28.05.25

Qualifications of the individual for defining area of expertise

Name/ Birth year	**Marek Iwaniec** / 1968
Title (year degree obtained) / Prof. status	Msc. Eng. (1993) PhD (1998) / research scientist DSc. (2007) 2016 / associate professor
Address[1]	AGH University of Science and Technology, Al. Mickiewicza 30, 30-059 Krakow, Poland phone: +48 12 617 47 12, fax: +48 12 634 15 68, mobile: +48 502 040 951 email: iwaniec@agh.edu.pl
Area of expertise[2]	Modelling, design and optimal modification of biomechatronical systems Investigation of biomechanical structures
Relevant (best) publications[3]	1. Joanna IWANIEC, Marek IWANIEC, Piotr KUROWSKI, Krystian SZOPA **Investigation into power line supporting structure dynamic properties by means of impulse test** Energies, vol. 15 iss. 15 art. no. 5707, s. 1–18, 2022 2. Agnieszka Brzózka, Anna Brudzisz, Anna Jeleń, Mikołaj Kozak, Jacek WESÓŁ, Marek IWANIEC, Grzegorz D. Sulka **A comparative study of electrocatalytic reduction of hydrogen peroxide at carbon rod electrodes decorated with silver particles** Materials Science and Engineering ; 2020 3. Nazariy Jaworski, Nazariy Andrushchak, Mykhailo Lobur, Marek IWANIEC **A finite element model of terahertz substrate-based wire-grid polarizer** Mathematics and Computers in Simulation ; 2021 Krystian SZOPA, Marek IWANIEC, Joanna IWANIEC **Modelling and identification of bolted truss structure with the use of design of experiment approac**h, Structures 2020 4. Ludwin MOLINA ARIAS, Marek IWANIEC, Paulina Pirowska, Magdalena SMOLEŃ, Piotr AUGUSTYNIAK **Head and voice-controlled human-machine interface system for transhumeral prosthesis**, Electronics, 2023
Publications statistics:	**Scopus:** Citations: 281, H-index: 9 **Web of Science**: Publications: 53, Citations: 187, H-index: 8
Other[4]	2021 to date: Department of Biocybernetics and Biomedical Engineering 2015-2020: Head of the Department of Process Control 2011: Obtaining the title of associate professor at AGH 2009: Department of Process Control, WIMiR, AGH 2008: Obtaining a postdoctoral degree in technical sciences, Faculty of Mechanical Engineering and Robotics, AGH, habilitation thesis on "*Energy analysis of modifications of mechanical and biomechanical structures*" 2001-2002 Visiting professor Universita La Sapienza, Departamento Meccanica a

[1] Organisation, street address, telephone, email, web page
[2] With keywords characterising your field(-s) of expertise
[3] Max. 10
[4] List didactic, major grants, conference responsibilities, professional recognitions, memberships, journals, patents, etc.

	Aeronautica, NATO grant - 1 year
	1999-2008 Ph.D., assistant professor at the Department of Structural Acoustics and Intelligent Materials, and then at the Department of Mechanics and Vibroacoustics, Faculty of Mechanical Engineering and Robotics
	1998 obtaining the degree of doctor of technical sciences, Faculty of Mining and Metallurgical Machines, AGH University of Science and Technology
	1988 -1993 Studies at AGH, Faculty of Mechanical Engineering and Robotics
	major grants: International projects: CEEPUS BG-0613-04-1415, CIII-BG- 0703-04-1516 Modern Trends in Education and Research on Mechanical Systems - Bridging Reliability, Quality and Tribology – National coordinator, 2010-2024 Project 3021/C.T11-6/2001): ***Rehabilitation bed with lateral tilt*** Contractor: Żywiec Hospital Equipment Factory FAMED S.A., 34-300 Żywiec, ul. Fabryczna 1, Main contractor from AGH approx. PLN 2 million Project 7T11E 05920: ***Anti-decubitus mattress,*** 2002-2004; Project NCN N N501 241 138: ***Application of the Magnus effect in mechanics and biomechanics***, (2010 - 2013), ~ PLN 500,000 project manager. Project NR03-0034-10: ***Diagnostic system for power transmission lines*** AGH in cooperation with ENION Kraków and Tauron, Project manager, PLN 1.8 million, 2010-2013 Projects and implementation: ***Line for the synthesis of metal and metal oxide nanoparticles by electrochemical method*** and***: Line for the separation of metal, metal oxide and metal nanoparticles on carriers by microfiltration method,*** Project number: UDA-POIG.04.04.00-12-052/13, Smart Nanotechnologies" S.A., ul. Karola Olszewskiego 25, 32-566 Alwernia, project manager from AGH, total ~22 million PLN / AGH 799,000 PLN
	Chosen invited lectures Conference Open Seminar on Acoustics Gdansk 2008 Conference Open Seminar on Acoustics Gliwice 2009 Vibration of Physical Systems Poznań-Będlewo 2009 Clipsch Audio Technologies - Indianapolis 2004 ICMIMT 2018, IEEE 9th International Conference on Mechanical and Intelligent Manufacturing Technologies, Cape Town 2018 Conferences MEMSTECH Lwiv 2017, 2018, 2019
	memberships elected member of the Committee of Acoustics, Polish Academy of Science, since 2011 elected member of the Committee for Biocybernetics and Biomedical Engineering, Polish Academy of Science, since 2023 Polish Society of Acoustics - 1993-2022 Polish Association Biomedical Engineering, since 2020 IEEE Signal Processing Society, since 2024
	supervision of 2 PhD, over 50 Master's, over 100 BSc students, with their thesis/diploma