

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

Name and surname, degree, title: Paweł Ogrodnik, dr hab. inż.	
Discipline/ disciplines of science	Civil Engineering and Transport
Professional development (degrees and titles) in chronological order	2006 – doctor of technical sciences, construction, Lublin University of Technology 2019 – habilitated doctor of technical sciences, Environmental Engineering, Warsaw University of Technology
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> <li>1. <b>Ogrodnik P.</b>, Rutkowska G., Szulej J., Żółtowski M., Powęzka A., Badyda A. : Cement Mortars with Addition of Fly Ash from Thermal Transformation of Sewage Sludge and Zeolite, <i>Energies</i>, MDPI, vol. 15, nr 4, 2022, s. 1-21, DOI:10.3390/en15041399,</li> <li>2. Winkler J.; Malovcová M.; Adamcová D.; <b>Ogrodnik P.</b>; Pasternak G.; Zumr D.; Kosmala M.; Koda M.; Vaverková D.M.; Significance of Urban Vegetation on Lawns Regarding the Risk of Fire, <i>Sustainability</i> 2021, 13(19), 11027; doi.org/10.3390/su131911027, IF= 3.251</li> <li>3. <b>Ogrodnik P.</b>, Powęzka O., Piec R., Zwęgliński T., Smolarkiewicz M., Gromek P., Wróbel R., Węsierski T., Majder-Łopatka M., Wąsik W.: Testing Selected Personal Protection Items of Firefighters in Combined Conditions of Mechanical Loads and Temperatures Occurring during Gas LNG Leaks. <i>Energies</i> 2021,14(22):7698, DOI: 10.3390/en14227698,</li> <li>4. Powęzka, A.; <b>Ogrodnik, P.</b>; Szulej, J.; Pecio, M. Glass cullet as additive to new sustainable composites based on alumina binder, <i>Energies</i> 2021, 14 (12) 3423, 1-22, doi: 10.3390/en14123423, IF=3.004</li> <li>5. Powęzka, A.; Szulej, J.; <b>Ogrodnik, P.</b> The effect of high temperatures on the impact strength of concrete based on recycled aggregate from heat-resistant cullet. <i>Materials</i> 2020, 13 (465), 1-21, doi: 10.3390/ma13020465, IF=3.623</li> <li>6. Powęzka, A.; Szulej, J.; <b>Ogrodnik, P.</b> Reuse of heat resistant glass cullet in cement composites subjected to thermal load. <i>Materials</i> 2020, 13 (4434), 1-21, doi: 10.3390/ma13194434, IF=3.623</li> <li>7. Powęzka, A.; <b>Ogrodnik, P.</b>; Biedugnis, S; Szulej, J. Assessment of selected parameters of concrete composite containing recycle obtained from fire-resistant cullet, <i>Journal of Physics: Conference Series</i>, 3rd Forum of Alternative Fuels, Zawiercie, 20-22 November 2019, 1398 (2019/012011), 1-7, doi: 10.1088/1742-6596/1398/1/012011, IF=0.601</li> <li>8. Rutkowska G., <b>Ogrodnik P.</b>, Żółtowski M., Powęzka A., Kucharski M., Krejsa M.: Fly Ash from the Thermal Transformation of Sewage Sludge as an Additive to Concrete Resistant to Environmental Influences in Communication Tunnels, <i>Applied Sciences-Basel</i>, MDPI, vol. 12, nr 4, 2022, s. 1-20, DOI:10.3390/app12041802, IF=2,679</li> </ol>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	<p><u>Open Doctoral thesis</u></p> <p><b>Aleksandra Powęzka:</b> „Analysis of the possibility of using heat – resistant glass cullet as aggregate in concrete composites resistant to high temperatures” – Planned Defense 2022 r.</p> <p><b>Dariusz Baranowski:</b> „Analysis of the usefulness of metalographic tests in fire investigation” – Planned Defense 2023 r.</p>
Project/grants achievements (from the last 10 years)	<p><b>2012-2015</b> B-R project financed by (NCBiR) entitled „Advanced ICT technologies supporting the design of a rescue system at the following levels: commune, powiat, voivodship”. Contract number: DOBR/0015/R/ID1/2012/03 – <b>Main constructor</b></p> <p><b>2013-2016</b> B-R project financed by (NCBiR) entitled „Development of a methodology for continuous supervision of the operation of selected areas of firefighting equipment in terms of</p>

	<p>reliability and effectiveness". Contract number: DOBR-BIO4/051/13087/2013 – <b>Head of the Research Team</b></p> <p><b>2015-2018</b> B-R project financed by (NCBiR) entitled „Development of an innovative safety management system for historic buildings in urbanized city centers". Contract number: DOB-BIO7/08/01/2015 – <b>Project manager</b></p> <p><b>2017-2020</b> The project is co-financed by the European Union under the action 1.1 „B-R projects of enterprises", Intelligent Development Operational Program 2014-2020 co-financed by the European Regional Development Fund entitled „Development of an innovative technology of fire-resistant FENIX® aluminum joinery systems and facades for internal and external applications". POIR.01.01.01-00-00071/16 – <b>Main constructor</b></p> <p><b>2018-2023</b> B-R project financed by (NCBiR) entitled „A training simulator in the use of technical fire protection systems supporting the evacuation of people from buildings". Contract number: DOB-BIO9/16/01/2018 – <b>Project manager</b></p>
<p>Topic – research problem – for which the candidate supervisor seeks a doctoral student</p>	<p>1. The use of recycled additives and admixtures in the production of mortars and concretes. 2. Problems of fire safety engineering of buildings and structures.</p>
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