Prospective supervisor's form

Name of the supervisor: Sebastian Demkowicz

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

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Faculty of Chemistry

Gdańsk University of Technology **Department of** Organic Chemistry

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Discipline[i] chemical sciences [NCh] none

Optional

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

medicinal chemistry

steroid sulfatase inhibitors

phosphoroorganic chemistry

organosulfur chemistry

Bibliometric indicators

1. Number of journal publications in WoS/ Scopus: 24 (WoS) 26 (Scopus)
2. Citations excluding self-citations: WoS 178 Scopus 192
3. Hirsch index: WoS 9 Scopus 9

1. The number of PhD students who have graduated under your supervision: 2
2. The number of PhD students currently supervised:
   a. within the current doctoral school: 1
   b. within doctoral studies (previous system): 1
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)[ii]

The subject of scientific research includes design, synthesis and biological evaluation of new chemotherapeutics with potential application in the treatment of hormone-dependent cancers, including breast cancer. The research has an interdisciplinary character and combines the experience of a number of (national and international) research teams in the field of molecular modeling, QSAR analysis, chemical synthesis and biological research.

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

1. Is funding available for experimental work: *Yes/No/not needed* — No
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.	Kozak, W., Demkowicz, S., Daśko, M., Rachon, J., Rak, J./ Modifications at the C(5) position of pyrimidine nucleosides/ Russian Chemical Reviews	100	2020
2.	Daśko, M., Demkowicz, S., Biernacki, K., (...), Kubiński, K., Boguszewska-Czubara, A. / Novel steroid sulfatase inhibitors based on N-thiophosphorylated 3-(4-aminophenyl)-coumarin-7-O-sulfamates/ Drug Development Research	70	2019

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3.	Kozak, W., Rachon, J., Daśko, M., Demkowicz, S./ Selected Methods for the Chemical Phosphorylation and Thiophosphorylation of Phenols/ Asian Journal of Organic Chemistry	70	2018
4.	Daśko, M., Demkowicz, S., Biernacki, K., Ciupak, O., Kozak, W., Masłyk, M., Rachon, J./ Recent progress in the development of steroid sulphatase inhibitors –examples of the novel and most promising compounds from the last decade/ Journal of Enzyme Inhibition and Medicinal Chemistry	140	2020
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 [iv]
1.	„Projektowanie, synteza oraz badanie aktywności biologicznej nowych inhibitorów Sulfatazy Steroidowej (STS) na bazie związków fosforoorganicznych", funded by the National Science Center (Poland), in „Sonata" program; principal investigator Sebastian Demkowicz, Gdansk University of Technology	2012-2015	PI
2.	Project no. 40, „Inhibitory sulfatazy steroidowej (STS) jako potencjalne chemoterapeutyki w leczeniu hormonozależnego raka piersi", funded by the Centre for Knowledge and Technology Transfer GUT and the Ministry of Science and Higher Education (Poland) in "Incubator of Innovation+" program; principal investigator Sebastian Demkowicz, Gdansk University of Technology	2018-2019	PI
3.	Project no. 2015/19/N/NZ7/00938, „Projektowanie, synteza oraz badanie aktywności biologicznej nowych inhibitorów sulfatazy steroidowej (STS) na bazie amidosiarczanowych pochodnych zawierających wiązania C-F", funded by the National Science Center (Poland), in „Preludium" program; principal investigator Mateusz Daśko, Gdansk University of Technology	2015-2018	Co-I

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Additional relevant information – (no more than 1600 characters)[v]

[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 2000 characters

[iii] Leave only one answer

[iv] 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

[v] Add any other relevant information e.g. awards for PhD students whom you supervised (no more than 1600 characters)