

# **ACADEMIC TEACHER PROFESSIONAL EXPERIENCE**

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

#### 1. Basic information

Name, surname:	Dawid Skrzypczak
Grade / Title:	Dr inż.
Scientific discipline	inżynieria chemiczna / chemical engineering
Faculty:	W3 Wydział Chemii / Faculty of Chemistry
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### 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.	Dawid S. Skrzypczak, Derya Calis, Katarzyna Mikula, Grzegorz K. Izydorczyk, Xymena Połomska, Michalina Matejko, Konstantinos Moustakas, Anna Witek-Krowiak, Katarzyna Chojnacka. Maximizing the potential of leachate from sewage sludge as a sustainable nutrients source to alleviate the fertilizer crisis. Journal of Environmental Management.	2023
2.	Dawid S. Skrzypczak, Krzysztof T. Trzaska, Katarzyna Mikula, Filip Gil, Grzegorz K. Izydorczyk, Małgorzata M. Mironiuk, Xymena Polomska, Konstantinos Moustakas, Anna Witek-Krowiak, Katarzyna Chojnacka. Conversion of anaerobic digestates from biogas plants: Laboratory fertilizer formulation, scale-up and demonstration of applicative properties on plants. Renewable Energy.	2023
3.	Katarzyna Chojnacka, Dawid S. Skrzypczak, Daniel Szopa, Grzegorz K. Izydorczyk, Konstantinos Moustakas, Anna Witek-Krowiak. Management of biological sewage sludge: fertilizer nitrogen recovery as the solution to fertilizer crisis. Journal of Environmental Management	2023
4.	Daniel Szopa, Dawid S. Skrzypczak, Grzegorz K. Izydorczyk, Katarzyna Chojnacka, Mariusz Korczyński, Anna Witek-Krowiak. Evaluation of Tenebrio molitor protein hydrolysates as biostimulants improving plants growth and root architecture. Journal of Cleaner Production.	2023
5.	Dawid S. Skrzypczak, Daniel Szopa, Katarzyna Mikula, Grzegorz K. Izydorczyk, Sylwia B. Baśladyńska, Viktoria Hoppe, Katarzyna Pstrowska, Zbigniew Wzorek, Halyna Kominko, Marek Kułażyński, Konstantinos Moustakas, Katarzyna Chojnacka, Anna Witek-Krowiak. Tannery waste-derived biochar as a carrier of micronutrients essential to plants. Chemosphere.	2022
6.	Dawid S. Skrzypczak, Filip Gil, Grzegorz K. Izydorczyk, Katarzyna Mikula, Aleksandra Z. Gersz, Viktoria Hoppe, Katarzyna Chojnacka, Anna Witek-Krowiak. Innovative bio-waste-based multilayer hydrogel fertilizers as a new solution for precision agriculture. Journal of Environmental Management.	2022



7.	Dawid S. Skrzypczak, Aleksandra Z. Gersz, Filip Gil, Grzegorz K. Izydorczyk, Małgorzata M. Mironiuk, Viktoria Hoppe, Konstantinos Moustakas, Derya Lale, Katarzyna Chojnacka, Anna Witek-Krowiak. Innovative uses of biochar derived from tannery waste as a soil amendment and fertilizer. Biomass Conversion and Biorefinery.	2022
8.	Dawid S. Skrzypczak, Katarzyna Mikula, Grzegorz K. Izydorczyk, Anna J. Dawiec-Liśniewska, Konstantinos Moustakas, Katarzyna Chojnacka, Anna Witek-Krowiak. New directions for agricultural wastes valorization as hydrogel biocomposite fertilizers. Journal of Environmental Management.	2021
9.	Dawid S. Skrzypczak, Katarzyna Mikula, Grzegorz K. Izydorczyk, Anna J. Dawiec-Liśniewska, Konstantinos Moustakas, Katarzyna Chojnacka, Anna Witek-Krowiak. New directions for agricultural wastes valorization as hydrogel biocomposite fertilizers. Journal of Environmental Management.	2021
10.	Dawid S. Skrzypczak, Anna Witek-Krowiak, Anna J. Dawiec-Liśniewska, Daria Podstawczyk, Katarzyna Mikula, Katarzyna Chojnacka. Immobilization of biosorbent in hydrogel as a new environmentally friendly fertilizer for micronutrients delivery. Journal of Cleaner Production.	2019

## 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.,	Innovative fertilizers with micronutrients obtained by biosorption
	principal investigator,	for ecological agriculture
	work package leader, etc.)	
	Project title	NCBiR
	Sources of funding	LIDER
	Name of the call	2023-2025
	Implementation period	Innovative complex ecological fertilizers based on waste biomass
2.	Role in the project (e.g.,	principal investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Solutions for GHGs emissions mitigation for the mixed farming
		systems across different European climates
	Sources of funding	European Union's Horizon2020 Research & Innovation
		Programme, NCBiR
	Name of the call	ERA-NET
	Implementation period	2021-2024
3.	Role in the project (e.g.,	principal investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Innovative fertilizers with micronutrients obtained by biosorption
		for ecological agriculture
	Sources of funding	NCBiR
	Name of the call	TANGO
	Implementation period	2022-2024
4.	Role in the project (e.g.,	principal investigator
	principal investigator,	
	work package leader, etc.)	



	Project title	Development of technology for the recovery of metals from copper ore smelting slags and their use in the production of micronutrient-enriched fertilizers, in accordance with the principles of a circular economy
	Sources of funding	NCBiR
	Name of the call	CuBR-IV
	Implementation period	2019-2020
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	principal investigator
	Project title	Study of the properties of designable biocomposite hydrogel capsules for precise release of micronutrients
	Sources of funding	NCN
	Name of the call	Opus
	Implementation period	2019 - 2022

#### 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.	Mobility Agreement, National Technical University of Athens, School of	2021
	Chemical Enginieering;	
2.	7th International Conference of Sustainable Solid Waste Management.	2019
3.	2nd International Conference ADAPTtoCLIMATE	2019

#### 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.	From waste to useful product – laboratory practice	2022-2023

#### 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.	Krzysztof Trzaska	Innovative technology of amino acid fertilizers obtained from high-protein renewable raw materials	2022 - now
2.	Daniel Szopa	Valorization of high-protein waste for fertilizer purposes	2021 - now

#### 7. Prizes and awards



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

No.	Description	Year
1.	Laureate of the Ministry of Education and Science scholarship for	2021
	outstanding young scientists 2021.	

#### 8. Other significant achievements

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

Implementation of technology concerning an innovative method of enriching feedstuffs with micronutrients such as copper, manganese, zinc and iron, by spray biosorption, Aktiw Sp. z o. o.. The implementation was carried out within the framework of the project POIR.01.01-00-1102/19-00 "Innovative production of biofortified eggs in selected micronutrients" carried out under Measure M16 "Cooperation" of the Rural Development Program 2014 - 2020, co-financed by the European Agricultural Fund for Rural Development.