grant NCN (Opus 2022/45/B/NZ9/00761)</p>
Topic – research problem – for which the candidate supervisor seeks a doctoral student	Interdisciplinary research on the legumes symbiotic interactions and adaptation of legume plants spontaneously colonizing metalliferous heaps, to growth in an environment containing extremely high concentrations of toxic metals.
<p><u>Contact details:</u></p> <p>Faulty/Institute</p> <p>E-mail address</p> <p>Tel.</p>	<p>Institute of Biology, Department of Botany</p> <p>marzena_sujkowska@sggw.edu.pl;</p> <p>marzenasujkowska2@gmail.com</p> <p>(22) 59 32 659</p>