

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: Aleksander Lisowski, PhD, DSc, Prof.	
Scientific discipline/s	Mechanical Engineering
Professional development (scientific degrees and titles) chronologically	<p>1989 – PhD, Faculty of Agricultural and Forestry Engineering, WULS.</p> <p>2000 – DSc, Institute for Building, Mechanization and Electrification in Agriculture, Warsaw.</p> <p>2007 – Prof.</p>
Most important publications/patents from the last 3 years (max. 10)	<p>Piątek M., Lisowski A., Dąbrowska M. The effects of solid lignin on the anaerobic digestion of microcrystalline cellulose and application of smoothing splines for extended data analysis of its inhibitory effects. <i>Bioresource Technology</i>. 2021, 320, 1-7, 140 p., IF=9,642.</p> <p>Lisowski A., Świętochowski A., Dąbrowska M., Klonowski J., Nowakowski T., Chlebowski J., Tryskuć P., Parys T., Ferre S., Roberge M. Effect of Stone Impacts on Various Ground Engaging Tools (Flexible/Stiff Tines and Coulter): Part. <i>Materials</i>. 2022, 15, 1568: 1-23; 140p, IF=3,623.</p> <p>Lisowski A., Świętochowski A., Dąbrowska M., Klonowski J., Nowakowski T., Chlebowski J., Tryskuć P., Parys T., Ferre S., Roberge M. Kinetics and dynamics of the stiff and flexible tines with the duckfoot and the coulter after impact with stones embedded in compacted soil: Part II. <i>Materials</i>. 2022, 15, 1351: 1-27; 140p, IF=3,623</p> <p>Tryjarski P., Gawron J., Andres B., Obiedzińska A., Lisowski A. FTIR Analysis of Changes in Chipboard Properties after Pretreatment with <i>Pleurotus ostreatus</i> (Jacq.) P. Kumm. <i>Energies</i> 2022, 15, 23, 9101, 1-18; 100p, IF=3,2</p> <p>Tryjarski P., Lisowski A., Gawron J. Obstawski P. Physicomechanical properties of raw and comminuted pine and poplar shavings: energy consumption, particle size distribution and flow properties. <i>Wood Sci Technol</i> 2023, 57, 2, 625-649; 200p. wg MEN, IF=3,4. Gruz Ł., Joński M., Mieszkalski L., Lisowski A. Patent B1 238547 received 06.09.2021: Rotating large fruit transfer unit and large fruit processing unit.</p> <p>Mieszkalski L., Lisowski A., Klonowski J., Tucki K. Patent B1 238709 received 27.09.2021: Rotary harrow rotor with swiveling blends.</p> <p>Mieszkalski L., Lisowski A. Patent B1 238708 received 27.09.2021: Weeder section for inter-row work with curvilinear rows of plants.</p> <p>Kęska P., Mieszkalski L., Lisowski A., Tucki K. Patent B1 240036 received 07.02.2022: Pumpkin fruit slicing machine.</p>

<p>Experience in work with PhD students (defended dissertations, initiated dissertation procedures), chronologically</p>	<p>Niewęglowski Krzysztof, defense 27.06.2006 Wardecki Piotr, defense 21.11.2006 Motyl Krzysztof, defense 18.11.2008 Świątek Krzysztof, defense 23.11.2010 Świętochowski Adam, defense 01.04.2014 Dąbrowska Magdalena, defense 03.11.2015 Stasiak Patryk, defense 03.11.2015 Piątek Michał, defense 29.06.2021 Matkowski Patryk, defense 29.09.2021 Tryjarski Paweł, supervisor 17.12.2019</p>
<p>Project/grant accomplishments (from the last 10 years)</p>	<p>The use of Capacitive Computed Tomography to monitoring the flow of plant mass flow, NCRD, PBS2/A8/18/2013, 2013-2016, research grant, manager (Partner).</p>
<p>Theme scope - research problem - for the solving of which the PhD student is sought</p>	<p>Conversion of biomass into biogas or solid fuels. Physical relations of the working element - soil. Modeling of physical processes of separation and densification of biological materials.</p>
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