

### Card of the potential supervisor

Name and surname, degree, academic title	
<b>Dr hab. inż. Zbigniew M. Karaczun, professor SGGW</b>	
Scientific discipline / disciplines	Environmental engineering (50%) Agriculture and horticulture (50%)
Professional development (academic degrees and titles) chronologically	<b>May 6, 1992</b> - PhD in agricultural sciences in the field of horticulture (Faculty of Horticulture, Warsaw University of Life Sciences) <b>September 30, 2009</b> - dr hab. agricultural sciences in the field of environmental shaping, specializing in environmental protection (Faculty of Engineering and Environmental Management, Warsaw University of Life Sciences)
The most important publications / patents / from the last 3 years (maximum 10))	<ol style="list-style-type: none"> <li>1. Karaczun Z. M., Kozyra J., 2020: Wpływ zmiany klimatu na bezpieczeństwo żywności we Polski. [The impact of climate change on Poland's food security] Wyd. SGGW. Warszawa ss. 118 ISBN 987-83-7583-875-6</li> <li>2. Karaczun Z.M., 2020: Analiza ewolucji instrumentów polityki ekologicznej w systemie zarządzania ochroną środowiska oraz ocena potrzeb nowych narzędzi. [w] 100 lat ochrony środowiska w Polsce. Szymalski W. (red). [Analysis of the evolution of environmental policy instruments in the environmental management system and the assessment of the needs of new tools. [in] 100 years of environmental protection in Poland. Szymalski W. (ed)] Instytut Naukowo – Wydawniczy „Spatium”. Radom. ss. 57 – 74. ISBN 978-83-66550-19-3</li> <li>3. Mills J., Ingram J., Dibari C., Merante P., Karaczun Z.M., Molnar M, Sánchez B., Iglesias A., Ghaley B.B., 2019: Barriers to and opportunities for the uptake of soil carbon management practices in European sustainable agricultural production, Agroecology and Sustainable Food Systems, DOI: <a href="https://doi.org/10.1080/21683565.2019.1680476">10.1080/21683565.2019.1680476</a></li> <li>4. Karaczun Z.M., Kassenberg A., 2019: Environmental transformation in CEE countries [in] Social and economic development in Central and Eastern Europe. Stability and changes after 1990. (Gorzela G., ed). Routledge. Taylor and Francis Group. London and New York p. 267 - 311 ISBN 978 - 1- 138 - 32429 - 9</li> <li>5. Karaczun Z.M., Saniewska A., Obidoska G., Żarska B., 2018: Development of environmental protection infrastructure in a rural commune after Poland's accession to the European Union - case study. Annals of Warsaw University of Life Sciences - SGGW Land Reclamation 50(1):69 - 79</li> <li>6. Karaczun Z.M.: 2018: Climate protection as an ethical challenge: Studia Ecologiae et Bioethicae</li> </ol>

	<p>7. Karaczun Z.M., 2018: Evolution of the idea of sustainable development in Poland on the example of climate policy. Papers on Global Change 28: 11 - 22</p> <p>8. Karaczun Z.M., 2018: Architektura krajobrazu wobec problemu zanieczyszczenia powietrza. [w] XIV Zieleń w ochronie powietrza. (Kosmalna M. Red). [Landscape architecture in the face of the problem of air pollution. [in] XIV Green in air protection. (Cosmic M. Red).] PZliTS. Toruń.</p>
Experience in working with PhD students (defended PhDs, open courses), chronologically	<b>Supervisor:</b> Anna Hadam: Effect of salinity on the effectiveness of a hydrogel in water deficit conditions on the example of street lawns (defended at the Faculty of Horticulture, Biotechnology and Landscape Architecture in 06/2015).
Project / grant achievements (from the last 10 years)	<ul style="list-style-type: none"> <li>• Sustainable Farm Management Aimed at Reducing Threats to Soil under climate change. (VII EU Framework Program) - grant manager at WULS-SGGW. Project implemented on 11/2011 - 04/2014</li> <li>• Deutsch – Polnische Konferenz Dezentrale Energieversorgung und Energieeffizienz (Project financed by the German Ministry of Foreign Affairs). - grant manager at the Warsaw University of Life Sciences. Project implemented on 08/2013 - 04/2014</li> <li>• Low-emission Poland 2050 (Project financed by the European Climate Foundation). External expert in the field of the circular economy and innovation in climate policy. Project implemented on 8/2012 - 12/2015</li> <li>• Implementation of the goals of the European climate policy for 2030 in non-ETS sectors (Project financed by the German Ministry of Foreign Affairs) - head of the research task: Agriculture Project implemented in 2016</li> <li>• To continue building up better legislative condition for progressive climate and Energy policy and for transformation towards low-emission economy in Poland (Project financed by the European Climate Foundation). External expert in the field of implementation of the EU climate policy in Poland. Project implemented on 7/2016 - 6/2017</li> <li>• The impact of climate change on health (Project financed by HEAL Polska). External expert in the field of forecasting the effects of climate change in Poland. Project implemented on 10/2017 - 6/2018</li> <li>• The impact of food waste on the climate. (Project financed by the German Ministry of Foreign Affairs) - project coordinator. Project carried out on 05/2018 - 12/2018</li> </ul>
Thematic scope - a research problem - to be solved by a PhD student	<ol style="list-style-type: none"> <li>1. Identification and valuation of the value of ecosystem services provided by residents to the city and local community;</li> <li>2. Adaptation of cities to the predicted effects of climate change.</li> </ol>

	<p>3. Horticulture in the face of the effects of climate change - assessment of the needs and possibilities of action in the field of adaptation to the effects of climate change and the role of the sector in climate protection.</p>
<p>Basic expectations towards a candidate for a PhD student</p>	<ul style="list-style-type: none"> <li>• Knowledge of environmental problems occurring in urban areas;</li> <li>• Knowledge of the main directions of needs in the field of urban adaptation to contemporary threats: climate crisis, air pollution, loss of biodiversity;</li> <li>• Basic knowledge of methods for the assessment and valuation of pro-environmental activities and the valuation of the value of ecosystem services used in contemporary environmental research;</li> <li>• The ability to use contemporary social communicators and understanding their functions for contemporary city dwellers.</li> <li>• Basic knowledge of town and city planning and spatial planning..</li> </ul>
<p><u>Contact details:</u>  <u>Faculty / Institute</u>   <u>e-mail address</u>  <u>Telephone</u></p>	<p>Institute of Horticulture Sciences, Department of Environmental Protection and Dendrology; Faculty of Horticulture  <a href="mailto:zbigniew_karaczun@sggw.edu.pl">zbigniew_karaczun@sggw.edu.pl</a>  506 173 522</p>