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ORCID:	0000-0002-2318-9323
UPWr Base of Knowledge - link:	https://bazawiedzy.upwr.edu.pl/info/author/UPWRf6b2e9d8b3ab40b297095f94b455211b
Researchgate:	https://www.researchgate.net/profile/Roman-Jaskulski
Personal website / Working group website:	
Participation in projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	<p>1. Title: Ecological construction materials using industrial waste Financing: City of Płock budget - activity "Cooperation with higher education institutions" Value of the project: PLN 40 000.00; Function: Principal investigator - PI Involvement time: 2018-2019</p> <p>2. Title: Concrete - investigation and modelling of thermal, mechanical and rheological phenomena and parameters Financing: Faculty of Civil Engineering, Mechanics and Petrochemistry Warsaw University of Technology – Dean's Grants Funds Value of the project: PLN 54 000.00; Function: Principal investigator - PI Involvement time: I-XII 2020</p> <p>3. Title: Air permeability of concrete as a function of its water saturation" Financing: BEYOND POB programme as part of the University's Excellence Initiative project implemented at the Warsaw University of Technology. Value of the project: PLN 198 610.00 Function: Principal investigator - PI Involvement time: 2022-2023</p>
Do you plan to engage support of second supervisor or auxiliary supervisor?	YES
	Auxiliary supervisor
Name and surname:	Maciej Kaźmierowski
Academic Degree:	dr inż. (Dr. Eng.)
Faculty, Institute/Department:	Department of Civil Engineering
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UPWr Base of Knowledge - link or most important publications from last 3 year (JCR) / patents from last 3 years (maximum 5):	https://bazawiedzy.upwr.edu.pl/info/author/UPWrec1a730b0e3e4e7e832bad1b44e67614
Researchgate:	https://www.researchgate.net/profile/Maciej-Kazmierowski
Personal website / Working group website:	

<p>Projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):</p>	<p>1. Title: Experimental and theoretical investigations into the deformation of flexural elements made of high performance concrete modified with dispersed and longitudinal reinforcement Financing: N060/0012/21 (Basic subvention - Innowacyjny Naukowiec II) Function: Principal investigator - PI Involvement time: 2021</p> <p>2. Title: Experimental investigation of the influence of a magnetic field on the deformation and mechanical properties of high-strength concrete modified with steel fibres Financing: N110/0001/22 (Basic subvention - POMOST II) Function: Principal investigator - PI Involvement time: 2022-2023</p> <p>3. Title: Analysis of the properties of high-strength geopolymer concrete modified with hybrid dispersed reinforcement Financing: N010/0009/23 (IDUB - 2%) Function: Principal investigator - PI Involvement time: 2023-2024</p>
<p>PhD topic:</p>	<p>Investigation of the influence of selected carboxylic acids on cement hydration, microstructure and selected mechanical and durability properties of concrete</p>
<p>Research discipline in Doctoral School:</p>	<p>Civil Engineering, Geodesy and Transport</p>
<p>Short description of the research problem to be solved in the PhD (minimum 1000 characters):</p>	<p>The research topic will involve investigating the effects of selected carboxylic acids on selected concrete properties and cement hydration. Among the properties investigated, the strength (and its development over time) and the durability characteristics of the material will play a key role. The microstructure of concrete will also be investigated. Selected carboxylic acids will be added to concrete as an admixture, i.e. in varying amounts not exceeding 5%. Individual batches of concrete will be differentiated in terms of water-cement ratio and type of cement. The proportion and type of aggregate will be essentially unchanged, except for minor adjustments due to differences in cement density or the adoption of different water-cement ratio values. The number of carboxylic acids used in the study, their dosage ranges and other more detailed assumptions will be agreed with the potential PhD student after they have successfully completed the recruitment process. At a minimum, the programme assumes the use of three different acids at seven different dosages.</p>
<p>Professional skills for PhD candidate (e.g. master program, specializations, softwares, language, analytical techniques, minimum 500 characters):</p>	<p>The potential candidate should hold a level II (Master's) degree in civil engineering. Knowledge of English at B2 level is also desirable, as well as time availability due to the need to carry out a large range of laboratory tests, often on a strict schedule. Knowledge of basic descriptive statistics and the ability to critically analyse results using at least basic worksheet tools (e.g. Excel) is desirable. Professional experience related to concrete technology is welcome but not required. Notwithstanding the above, the candidate must meet the requirements for candidates by the Doctoral School. In the case of candidates from abroad, it is solely the responsibility of the candidate to fulfil the requirements of having a diploma recognised in the Polish education system. If a visa is required for the duration of their stay in Poland, such a candidate is also obliged to obtain one on their own.</p>
<p>a) Project title:</p>	<p>none</p>
<p>b) Agreement number:</p>	<p>none</p>
<p>c) Number of months in the project to support PhD student (in months; starting from 1st of October 2024):</p>	<p></p>