

### Scientific business card of the candidate for the promoter

maximum 2 pages – it should be a synthesis of the most important elements of the acquis

Name and surname, degree, academic title: Mariusz Żółtowski, Ph.D.	
Scientific discipline(s)	Civil Engineering, Geodesy and Transportation;
Professional development (degrees and titles) chronologically	2009 – PhD in technical sciences, civil engineering, Szczecin University of Technology 2022 – habilitated doctor of technical sciences, Environmental Engineering, Warsaw University of Technology
The most important publications/patents/ from the last 3 years (maximum 10)	<p>Żółtowski Mariusz, Żółtowski Bogdan, Ogrodnik Paweł, Rutkowska Gabriela, Wierzbicki Tomasz: Vibration Signal Diagnostic Information of Reinforced Masonry Elements Destruction, Applied Sciences-Basel, MDPI, vol. 13, 2023, Item number: 4913, pp. 1-15, DOI:10.3390/app13084913</p> <p>Żółtowski Mariusz, Rutkowska Gabriela, Dąbkowski Norbert, Jeleniewicz Katarzyna, Kula Dorota, Szlachetka Olga: Diagnostics of damage to masonry elements based on numerical measures of the vibration process, Materiały Budowlane, Wydawnictwo SIGMA-NOT Sp. z o.o., vol. 1, no. 5, 2022, pp. 24-26, DOI:10.15199/33.2022.05.04</p> <p>Żółtowski Mariusz, Rutkowska Gabriela, Liss Michał, Kałaczyński Tomasz, Krejsa Martin: Vibration Energy Signal Information for Measure Dynamic Preferences of Ceramic Building Materials Using Experimental Modal Analysis Methodology, Materials, MDPIAG, vol. 15, no. 4, 2022, Order number: 1452, pp. 1-14, DOI:10.3390/ma15041452</p> <p>Żółtowski Mariusz: FRF FUNCTION INFORMATION USEFULNESS IN BRICKS DEGRADATION, IN: Proceedings of extended abstracts Modelling in Mechanics, 2022, VSB-Technical University of Ostrava, ISBN 978-80-248-4610-1 , pp. 38-38</p> <p>Rutkowska Gabriela, Żółtowski Mariusz, Liss Michał: The Use of Modal Analysis in Addition Percentage Differentiation, and Mechanical Properties of Ordinary Concretes with the Addition of Fly Ash from Sewage Sludge, Materials, MDPIAG, vol. 14, no. 17, 2021, Item number: 5039, pp. 1-24, DOI:10.3390/ma14175039</p> <p>Żółtowski Mariusz, Šadzevičius Raimondas: Frequency response function shape differences as a sign of bricks elements destruction diagnostics, MATEC Web of Conferences, E D P Sciences, vol. 332, 2021, Article number: 01021, pp. 1-9</p> <p>Żółtowski Mariusz: FRF function in degradation of the general condition of bricks, In: Contemporary problems of security, management and modern engineering / Runiewicz Renata, Przychocka Iwona, Milewski Leonard (eds.), 2021, Instytut Wydawniczy EuroPrawo, ISBN 978-83-7627-190-3, pp. 936-948</p> <p>Żółtowski Mariusz, Jeleniewicz Katarzyna: Diagnostics of sulfur cement</p>

	<p>properties, MATEC Web of Conferences, E D P Sciences, vol. 302, 2019, pp. 1-8, DOI:10.1051/mateconf/201930201025</p> <p>Żółtowski Mariusz, Jeleniewicz Katarzyna: The use of modal analysis to examine the lattice structure, Przegląd Naukowy Inżynieria i Shaping Środowiska, Wydawnictwo SGGW, vol. 28 (3), No. 85, 2019, pp. 332-344, DOI:10.22630/PNIKS.2019.28.3.31</p> <p>Żółtowski Mariusz, Jeleniewicz Katarzyna: Vibrations system in state destruction of building construction, Acta Scientiarum Polonorum. Series: Architectura, Wydawnictwo S G G W, vol. 18, no. 4, 2019, pp. 73-81, DOI:10.22630/ASPA.2019.18.4.47</p>
<p>Experience in working with doctoral students (defended doctorates, open wires), chronologically</p>	<p><u>Open doctoral dissertations</u></p> <p>Auxiliary supervisor of Katarzyna Radecka's doctoral thesis at the Faculty of Production Engineering and Materials Technology, Częstochowa University of Technology entitled "Shaping the quality of the company's products based on innovative maintenance of the airworthiness of the production system". By Resolution of the Council for Academic Degrees No. 551/2019 of September 24, 2019, it grants Katarzyna Radecka a doctoral degree in the field of engineering and technical sciences in the discipline of mechanical engineering.</p>
<p>Project/grant achievements (from the last 10 years)</p>	<ol style="list-style-type: none"> <li>1. <b>Participation in</b> a research project (contractor) under the Operational Programme Innovative Economy, 2009 – 2012, entitled: Virtual techniques in research on the condition, safety and environmental hazards of operated machines - <b>WND-POIG.01.03.01-00-212/09</b>, Bydgoszcz, Poland 2009-2012</li> <li>2. <b>Contractor</b> in the project of the National Science Centre (NCN): Research on threats of loss of environmental suitability of technical systems. Project no. 4832/T02/2010/39. WIM, UTP, Bydgoszcz, 2010-2013.</li> <li>3. <b>Participation in the</b> international research project (executor) of the GEMI research group conducted at the Faculty of Mechanical Engineering of the EAFIT University in Medellin, <b>Colombia</b> 2011. Head: Prof. L. Castaneda.</li> <li>4. <b>Participation in the project FACCE JPI Knowledge Center: Modeling European Agriculture with Climate Change for Food Security, FACCE MACSUR (P110)</b> Bydgoszcz, Poland 2013. Head: W. Bojar, Prof. UTP.</li> <li>5. <b>Participation</b> in a research project at TU Chemnitz at the Professur Strukturleichtbau und Kunststoffverarbeitung (SLK), Chemnitz, Germany 2013. Head: Prof. L. Kroll.</li> <li>6. <b>Participation</b> in the research projection (executor) of the research group: The Berkeley Micromechanical Analysis and Design (BMAD) at the University of California, Berkeley, USA 2013. Head: Prof. A.</li> </ol>

	<p>Pissano.</p> <p>7. <b>Contractor</b> in the POIG project 01.04.00-14-067/13 under the Innovative Economy Operational Program, action 1.4 for the implementation of the project "Innovative means for de-icing motor vehicles and ground infrastructure". Project implementation period: 01.06.2014 to 30.11.2015.</p>
<p>Thematic scope – research problem – for which a doctoral student is sought</p>	<p>1.The use of modal analysis methodology in the study of the degradation state of building materials.</p> <p>2. Use of diagnostic information contained in the vibration signal to assess the degradation status of building materials and engineering structures</p>
<p><u>Contact:</u> Faculty/Institute E-mail address Telephone</p>	<p>Institute of Civil Engineering mariusz_zoltowski@sggw.edu.pl 791626848</p>