

Prospective supervisor's form

Name of the supervisor: Christian Jungnickel

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

Orcid ID number: <https://orcid.org/0000-0003-2468-8498>

Gdańsk University of Technology Faculty of Chemistry

Department of Colloid and Lipid Science

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Discipline: chemical sciences [NCh] none

Optional

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

modelling

QSPR

bile salts

digestion

Bibliometric indicators

1. Number of journal publications in WoS/ Scopus 44/42

2. Citations excluding self-citations WoS 1364 Scopus 1440

3. Hirsch index WoS 19 Scopus 20

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

1. Significance of bile salt conjugation on digestion processes.
2. Assessment of chemicals in water-borne and air-borne microplastic particles, and their release mechanism after ingestion during digestion.

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

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.	Łozińska N., Głowacz-Różyńska A., Artichowicz W., Lu Y., Jungnickel C. Microencapsulation of fish oil - determination of optimal wall material and encapsulation methodology. Journal of Food Engineering, 268 (2020) 109730.	140	2020
2.	Macierzanka A., Torcello-Gómez A., Jungnickel C., Maldonado-Valderrama J. Bile salts in digestion and transport of lipids. Advances in Colloid and Interface Science, 274 (2019) 102045.	200	2019

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3.	Szumala P., Jungnickel C., Kozłowska-Tylingo K., Jacyna B., Cal K. Transdermal transport of collagen and hyaluronic acid using water in oil microemulsion. International Journal of Pharmaceutics, 572 (2019) 118738.	100	2019
4.	Wojewódka P., Aranowski R., Jungnickel C. Mass transfer in Spinning Fluids Reactor — Measurement and prediction. Journal of Industrial and Engineering Chemistry, 80 (2019) 712-721.	100	2019
5.	Wojewódka P., Aranowski R., Jungnickel C. Residence Time Distribution in Rapid Multiphase Reactors. Journal of Industrial and Engineering Chemistry, 69 (2019) 370-378.	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 ^{iv}
1.	Go!Green - Inter Applied Chemistry Program POWR.03.03.00-IP.08-00-MPK/16, Christian Jungnickel, Gdansk University of Technology	2017-2021	PI
2.	Analysis of new generation ionic liquids in terms of microanalytics, distribution in the environment and ecotoxicity, Piotr Stepnowski, N N204 527139, University of Gdansk	2010-2013	R
3.	The influence of ionic liquids on physico-chemical and biological parameters of sewage sludge, Christian Jungnickel, N N305 327439, Gdansk University of Technology	2010-2011	PI

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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)