



## ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

### DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### 1. Basic information

Name, surname:	Mateusz Samoraj
Grade / Title:	Dr inż.
Scientific discipline	<b>inżynieria chemiczna / chemical engineering</b>
Faculty:	W3 Wydział Chemii / Faculty of Chemistry
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Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	<a href="https://techmat.pwr.edu.pl/pracownicy-k26/dr-inz-mateusz-samoraj">https://techmat.pwr.edu.pl/pracownicy-k26/dr-inz-mateusz-samoraj</a>

#### 2. Publication record

*Up to 10 most important papers published over the period of previous 10 years.*

No.	Description (authors, publication title, journal / conference, DOI)	Publication year
1.	Mateusz Samoraj, Agnieszka Dmytryk, Łukasz S. Tuhy, Anna Zdunek, Piotr Rusek, Konstantinos Moustakas, Katarzyna Chojnacka Applicability of alfalfa and goldenrod residues after supercritical CO <sub>2</sub> extraction to plant micronutrient biosorption and renewable energy production. <i>Energy</i> . 2023, vol. 262, Pt. A, 125437, s. 1-17. <a href="https://doi.org/10.1016/j.energy.2022.125437">https://doi.org/10.1016/j.energy.2022.125437</a>	2023
2.	Mateusz Samoraj, Grzegorz K. Izydorczyk, Paweł Krawiec, Konstantinos Moustakas*, Katarzyna Chojnacka Biomass-based micronutrient fertilizers and biofortification of raspberries fruits. <i>Environmental Research</i> . 2022, vol. 215, pt. 1, art. 114304, s. 1-7. <a href="https://doi.org/10.1016/j.envres.2022.114304">https://doi.org/10.1016/j.envres.2022.114304</a>	2022
3.	Mateusz Samoraj, Małgorzata M. Mironiuk, Grzegorz K. Izydorczyk, Anna Witek-Krowiak, Daniel Szopa, Konstantinos Moustakas, Katarzyna Chojnacka The challenges and perspectives for anaerobic digestion of animal waste and fertilizer application of the digestate. <i>Chemosphere</i> . 2022, vol. 295, art. 133799, s. 1-19. <a href="https://doi.org/10.1016/j.chemosphere.2022.133799">https://doi.org/10.1016/j.chemosphere.2022.133799</a>	2022
4.	Mateusz Samoraj, Małgorzata M. Mironiuk, Anna Witek-Krowiak, Grzegorz K. Izydorczyk, Dawid S. Skrzypczak, Katarzyna Mikula, Sylwia B. Baśladyńska, Konstantinos Moustakas, Katarzyna Chojnacka Biochar in environmental friendly fertilizers - prospects of development products and technologies. <i>Chemosphere</i> . 2022, vol. 296, art. 133975, s. 1-19. <a href="https://doi.org/10.1016/j.chemosphere.2022.133799">https://doi.org/10.1016/j.chemosphere.2022.133799</a> ,	2022
5.	Mateusz Samoraj, Łukasz S. Tuhy, Katarzyna Chojnacka Valorization of biomass into micronutrient fertilizers. <i>Waste and Biomass Valorization</i> . 2019, vol. 10, nr 4, s. 925-931. <a href="https://dx.doi.org/10.1007/s12649-017-0108-6">https://dx.doi.org/10.1007/s12649-017-0108-6</a>	2019
6.	Mateusz Samoraj, Łukasz S. Tuhy, Piotr Rusek, Edward Rój, Katarzyna Chojnacka Pilot plant conversion of blackcurrant seeds into new micronutrient fertilizer	2016



	biocomponents via biosorption. <i>BioResources</i> . 2016, vol. 11, nr 1, s. 400-413. <a href="https://dx.doi.org/10.15376/biores.11.1.400-413">https://dx.doi.org/10.15376/biores.11.1.400-413</a>	
7.	Mateusz Samoraj, Łukasz S. Tuhy, Sylwia B. Baśladyńska, Katarzyna Chojnacka Biofortification of maize grains with micronutrients by enriched biomass of blackcurrant seeds. <i>Open Chemistry</i> . 2015, vol. 13, nr 1, s. 1236-1244. <a href="https://dx.doi.org/10.1016/j.ecoleng.2015.09.032">https://dx.doi.org/10.1016/j.ecoleng.2015.09.032</a>	2015
8.	Małgorzata M. Mironiuk, Mateusz Samoraj, Anna Witek-Krowiak, Henryk Górecki, Konstantinos Moustakas, Katarzyna Chojnacka Processing of nuisance animal waste into agricultural products. <i>Environmental Pollution</i> . 2023, vol. 319, art. 120924, s. 1-10. <a href="https://doi.org/10.1016/j.envpol.2022.120924">https://doi.org/10.1016/j.envpol.2022.120924</a>	2023
9.	Agnieszka Dmytryk, Mateusz Samoraj, Konstantinos Moustakas*, Anna Witek-Krowiak, Katarzyna Chojnacka Bioactive fatty acids and compounds from <i>Spirulina (Arthrospira) platensis</i> : Potential as biostimulants for plant growth. <i>Sustainable Chemistry and Pharmacy</i> . 2022, vol. 30, art. 100899, s. 1-12. <a href="https://doi.org/10.1016/j.scp.2022.100899">https://doi.org/10.1016/j.scp.2022.100899</a>	2022
10.	Katarzyna Chojnacka, Mateusz Samoraj, Łukasz Tuhy, Małgorzata M. Mironiuk, Konstantinos Moustakas, Anna Witek-Krowiak New micronutrient biocomponents based on blackcurrant seeds pomace – bench-scale kinetic studies. <i>Energy &amp; Environment</i> . 2021, vol. 32, nr 8, s. 1397-1413. <a href="https://journals.sagepub.com/doi/10.1177/0958305X20942106">https://journals.sagepub.com/doi/10.1177/0958305X20942106</a>	2021

### 3. Projects and grants

List of the most important 5 projects/grants with basic description including: title, source(s) of funding, name of the call, role in the project (e.g., principal investigator).

1.	Role in the project (e.g., principal investigator, work package leader, etc.)	Project manager
	Project title	Innovative complex and ecological fertilizers based on waste biomass
	Sources of funding	NCBiR
	Name of the call	Lider XIII
	Implementation period	2023/03/01 - 2026-03-01
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	principal investigator
	Project title	Innovative micronutrient fertilisers obtained due biosorption for organic farming
	Sources of funding	NCBiR
	Name of the call	TANGO-V C
	Implementation period	2022/01/01 – 2024/12/31
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	principal investigator
	Project title	Solutions for GHGs emissions mitigation for the mixed farming systems across different European climates
	Sources of funding	ERA-NET/NCBiR



	Name of the call	ERA-NET 2021 Joint Call on Circularity
	Implementation period	1/12/2021-
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	R&D project manager
	Project title	Specialized multicomponent fertilizers based on ammonium nitrate containing basic nutrients nutrients (NPK), micro-nutrients, selenium and plant growth stimulators
	Sources of funding	NCBiR
	Name of the call	Szybka ścieżka
	Implementation period	2019-2020
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	R&D project manager
	Project title	New formulations of specialized organic-mineral fertilizers
	Sources of funding	NCBiR
	Name of the call	Innochem
	Implementation period	2019-2020

#### 4. International experience

*Brief description of international cooperation and experience (e.g., research stays, cooperation with foreign entities, coordination or participation in international projects or programmes, keynote speeches and presentations delivered at renowned international conferences, visiting professor stays, invited lectures).*

No.	Description	Year(s)
1.	24-29.06.2022 – Cartagena, Spain. LCA workshop for fertilizer products, Universidad Politécnica de Cartagena	2022
2.	1-14.11.2015 - Lund, Sweden. 2-week training and practical classes on improving soft skills in management, teaching and for combining learning with business - Soft Skills & Entrepreneurship cours	2015
3.	01.02-01.03.2015 - Brno, Czech Republic. 2-month internship in Brno at Masaryk University in Brno.	2015

#### 5. Experience in teaching doctoral students

*Brief description of experience in teaching doctoral students (e.g., courses in doctoral schools and PhD studies, summer/winter schools for doctoral students, tutorials, trainings, etc.).*

No.	Description	Year(s)
1.	New generation of feed and fertilizer technologies - seminar	2018-2021

#### 6. List of supervised doctoral students

*List of all supervised doctoral students that defended the PhD including: name of the student, dissertation title, year of awarding PhD.*

No.	Name, surname	Dissertation title	Year of awarding PhD
1.	Derya Calis	Innovative micronutrient fertilizers by biosorption for organic farming	Planned for 2026



## 7. Prizes and awards

*The most important national and international prizes and awards related to research, development and teaching activities.*

No.	Description	Year
1.	Rector's Award (2011/2012, 2015/2016, 2022).	2011/2012, 2015/2016, 2022
2.	Scholarship of the Minister of Science and Higher Education for outstanding young scientists	2020-2023
3.	the Grand Prix medal of the 7th International Expochem Fair 2014 and the 12th International Oil and Gas Conference 2014 for the results of work in the Innovative project technology of algal extracts - components of fertilizers, feeds, and cosmetics	2014

## 8. Other significant achievements

*Information on other significant achievements related to research, development and teaching activities.*

1. Laureate of the SECUNDUS competition for young scientists of the Wrocław University of Technology with the best publication output in 2019.
2. Distinction of the doctoral dissertation: "Biosorption of micronutrients into biomass as a method of utilization of of supercritical extraction residues".
3. Distinction for master's thesis: "Evaluation of bioavailability of micronutrients from biological fertilizer components produced by biosorption".
4. winning first place in the competition for the best graduate student of the second level of the Faculty of Mechanical Engineering Department of PWr 2014 (completed second Faculty during Ph.D.), M.Sc. degree in the field of Biomedical Engineering with a final grade on the diploma: excellent.
5. winning first place in the competition for the best graduate of the second degree at the Technical University of Wrocław University of Technology 2014.
6. rector's award (2011/2012 and 2015/2016)
7. winner of the nationwide competition "Scholarship of choice" (2.2012)
8. scholarship for the best doctoral students (2013/2014, 2014/2015, 2015/2016)
9. scholarship "Grant Plus" (2013/2014).
10. award of the Dean of the Faculty of Chemistry (2014/2015 and 2015/2016)