Wrocław University of Science and Technology
Doctoral School

ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Włodzimierz Tylus
Grade / Title:	Dr hab. inż.
Scientific discipline	**inżynieria chemiczna / chemical engineering**
Faculty:	W3 Wydział Chemiczny / Faculty of Chemistry
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Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	ORCID:0000-0001-6780-5100;

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.	Agnieszka Laszczyńska, Włodzimierz Tylus, Irena Szczygieł, Electrocatalytic properties for the hydrogen evolution of the electrodeposited Ni-Mo/WC composites. International Journal of Hydrogen Energy. 2021, vol. 46, nr 44, s. 22813-22831, DOI: 10.1016/j.ijhydene.2021.04.103	2021
2.	Agnieszka Laszczyńska, Włodzimierz Tylus, Improving the electrocatalytic performance for the hydrogen evolution reaction in the electrodeposited Ni-based matrix by incorporating WS2 nanoparticles. Journal of the Electrochemical Society. 2023, vol. 170, nr 7, art. 076502, s. 1-13, 10.1149/1945-7111/ace1a8	2023
3.	Tomasz Bereta, Włodzimierz Tylus, Anna M. Trzeciak, New palladium(II) complexes with ferrocenyl Schiff bases in the hydrogenation of aromatic ketones. Polyhedron. 2022, vol. 225, art. 116075, s. 1-7	2022
4.	Waleed Alsalahi, Adam W. Augustyniak, Włodzimierz Tylus, Anna M. Trzeciak; New palladium - ZrO2 nano-architectures from thermal transformation of UiO-66-NH2 for carbonylative Suzuki and hydrogenation reactions. Chemistry: a European Journal. 2022, vol. 28, nr 6, art. e202103538, s. 1-8; doi.org/10.1002/chem.202103538	2022
5.	Włodzimierz Tylus, Juliusz Winiarski, Mirosława Pawlyta, Bogdan Szczygieł, Titanium anodization in deep eutectic solvents: the effect of anodizing time on the morphology and structure of anodic layers. Applied Surface Science. 2022, vol. 577, art. 151892, s. 1-9, DOI: 10.1016/j.apsusc.2021.151892	2022
6.	Eva Chmielewská, Włodzimierz Tylus, Marek Bujdoš, Study of mono- and bimetallic Fe and Mn oxide-supported clinoptilolite for improved Pb(II) removal. Molecules. 2021, vol. 26, nr 14, art. 4143, s. 1-14, DOI: 10.3390/molecules26144143	2021
7.	Katarzyna Adamska, Janina Okal, Włodzimierz Tylus Stable bimetallic Ru-Mo/Al2O3 catalysts for the light alkane combustion : effect of the Mo addition. Applied Catalysis B-Environmental. 2019, vol. 246, s. 180-194, DOI: 10.1016/j.apcatb.2019.01.059	2019

8.	Juliusz Winiarski, Beata Cieślikowska, Włodzimierz Tylus, Piotr Kunicki*, Bogdan Szczygieł, Corrosion of nanocrystalline nickel coatings electrodeposited from choline chloride: ethylene glycol deep eutectic solvent exposed in 0.05 M NaCl solution. Applied Surface Science. 2019, vol. 470, s. 331-339, 10.1016/j.apsusc.2018.11.155	2019
9.	Juliusz Winiarski, Włodzimierz Tylus, A. Lutz, I. De Graeve, Bogdan Szczygieł, The study on the corrosion mechanism of protective ternary Zn-Fe-Mo alloy coatings deposited on carbon steel in 0.5 mol dm-3 NaCl solution. Corrosion Science. 2018, vol. 138, s. 130-141	2018
10.	Waleed Alsalahi, Włodzimierz Tylus, Anna M. Trzeciak* Green synthesis of rhodium nanoparticles that are catalytically active in benzene hydrogenation and 1-hexene hydroformylation. ChemCatChem. 2018, vol. 10, nr 9, s. 2051-2058., 10.1002/cctc.201701644	2018

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.)	leader
	Project title	Pilot implementation of a purification method for exhaust gases from heavy-duty Diesel engines with high molecular emissions
	Sources of funding	NCBR Nr R05 0063 06
	Name of the call	
	Implementation period	2010-2012
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	leader
	Project title	Powłoki ochronne SiO2-CeO2 otrzymywane metodą zol-żel do ochrony metali w warunkach korozji wysokotemperaturowej”
	Sources of funding	KBN Nr T09B 049 22
	Name of the call	
	Implementation period	2002-2004
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	PWr coordinator of the science and industry consortium, principal investigator
	Project title	Environmentally sustainable technology for coal mine methane disposal
	Sources of funding	POIG; **UDA-POIG.01.03.01-00-072/08**
	Name of the call	
	Implementation period	2009 - 2012
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	principal investigator
	Project title	Study of mechanisms of stabilization of ruthenium nanoparticles in Ru-M_{ox}/carrier systems, where M -renium or molybdenum
	Sources of funding	**NCN** nr N N209 096440
	Name of the call	
	Implementation period	2013 - 2016

5.	Role in the project (e.g., principal investigator, work package leader, etc.)	leader
	Project title	Diesel exhaust gas soot post-combustion catalysts.
	Sources of funding	KBN Nr 3T09B039 09
	Name of the call	
	Implementation period	1995 - 1998

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.	EuropaCat-VIII, Turku/Abo Finland; Effect of washcoat modification with metal oxides on the activity of a monolithic Pd-based catalyst for methane	2007
2.	Slovak National Science Council GAV Nr 1/1373/04 i 1/1385/04 oraz Slovak-Italian Project No 09105; Combined and hybrid adsorbents. Fundamentals and applications	2006
3.	EuropaCat-VI, Innsbruck Austria, Effect of noble metal additive on the activity of an $LaCoO_3$ perovskite monolithic catalyst in methane combustion	2003

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.	Advanced research techniques in material engineering	2019 -….

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.	Marczewski Marek	Surface morphology of 316L stainless steel electrochemically polished in DES liquids as green solvents	2023

7. Prizes and awards

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

No.	Description	Year
1.	Award of the Minister of National Education and Sports (team) for co-authorship of a series of scientific research papers on the use of functional polymers in separation processes,	2003

2.	Congratulation letter from the Minister of Economy Janusz Piechocinski for the team implementing the project UDA-POIG.01.03.01-00-072/08: " for the implementation of a project of great importance for the national economy and the development of an innovative technology on a global scale	2013
3.	Award of J.M. Rector of Wroclaw University of Technology for outstanding contribution to the development of the university,	2008; 2010

8. Other significant achievements

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