

Name of the advisor: Ryszard Jan Barczyński**Academic title: Ph.D., D.Sc., Eng.**Orcid ID number: <https://orcid.org/0000-0002-9965-7891>**Department of Solid State Physics****Faculty of Applied Physics And Mathematics****Gdańsk University of Technology****Phone: +48 58 347 1832****E-mail: jbarcz@pg.edu.pl****Personal web page: https://pg.edu.pl/web/2b323d6eb2_ryszard.barczyński****Disciplineⁱ materials engineering****Bibliometric indicators**

1.	Number of journal publications in WoS/ Scopus	50
2.	Citations (WoS/Scopus) excluding self-citations	375 (WoS)
3.	Hirsch index (WoS/Scopus)	12 (WoS)
4.	Hirsch index in Google Scholar	12
5.	Citations in Google Scholar	490

1. The number of PhD students who have graduated under your supervision: 2

2. The number of PhD students currently supervised: 1

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

The topic proposed the PhD candidate is the study of airgel materials based on manganese oxide.

The aerogel based on manganese oxide was first produced in our laboratory. It is characterized by a very high porosity and a huge specific surface. It is a very promising material due to a wide area of potential applications - as a catalyst and electrode material for supercapacitors and galvanic cells.

The proposed work consists of:

- determination of impact of parameters preparation on the structure and optimization of preparation process;
- examination of electrical and electrochemical properties;
- preliminary assessment of catalytic properties.

PhD Advisor form

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

1. Is funding available for experimental work: *Wybierz element.*
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.	P. Kupracz, A. Lenarciak, M. Lapiński, M. Przeźniak-Welenc, N. A. Szreder, R. J. Barczyński. Polaron hopping conduction in manganese borosilicate glass. <i>Journal of Non-Crystalline Solids</i> 458 (2017) 15-21. DOI:10.1016/j.jnoncrysol.2016.12.00	2.448 / Q1	2017
2.	N. A. Wójcik, P. Kupracz, R. J. Barczyński, Nonlinear electrical properties of glass-ceramics nanocomposites containing ferroelectric nanocrystallites of Bi ₂ VO _{5.5} , <i>Solid State Ionics</i> , 317 (2018) 7-14. DOI: 10.1016/j.ssi.2017.12.035	2.751 / Q1	2018
3.	N. A. Wójcik, M. Przeźniak-Welenc, J. Karczewski, M. Gazda, P. Kupracz, R. J. Barczyński, Mixed ionic-electronic conductivity and structural properties of strontium-borate glass containing nanocrystallites of Bi ₂ VO _{5.5} , <i>Phys. Status Solidi B</i> 254 (2017) 1700093. DOI:10.1002/pssb.201700093	1.49 / Q2	2017
4.	P. Kupracz, N. A. Szreder, R. J. Barczyński. A method of determination of electrical conduction mechanisms in complex amorphous materials. <i>Journal of Non-Crystalline Solids</i> 498 (2018) 223-227. DOI:10.1016/j.jnoncrysol.2018.06.028	2.448 / Q1	2018
5.	N.A. Wójcik, B. Jonson, R.J. Barczyński, P. Kupracz, D. Möncke, S. Ali, Electrical properties of Na ₂ O-CaO-P ₂ O ₅ glasses doped with SiO ₂ and Si ₃ N ₄ , <i>Solid State Ionics</i> , 325 (2018) 157-162. DOI: 10.1016/j.ssi.2018.08.011	2.751 / Q1	2018

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.			<i>Wybierz element.</i>
2.			<i>Wybierz element.</i>

PhD Advisor form

3.			Wybierz element.
<p>Additional relevant information – (no more than 1600 characters)^{iv} (Please fill in here)</p>			

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)