PhD Advisor form

Name of the advisor: Rafal Lech

Academic title: Ph.D., D.Sc., Eng., Associate Professor

Orcid ID number: http://orcid.org/0000-0002-5384-6830

Department of Microwave and Antenna Engineering

Faculty of Electronics, Telecommunications and Informatics

Gdańsk University of Technology

Phone: +48 58 348 62 99

E-mail: rafal.lech@pg.edu.pl

Personal web page: www.pg.edu.pl/456414ddff_rafal.lech

Discipline[i] **control, electronic and electrial engineering**

Bibliometric indicators

1.	Number of journal publications in WoS/ Scopus	50 (26 articles) / 61
2.	Citations (WoS/Scopus) excluding self-citations	102 / 134
3.	Hirsch index (WoS/Scopus)	8 /9
4.	Hirsch index in Google Scholar	10
5.	Citations in Google Scholar	256

1. The number of PhD students who have graduated under your supervision: 0
2. The number of PhD students currently supervised: 0
3. Are you currently accepting new PhD students:
   a. Polish Yes
   b. Foreign Yes

Research interests or topics offered for PhD research (no more than 2000 characters)[ii]

Main research interests are electromagnetic-wave scattering, numerical methods, filter design, complex materials, metamaterial applications at microwave frequencies, electromagnetic analysis of periodic structures and conformal antenna design.

Methods of analysis: mode matching, method of moments, spectral domain approach, finite element method, hybrid methods

PhD Advisor form

Funding or special equipment needed to carry out a PhD project [iii]:

1. Is funding available for experimental work: No
2. Is the equipment needed to complete a PhD project available in your lab/department: Yes

Most recent publications in WoS/SCOPUS journal – no more than 5 published after 1.01.2017

No	Authors/title/journal	Journal IF/Quartile – for WoS and SNIP/ CiteScore for SCOPUS	Publication year
1.	W. Marynowski, R. Lech and J. Mazur/Edge-Guided Mode Performance and Applications in Nonreciprocal Millimeter-Wave Gyroelectric Components/ IEEE Transactions on Microwave Theory and Techniques	3.176/Q1(WoS)-1.956 (SNIP)/3.59	2017
2.	R. Lech /Calculation of Resonance in Planar and Cylindrical Microstrip Structures Using a Hybrid Technique/ IEEE Transactions on Antennas and Propagation	4.13/Q1(WoS)-2.244(SNIP)/4.65	2018
3.	R. Lech / Resonance Microstrip Structure with Patch of Arbitrary Convex Geometry with the Use of Field Matching Technique/ Journal of Electromagnetic Waves and Applications	0.864/Q4(WoS)-0.604 (SNIP)/1.00	2018
4.	M. Warecka, R. Lech and P. Kowalczyk/Propagation in the Open Cylindrical Guide of Arbitrary Cross Section with the Use of Field Matching Method/IEEE Transactions on Antennas and Propagation	4.13/Q1(WoS)-2.244(SNIP)/4.65	2018
5.	P. Kowalczyk, R. Lech, M. Warecka, A. Kusiek/Electromagnetic Plane Wave Scattering from a Cylindrical Object with an Arbitrary Cross Section Using a Hybrid Technique/Journal of Electromagnetic Waves and Applications	0.864/Q4(WoS)-0.604 (SNIP)/1.00	2019

Most recent externally funded projects you were involved in – no more than 3

No	Project title, the name of the Princ. Investigator (PI) and the institution the project was carried out	Year awarded	Role in the project
1.	Study of field phenomena occurring in the scattering of electromagnetic wave in new materials and their application in microwave technology and millimeter waves - PI:Jerzy Mazur - Gdańsk University of Technology	2014	R
2.	Studies of conformal antennas using hybrid analysis methods - PI: Rafal Lech - Gdańsk University of Technology	2012	PI

3.	Study of the properties of new materials and wave structures containing heterogeneous ferrite objects and their application to the implementation of non-reciprocal systems in the microwave and millimeter wave bands- PI: Adam Kusiek - Gdańsk Universit	2012	R

Additional relevant information – (no more than 1600 charters)[iv]

(Please fill in here)

[i] You may select up to two disciplines out of 12 disciplines represented in the Doctoral School
[ii] Observe the limit of not more than 300 words
[iii] Leave only one answer
[iv] Add any other relevant information eg. awards for PHD students whom you supervised (no more than 200 words)