

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

Name and surname, degree, title: Ph.D. D.Sc. eng. Grzegorz Kowaluk , associate professor	
Academic discipline/disciplines	Forestry
Professional development (degrees and titles) in chronological order	<p>Master engineer of wood technology (2001)</p> <p>Doctor of forest sciences in the field of wood technology (2006)</p> <p>Doctor (habilitation) of forest sciences in the field of wood technology (2015)</p>
Most important publications/ patents in the last 3 years (maximum 10)	<p>Dasiewicz J., Kowaluk G.: Upcycling Calcium Carbonate as an Alternative Filler in Layered Wood Composite Technology, <i>Materials</i>, MDPI, vol. 18, nr 2, 2025, No.: 226, s. 1-17, DOI:10.3390/ma18020226</p> <p>Bartoszuk K., Kowaluk G.: Utilization of Fibrous Mat Residues from Upholstered Furniture as Sustainable Fillers in Plywood Production, <i>Materials</i>, MDPI, vol. 17, nr 16, 2024, No.: 4080, s. 1-12, DOI:10.3390/ma17164080</p> <p>Dasiewicz J., Wronka A., Jeżo A., Kowaluk G.: Thermally Active Medium-Density Fiberboard (MDF) with the Addition of Phase Change Materials for Furniture and Interior Design, <i>Materials</i>, MDPI, vol. 17, nr 16, 2024, No.: 4001, s. 1-14, DOI:10.3390/ma17164001</p> <p>Jeżo A., Poohphajai F., Herrera Diaz R., Kowaluk G.: Incorporation of Nano-Zinc Oxide as a Strategy to Improve the Barrier Properties of Biopolymer–Suberinic Acid Residues Films: A Preliminary Study., <i>Materials</i>, MDPI, vol. 17, nr 15, 2024, No.: 3868, s. 1-16, DOI:10.3390/ma17153868</p> <p>Kowalczyk A., Kowaluk G.: Influence of horse chestnut (<i>Aesculus hippocastanum</i> L.) seed particle content on the selected particleboard properties, <i>Annals of Warsaw University of Life Sciences - SGGW Forestry and Wood Technology</i>, Wydawnictwo SGGW, nr 125, 2024, s. 79-89, DOI:10.5604/01.3001.0054.7882</p> <p>Pawlik J., Kowaluk G.: Non-food use of solid residues from the dairy industry as a binder in dry-formed fiberboard technology, <i>Annals of Warsaw University of Life Sciences - SGGW Forestry and Wood Technology</i>, Wydawnictwo SGGW, nr 126, 2024, s. 5-16, DOI:10.5604/01.3001.0054.7880</p> <p>Raydan N., Charrier B., Kowaluk G., Robles E.: Preparation and Characterization of Particleboard Made from Industrial-Type Wood Particles and Discarded Duck Feathers, <i>Journal of Composites Science</i>, MDPI, vol. 8, nr 7, 2024, No.: 241, s. 1-15, DOI:10.3390/jcs8070241</p>

	<p>Reh R., Kristak L., Sedliacik J., Bekhta P., Wronka A., Kowaluk G.: Molded Plywood with Proportions of Beech Bark in Adhesive Mixtures: Production on an Industrial Scale, <i>Polymers</i>, MDPI, vol. 16, nr 7, 2024, No.: 966, s. 1-12, DOI:10.3390/polym16070966</p> <p>Wojciechowska M., Kowaluk G.: Challenges and Opportunities in Recycling Upholstery Textiles: Enhancing High-Density Fiberboards with Recycled Fibers, <i>Fibers</i>, MDPI, vol. 12, nr 12, 2024, No.: 105, s. 1-14, DOI:10.3390/fib12120105</p> <p>Wronka A., Kowaluk G.: Incorporating Birch Bark Suberinic Acid Residue Powder into Structural Particleboards: Exploring Fractional Influence on Material Properties in Circular Economy Framework, <i>Materials</i>, MDPI, vol. 17, nr 23, 2024, No.: 5750, s. 1-14, DOI:10.3390/ma17235750</p>
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	<p>Defended doctoral dissertations:</p> <p>05.07.2022 - Influence of selected material and process factors on the properties of dry-formed fibreboards – Conrad M. Sala</p>
Achievements in the area of projects/grants (in the last 5 years)	<ol style="list-style-type: none"> 1. Comprehensive Characterization of Post-Extraction Products from the Biorefining of Tree Bark Biomass in the Context of Their Eco-Innovative Upcycling Potential; NCN OPUS 27; 2025 – 2027 2. Tree bark as a renewable source of wood protection materials for building applications; ForestValue 2021 Call; 2022 – 2025; manager 3. Sustainable production of Cellulose-based products and additives to be used in SMEs and rural areas; Horyzont 2020; H2020-MSCA-RISE-2020; agreement no. 101007733; 2021 – 2025; manager of Polish part 4. Elaboration of layered lignocellulosic composites with new biobased adhesives; NAWA; agreement no. PPN/BFR/2020/1/00042/U/00001; 2021 – 2022; manager of Polish part
Subject area of the research project for which the candidate student is being recruited	<ol style="list-style-type: none"> 1. Lignocellulosic composites with defined end-of-life scenarios 2. Functionalization of wood and wood composites <p><i>There will be the opportunity to complete the thesis under co-supervision (including international)</i></p>
<p><u>Contact details:</u></p> <p>Institute</p> <p>E-mail address</p> <p>Telephone number</p>	<p>Institute of Wood Sciences and Furniture</p> <p>Warsaw University of Life Sciences - SGGW</p> <p>room no. 1/68, building no. 34</p> <p>159 Nowoursynowska St., Warsaw 02-787, Poland</p> <p>e-mail: grzegorz_kowaluk@sggw.edu.pl</p> <p>Phone: +48 22 59 38 546</p>