



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Karol Postawa
Grade / Title:	PhD Eng.
Scientific discipline	inżynieria chemiczna / chemical engineering
Faculty:	W3 Wydział Chemiczny / Faculty of Chemistry
Email address:	Karol.postawa@pwr.edu.pl
Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	https://techmat.pwr.edu.pl/en/employees-k26/phd-eng-karol-postawa https://scholar.google.pl/citations?user=ab5GRKgAAAAJ https://www.researchgate.net/profile/Karol-Postawa-2

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.	Karol Postawa, Kamila Klimek, Grzegorz Maj, Magdalena Kaptan, Jerzy Szczygieł: Advanced dual-artificial neural network system for biomass combustion analysis and emission minimization. Journal of Environmental Management. DOI:10.1016/j.jenvman.2023.119543	2024
2.	Karol Postawa, Justyna Małyszew, Karolina E. Jaroszevska, Edyta Wrzesińska-Jędrusiak: Adapting R4 simplifications of Anaerobic Digestion Model No. 1 (ADM1-R4) for pump-mixed biogas production. Fuel. DOI:10.1016/j.fuel.2023.128794	2023
3.	Karol Postawa, Hanna Fałtynowicz, Katarzyna Pstrowska, Jerzy Szczygieł, Marek Kułazyński: Artificial neural networks to differentiate the composition and pyrolysis kinetics of fresh and long-stored maize. Bioresource Technology. DOI:10.1016/j.biortech.2022.128137	2022
4.	Karol Postawa, Hanna Fałtynowicz, Jerzy Szczygieł, Elżbieta Beran, Marek Kułazyński: Analyzing the kinetics of waste plant biomass pyrolysis via thermogravimetry modeling and semi-statistical methods. Bioresource Technology. DOI:10.1016/j.biortech.2021.126181	2022
5.	Karol Postawa, Kamila Klimek, Magdalena Kaptan, Edyta Wrzesińska-Jędrusiak, Marek Kułazyński: Application of ozonation as a clean method of herbs freshness prolongation: experiment and model construction. Journal of Food Process Engineering. DOI:10.1111/jfpe.13913	2021
6.	Karol Postawa, Jerzy Szczygieł, Edyta Wrzesińska-Jędrusiak, Kamila Klimek, Marek Kułazyński: The pump-mixed anaerobic digestion of pig slurry: new technology and mathematical modeling. Waste Management. DOI:10.1016/j.wasman.2021.01.016	2021
7.	Karol Postawa, Jerzy Szczygieł, Marek Kułazyński: Innovations in anaerobic digestion: a model-based study. Biotechnology for Biofuels. DOI:10.1186/s13068-020-01864-z	2021



8.	Karol Postawa, Jerzy Szczygieł, Marek Kułczyński: Methods for anaerobic digestion model fitting—comparison between heuristic and automatic approach. Biomass Conversion and Biorefinery DOI:10.1007/s13399-020-00945-1	2020
9.	Karol Postawa, Jerzy Szczygieł, Marek Kułczyński: Heuristic methods in optimization of selected parameters of Two-Phase Anaerobic Digestion (TPAD) model. Fuel. DOI:10.1016/j.fuel.2020.118257	2020
10.	Karol Postawa, Jerzy Szczygieł, Marek Kułczyński: A comprehensive comparison of ODE solvers for biochemical problems. Renewable Energy. DOI:10.1016/j.renene.2020.04.089	2020

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.)	Research Assistant
	Project title	Opracowanie innowacyjnych technologii kompleksowej utylizacji odpadów generowanych w trakcie tuczu trzody chlewnej”, KompUtyl
	Sources of funding	NCBiR
	Name of the call	BIOSTRATEG2
	Implementation period	2016-2019
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	Assistant
	Project title	„Opracowanie innowacyjnej metody oczyszczania powietrza w suszarniach ziarna zbóż i nasion wraz z ograniczaniem emisji zanieczyszczeń”, ECO-Dryer.
	Sources of funding	NCBiR
	Name of the call	BIOSTRATEG3
	Implementation period	2018-2021
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	Expert
	Project title	"Opracowanie technologii racjonalnego zagospodarowania strużyn z przetwórstwa skór (MIZDRA 2.0)"
	Sources of funding	POIR
	Name of the call	POIR 4.1.4
	Implementation period	2021-2023
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	
	Project title	
	Sources of funding	
	Name of the call	
	Implementation period	



5.	Role in the project (e.g., principal investigator, work package leader, etc.)	
	Project title	
	Sources of funding	
	Name of the call	
	Implementation period	

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.		

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.	Alternative fuels (W03INC-SD0015W)	2024
2.		

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.			

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	2021
2.	Primus Sekundus	2021
3.		

8. Other significant achievements

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

Member of Wrocław Scientific Society - 2022