

# Prospective supervisor's form

Name of the supervisor:

Academic title:

Orcid ID number: [https://orcid.org/0000-](https://orcid.org/0000-0002-6445-0743)

Gdańsk University of Technology Faculty of

Department of

Phone: +48

E-mail:

Personal web page: <https://pg.edu.pl/>

Discipline:

Optional

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

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## Bibliometric indicators

1. Number of journal publications in WoS/ Scopus

2. Citations excluding self-citations WoS  Scopus

3. Hirsch index WoS  Scopus

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

2. The number of PhD students currently supervised:

a. within the current doctoral school

b. within doctoral studies (previous system)

3. Are you currently accepting new PhD students:

a. Polish Yes/No

b. Foreign Yes/No

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

- studies on interactions in aqueous solutions of small biologically relevant organic and inorganic solutes with experimental (FTIR-ATR spectroscopy) and computational (DFT) methods,
- studies of peptide-osmolyte interactions in solutions,
- the development of chemometric methods of spectral data analysis.

### 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*

2. Is the equipment needed to complete a PhD project available in your lab/department: *Yes/No/not needed*

### 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.	B. Zalewska-Piątek, M. Olszewski, T. Lipniacki, S. Błoński, M. Wieczór, P. Bruździak, A. Skwarska, B. Nowicki, S. Nowicki, R. Piątek. A shear stress micromodel of urinary tract infection by the Escherichia coli producing Dr adhesin. PLoS Pathog. 2020, 16, e1008247.	140	2020
2.	P. Bruździak. Vapor correction of FTIR spectra – A simple automatic least squares approach. Spectrochim. Acta A 2019, 223, 117373	100	2019

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3.	A. Panuszko, P. Bruździak, M. Śmiechowski, M. Stasiulewicz, J. Stefaniak, J. Stangret. DMSO hydration redefined: Unraveling the hydrophobic hydration of solutes with a mixed hydrophilic–hydrophobic characteristic. <i>J. Mol. Liquids</i> 2019, 294, 111661	100	2019
4.	A. Panuszko, M. G. Nowak, P. Bruździak, M. Stasiulewicz, J. Stangret. Amides as models to study the hydration of proteins and peptides – spectroscopic and theoretical approach on hydration in various temperatures. <i>J. Mol. Liquids</i> 2019, 278, 706–715.	100	2019
5.	P. Bruździak, A. Panuszko, B. Piotrowski, J. Stangret. Structural changes of a simple peptide—Trpzip-1—in aqueous solutions and the corresponding hydration phenomena under the influence of temperature. <i>J. Mol. Liquids</i> 2019, 277, 532–540	100	2019

#### 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>i</sup>
1.	Influence of hydration water properties on the process of amyloid fibrils formation (National Science Centre), PI: dr hab. inż. Piotr Bruździak, Gdańsk University of Technology	2018-2021	PI
2.	"Stabilność białek w wodnych roztworach osmolitów w oparciu o komplementarne podejście eksperymentalne i teoretyczne" (National Science Centre), PI: prof. dr hab. inż. Janusz Stangret, Gdańsk University of Technology	2014-2017	R
3.	"Charakterystyka oddziaływań w układzie białko-osmolit-woda" (Ministry of Science and Higher Education), PI: prof. dr hab. inż. Janusz Stangret, Gdańsk University of Technology	2010-2011	Co-I

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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)