

Prospective supervisor's form

Name of the supervisor: Agata Kot-Wasik

Academic title: professor

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Gdańsk University of Technology Faculty of Chemistry

Department of Analytical Chemistry

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Discipline: chemical sciences [NCh] none

Optional

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

hyphenated techniques

mass spectrometry

new emerging pollutants

human and environment

Bibliometric indicators

1. Number of journal publications in WoS/ Scopus /103

2. Citations excluding self-citations WoS 2484 Scopus 2673

3. Hirsch index WoS 26 Scopus 25

1. The number of PhD students who have graduated under your supervision: 5

2. The number of PhD students currently supervised:

a. within the current doctoral school 0

b. within doctoral studies (previous syst 5

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 scientific subject covers a very wide range of both fundamental and applied research. My research is focused around the development of new analytical methods based on modern analytical techniques, with particular emphasis on combined techniques, among them advanced modern ultra high performance liquid chromatography combined with mass spectrometry, tandem mass spectrometry and high resolution mass spectrometry. These techniques are involved for the identification and quantitative analysis of organic compounds. My main scientific concern is focused on:

1. New fast environmental friendly techniques used for sample preparation of liquid and solid samples prior chromatographic analysis.
2. Studies on the metabolic and environmental transformation of contaminants in the aquatic environment.
3. Metabolomics for human: food, health and future.
4. The use of the exhaust breath condensate in the diagnosis of diseases and changes in the body.
5. The development of chemical markers for identifying and characterising the origin of diffuse sources of pollution in urban surface waters.
6. The impact of second-hand and third-hand aerosol exposure due to the e-cigarette usage.

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

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.	Hewelt-Belka, W., Garwolińska, D., Belka, M., (...), Namieśnik, J., Kot-Wasik, A., A new dilution-enrichment sample preparation strategy for expanded metabolome monitoring of human breast milk that overcomes the simultaneous presence of low- and high-abundance lipid species, Food Chemistry	200	2019
2.	Dogan, A., Płotka-Wasyłka, J., Kempieńska-Kupczyk, D., Namieśnik, J., Kot-Wasik, A. Detection, identification and determination of chiral pharmaceutical residues in wastewater: Problems and challenges, TrAC - Trends in Analytical Chemistry	140	2020

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3.	Aszyk, J., Kubica, P., Namieśnik, J., Kot-Wasik, A., Wasik, A., New approach for e-cigarette aerosol collection by an original automatic aerosol generator utilizing melt-blown non-woven fabric, <i>Analytica Chimica Acta</i>	100	2018
4.	Garwolińska, D., Namieśnik, J., Kot-Wasik, A., Hewelt-Belka, W., State of the art in sample preparation for human breast milk metabolomics—merits and limitations, <i>TrAC - Trends in Analytical Chemistry</i>	140	2019
5.	Aszyk, J., Byliński, H., Namieśnik, J., Kot-Wasik, A., Main strategies, analytical trends and challenges in LC-MS and ambient mass spectrometry-based metabolomics, <i>TrAC - Trends in Analytical Chemistry</i>	140	2018

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.	Dynamika składu mleka kobiecego. Długofalowa analiza metabolomiczna mleka kobiecego. The dynamics of human breast milk composition. Long-term metabolomic analysis of breast milk. Grant NCN - OPUS	2019-2023	PI
2.			PI
3.			PI

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

All my Ph D student finished their PhD with the great distinction.
Additionally:
Jakimska A has got the award from Gdańsk Scientific Society.
Hewelt-Belka W. has got the award from Gdańsk Scientific Society.
Aszyk J. has got the award from Committee of Analytical Chemistry of the Polish Academy of Sciences.

- 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)