

ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Hanna Fałtynowicz
Grade / Title:	PhD, Eng.
Scientific discipline	inżynieria chemiczna / chemical engineering
Faculty:	W3 Wydział Chemiczny / Faculty of Chemistry
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(Google Scholar, ResearchGate, etc.)	hanna-faltynowicz ;
	https://www.researchgate.net/profile/Hanna-
	Faltynowicz; https://orcid.org/my-orcid?orcid=0000-
	0003-3047-9537

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.	K. Postawa, H. Fałtynowicz, K. Pstrowska, J. Szczygieł, M. Kułażyński; Artificial	2022
	neural networks to differentiate the composition and pyrolysis kinetics of	
	fresh and long-stored maize; Bioresource Technology 364 (2022) 128137, DOI: 10.1016/j.biortech.2022.128137	
2.	K. Postawa, H. Fałtynowicz, J. Szczygieł, E. Beran, M. Kułażyński; Analyzing	2022
	the kinetics of waste plant biomass pyrolysis via thermogravimetry modeling	
	and semi-statistical methods; Bioresource Technology 344 (2022) 126181,	
	DOI: 10.1016/j.biortech.2021.126181	
3.	W. Brostow, H. Fałtynowicz, N. Hnatchuk, YC. Yang; Improving the long-	2022
	term performance of poli(vinyl chloride); Chemistry and Chemical	
	Technology, 16(4) (2022) 543-554, DOI: <u>10.23939/chcht16.04.543</u>	2222
4.	H. Fałtynowicz, M. Kułażyński, S. H. Goodman; Epoxies. In: Handbook of	2022
	thermoset plastics: 4th edition; Oxford, Cambridge, Elsevier, 2022. pp. 175-	
5.	229, DOI: 10.1016/b978-0-12-821632-3.00014-2	2022
٥.	H. Fałtynowicz, H. Janik, J. Kucińska-Lipka, M. Sienkiewicz, Polyurethanes. In: Handbook of thermoset plastics: 4th edition, Oxford, Cambridge, Elsevier,	2022
	2022. pp. 231-262	
6.	E. M. Burchacka, K. Pstrowska, E. Beran, H. Fałtynowicz, K. Chojnacka, M.	2021
0.	Kułażyński; Antibacterial agents adsorbed on active carbon: a new approach	2021
	for S. aureus and E. coli pathogen elimination; Pathogens, 10(8) (2021) 1066,	
	DOI: 10.3390/pathogens10081066	
7.	W. Brostow, H. Fałtynowicz, O. Gencel, A. Grigoriev, H.E. Hagg Lobland, D.	2020
	Zhang, Mechanical and Tribological Properties of Polymers and Polymer-	
	Based Composites, Chemistry and Chemical Technology, 14(4) (2020) 514-	
	520, DOI: <u>10.23939/chcht14.04.514</u>	



8.	H. Fałtynowicz, P. Hodurek, J. Kaczmarczyk, M. Kułażyński, M. Łukaszewicz;	2019		
	Hydrolysis of surfactin over activated carbon; Bioorganic Chemistry, 93			
	(2019) 102896, DOI: <u>10.1016/j.bioorg.2019.03.070</u>			
9.	M. Daszkiewicz, M. Puszyńska-Tuszkanow, Z. Staszak, I. Chojnacka, H.	2018		
	Fałtynowicz, M. Cieślak-Golonka, 15. Single Crystal-to-Single Crystal			
	transformation induced by ammonia-water equilibrium changes,			
	CrystEngComm, 20 (2018) 2907-2911, DOI: <u>10.1039/C8CE00401C</u>			
10.	H. Fałtynowicz, J. Kaczmarczyk, M. Kułażyński; Preparation and	2015		
	characterization of activated carbons from biomass material - giant			
	knotweed (Reynoutria sachalinensis); Open Chemistry, 13 (2015) 1150-			
	1156; DOI: <u>10.1515/chem-2015-0128</u>			

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.	Dala in the project /o.a.	investigator
1.	Role in the project (e.g., principal investigator,	investigator
	work package leader, etc.)	
		Development of technologies for retional recognization of heating
	Project title	Development of technologies for rational management of bovine
	Covers of founding	shavings from leather processing (MIZDRA 2.0)
	Sources of funding	NCBR
	Name of the call	Poir 1/4.1.4/2020
	Implementation period	2021-2023
2.	Role in the project (e.g.,	investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Developing an innovative method of air purification in cereal
		grains and seeds dryers and reduction of waste generation
		(EcoDryer)
	Sources of funding	NCBR
	Name of the call	BIOSTRATEG 3
	Implementation period	2018-2021
3.	Role in the project (e.g.,	investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Developing complex technologies of biomass biotransformation
		and its cascaded biorafination based on microbiorefinery
		prototype
	Sources of funding	NCBR
	Name of the call	DEMONSTRATOR
	Implementation period	2016-2018
4.	Role in the project (e.g.,	investigator
	principal investigator,	
	work package leader, etc.)	
	Project title	Developement of innovative technology for complex utilization of
		wastes generated during pigs breeding (KompUtyl)
	Sources of funding	NCBR , , , ,
	Name of the call	BIOSTRATEG 2



	Implementation period	2016-2019
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal investigator
	Project title	Developement of a method of cannabinoid analysis during all steps of cosmetics and parapharmaceuticals production by Botanika Farm company
	Sources of funding	DARR
	Name of the call	Bon na Innowacje
	Implementation period	2019

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.	Short cycle of lectures entitled 'Hydrogen fuel' in Al-Farabi Kazakh National	2023
	University, Almaty, Kazakhstan; Erasmus+ Staff Mobility Programme	
2.	Research stay (one year) at Hornsund Polish Polar Station, Svalbard, Norway	2021-22
3.	Presentation entitled 'Surfactin separation on mesoporous activated	2019
	carbons' during Polychar 27, World Forum on Advanced Materials in Naples,	
	Italy	

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.	-	
2.		
3.		

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.	1		
2.			
3.			

7. Prizes and awards

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

No.	Description	Year
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1.	Carl Klason Student Award for presentation during Polychar 27, World	2019
	Forum on Advanced Materials in Naples	
2.	3 rd prize for presentation 'Effect of activation parameters on methane	2016
	storage on activated carbon' during VIII International Conference 'Advance	
	in Petroleum and Gas Industry and Petrochemistry', Lviv, Ukraine	
3.	Article 'Single Crystal-to-Single Crystal transformation induced by ammonia-	2019
	water equilibrium changes' was awarded with Diamond by PAS	
	Crystallography Committee	

8. Other significant achievements

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