

**Summary Specification of Scientific Accomplishments of a Thesis Supervisor  
Candidate**

maximum 2 pages - it should be a synthesis of the most important elements of  
accomplishments

Name and surname, degree, scientific title: <b>Stanisław Samborski, dr hab.</b>	
Scientific discipline/s	Agriculture and horticulture
Professional development (scientific degrees and titles) chronologically	<p><b>2016</b> – Habilitation/PostDoctoral Qualification, Department of Agronomy, Warsaw University of Life Sciences (WULS-SGGW), Poland</p> <p><b>2003</b> – Ph.D., Agronomy, Department of Agronomy, WULS-SGGW, Poland</p> <p><b>1998</b> – M. Sc., Eng. in Agronomy, WULS-SGGW, Poland.</p>
Most important publications/patents from the last 3 years (max. 10)	<p>1. <b>Samborski S.</b>, Gozdowski D., R. Leszczyńska. 2021. Chapter: The use of precision agriculture in potato cultivation. Monography: Potato. K. Rębarz (Ed.). Agro Wydawnictwo sp. z o.o., pp. 43-56. ISBN: 978-83-958358-2-7.</p> <p>2. Sobczyński G., Studnicki M., Mądry W., Wijata M., Gozdowski D., Noras N., <b>Samborski S.</b>, &amp; J. Rozbicki. 2020. <u>Impact of cultivar and environment soil suitability on the contribution of yield components to grain yield variation in spring wheat.</u> <i>Crop Science</i>. 60, 1, 428-440.</p> <p>3. Rahmana M.M., Lamb D.W., <b>Samborski S.M.</b> 2019. <u>Reducing the influence of solar illumination angle when using active optical sensor derived NDVIAOS to infer fAPAR for spring wheat (<i>Triticum aestivum</i> L.).</u> <i>Computers and Electronics in Agriculture</i>. 156, 1-9.</p> <p>4. Stępień M., Bodecka E., Gozdowski D., Wijata M., Groszyk J., Studnicki M., Sobczyński G., Rozbicki J., <b>Samborski S.</b> 2018. <u>Zgodność pomiędzy grupami granulometrycznymi określonymi według normy BN-78/9180-11 a grupami granulometrycznymi według PTG 2008 i klasami uziarnienia USDA.</u> <i>Soil Science Annual</i>. 69, 4, 223-233.</p> <p>5. <b>Samborski S.</b> (Ed.). 2018. Zespół autorów: Dobers E.S., Elliot S., Gnatowski T., Gozdowski D., Kozyra J., Nieróbca A., Pudełko R., Samborski S., Stępień M., Szatyłowicz J. <u>Rolnictwo precyzyjne.</u></p>

	<p>Wydawnictwo Naukowe PWN SA, Warszawa, ss. 522.</p> <p>6. Stępień M., Gozdowski D., Bodecka E., Groszyk J., Rozbicki J., <b>Samborski S.</b> 2017. <u>Topsoil texture maps based on calibration of soil electrical conductivity with soil datasets varying in size.</u> <i>Polish Journal of Soil Science.</i> 50, 2, 265-278.</p> <p>7. Gozdowski D., Leszczyńska E., Stępień M., Rozbicki J., <b>Samborski S.</b> 2017. <u>Within-Field Variability of Winter Wheat Yield and Grain Quality versus Soil Properties.</u> <i>Communications in Soil Science and Plant Analysis.</i> 48, 9, 1029-1041.</p> <p>8. <b>Samborski S.</b>, Gozdowski D., Walsh O. S., Kyveryga P., Stępień M. 2017. <u>Sensitivity of sensor based nitrogen rates to selection of within-field calibration strips in winter wheat.</u> <i>Crop and Pasture Science.</i> 68, 101-114.</p> <p>9. Stępień M., Gozdowski D., <b>Samborski S.</b>, Dobers E.S., Szatyłowicz J., Chormański J. 2016. <u>Validation of topsoil texture derived from agricultural soil maps by current dense soil sampling.</u> <i>Journal of Plant Nutrition and Soil Science.</i> 179, 618-629.</p> <p>10. <b>Samborski S.</b>, Gozdowski D., Stępień M., Walsh O. S., Leszczyńska E. 2016. <u>On-farm evaluation of an active optical sensor performance for variable nitrogen application in winter wheat.</u> <i>European Journal of Agronomy.</i> 74, 56-67.</p>
<p>Experience in work with PhD students (defended dissertations, initiated dissertation procedures), chronologically</p>	<ul style="list-style-type: none"> <li>✓ December 15<sup>th</sup>, 2022 Ph.D. defended by Elżbieta Bodecka on: <i>Use of information on spatial field variability to determine efficiency of variable nitrogen application in winter wheat</i>,</li> <li>✓ April 5<sup>th</sup>, 2019 Ph.D. defended by Joanna Groszyk on: <i>“Estimation of the influence of sulfur fertilization on yield and grain quality and efficiency of nitrogen utilization by winter wheat cultivated on different soils”</i>,</li> <li>✓ Currently supervising a Ph.D. student – Renata Leszczyńska: „Determination of the effect of soil properties on the spatial variability of canopy, yield, and quality of potato grown in various crop rotations using remote sensing.</li> </ul>
<p>Project/grant accomplishments (from the last 10 years)</p>	<ul style="list-style-type: none"> <li>✓ <b>2023–2024</b> PRELUDIUM-21 – <i>“Remote evaluation of vine maturity in potato breeding trials”</i>. Finansowany przez Narodowe Centrum Nauki, nr 022/45/N/NZ9/03953, <u>a supervisor of a Ph.D. student – Renata Leszczyńska.</u></li> </ul>

	<p>✓ <b>2022</b> “<i>Enhancing Soil Health in U.S. Potato Production Systems</i>”. USDA National Institute of Food and Agriculture through the Specialty Crops Research Initiative. <u>Scholar of the Fulbright Senior Award</u> founded by the Polish-American Fulbright Commission,</p> <p>✓ <b>2016–18</b> – Senior researcher, Satellite-based service for variable rate nitrogen application in cereal production. European Space Agency, contract No. 4000118613/16/NL/EM.</p> <p>✓ <b>2013–15</b> – Leader, Innovative cereal production technologies aimed at achieving high quality material for the production of cereal goods with lowered calorific value and high added value, part of Bioproducts, innovative technologies for production of pro health bakery and pasta goods with lowered calorific value project (No. POIG.01.03.01-14-041/12), The National Centre for Research and Development.</p> <p>✓ <b>2009–12</b> – Leader, Optimization of winter wheat nitrogen fertilization with the use of remote sensing tools and determination of the usefulness of soil electrical conductivity measurements for soil management zone delineation project (No. N N310 089036), the Ministry of Science and Higher Education.</p> <p>✓ <b>2001–03</b> – Ph.D. student/researcher, Utilization of chlorophyll content measurement for nitrogen nutrition status diagnosing in winter Triticale, (No. 6 P06R 028 21), the State Committee for Scientific Research.</p>
<p>Theme scope - research problem - for the solving of which the Ph.D. student is sought</p>	<ol style="list-style-type: none"> <li>1. Optimization of nitrogen fertilization in corn.</li> <li>2. Determination of nutrient uptake depending on crop yield.</li> <li>3. Optimization of crop field destoning.</li> </ol>
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