

**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. <b>Grzegorz Kowaluk</b> , associate professor	
Academic discipline/disciplines	Forestry
Professional development (degrees and titles) in chronological order	Master engineer of wood technology (2001) Doctor of forest sciences in the field of wood technology (2006) Doctor (habilitation) of forest sciences in the field of wood technology (2015)
Most important publications/ patents in the last 3 years (maximum 10)	<p>Mialeszka, V.; <b>Kowaluk, G.</b>; Pásztor, Z. Sustainable Insulation Panels Made of Tree Bark Fibers: Thermal and Fire Performance. <i>Forests</i> 2026, 17, 26. <a href="https://doi.org/10.3390/f17010026">https://doi.org/10.3390/f17010026</a></p> <p>Dasiewicz J., <b>Kowaluk G.</b>: 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., <b>Kowaluk G.</b>: 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., <b>Kowaluk G.</b>: 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., <b>Kowaluk G.</b>: 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., <b>Kowaluk G.</b>: 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., <b>Kowaluk G.</b>: 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., <b>Kowaluk G.</b>, Robles E.: Preparation and Characterization of Particleboard Made from Industrial-Type Wood Particles and Discarded Duck Feathers, Journal of Composites Science, 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., <b>Kowaluk G.</b>: Molded Plywood with Proportions of Beech Bark in Adhesive Mixtures: Production on an Industrial Scale, Polymers, MDPI, vol. 16, nr 7, 2024, No.: 966, s. 1-12, DOI:10.3390/polym16070966</p> <p>Wojciechowska M., <b>Kowaluk G.</b>: Challenges and Opportunities in Recycling Upholstery Textiles: Enhancing High-Density Fiberboards with Recycled Fibers, Fibers, MDPI, vol. 12, nr 12, 2024, No.: 105, s. 1-14, DOI:10.3390/fib12120105</p>
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	<p><b>Defended doctoral dissertations:</b></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"> <li>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</li> <li>2. Tree bark as a renewable source of wood protection materials for building applications; ForestValue 2021 Call; 2022 – 2025; manager</li> <li>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</li> <li>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</li> </ol>
Subject area of the research project for which the candidate student is being recruited	<ol style="list-style-type: none"> <li>1. Lignocellulosic composites with defined end-of-life scenarios</li> <li>2. Functionalization of wood and wood composites</li> </ol> <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><b>Institute of Wood Sciences and Furniture</b></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>