

# Prospective supervisor's form

Name of the supervisor: Piotr Musznicki

Academic title: dr hab.

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Discipline: control, electronic and electrical engineering none Optional

Key words (obligatory four key words describing research interests / expertise):

# power electronics

# electromagnetic compatibility

# wide banded circuit simulation

#

## Bibliometric indicators

1. Number of journal publications in WoS/ Scopus 17/18

2. Citations excluding self-citations WoS 64 Scopus 79

3. Hirsch index WoS 4 Scopus 5

1. The number of PhD students who have graduated under your supervision: 0

2. The number of PhD students currently supervised:

a. within the current doctoral school 0

b. within doctoral studies (previous system) 0

3. Are you currently accepting new PhD students:

a. Polish Yes/No Yes

b. Foreign Yes/No Yes

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Research interests or topics offered for PhD research (no more than 2000 characters)<sup>ii</sup>

Research interests:

- conducted EMI in power electronics converter,
- impact of PCB layout on the converter operation,
- EMI limitation in converters with wide gap transistors,
- wide banded simulation including precise model of semiconductors, passive elements and conducting tracks

Funding or special equipment needed to carry out a PhD project <sup>iii</sup>:

1. Is funding available for experimental work: *Yes/No/not needed*

Yes

2. Is the equipment needed to complete a PhD project

available in your lab/department: *Yes/No/not needed*

Yes

Most important publications – no more than 5 published after 1.01.2018

No	Authors/title/journal	Number of points according to the current list of the Ministry of Science and Higher Education	Publication year
1.	Maciej Kolincio ; Piotr J. Chrzan ; Piotr Musznicki /Multitransformer Primary-Side Regulated Flyback Converter for Supplying Isolated IGBT and MOSFET Drivers/ IEEE Transactions on Industrial Electronics ( Volume: 67 , Issue: 2 , Feb. 2020 )	200	2020
2.	Pawel B. Derkacz ; Piotr Musznicki ; Piotr J. Chrzan/ EMI attenuation in a DC-DC buck converter using GaN HEMT/ IEEE Journal of Emerging and Selected Topics in Power Electronics 2020	140	2020

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3.	Piotr Musznicki / The conducted EMI in DC-DC converters/ Walter de Gruyter (Sciendo) 2018	80	2018
4.			
5.			

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

No	Project title, the name of the Principal Investigator (PI) and the institution the project was carried out	Years	Role in the project <sup>iv</sup>
1.			PI
2.			PI
3.			PI

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Additional relevant information – (no more than 1600 characters)<sup>v</sup>



- <sup>i</sup> You may select up to two disciplines out of 12 disciplines represented in the Doctoral School
- <sup>ii</sup> Observe the limit of not more than 2000 characters
- <sup>iii</sup> Leave only one answer
- <sup>iv</sup> Select the role in the project: PI stands for principal investigator (refers to the holder of an independent grant and the lead researcher for the grant project), Co-I for co-investigator (Co-I assists the principal investigator in the management and leadership of the research project), R for researcher
- <sup>v</sup> Add any other relevant information e.g. awards for PhD students whom you supervised (no more than 1600 characters)