



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Piotr Kolasiński
Grade / Title:	prof. dr hab. inż.
Scientific discipline	inżynieria środowiska, górnictwo i energetyka / environmental engineering, mining, and energy
Faculty:	W9 Wydział Mechaniczno-Energetyczny / Faculty of Mechanical and Power Engineering
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Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	

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.	Attila R. Imre*, Sindu Daniarta , Przemysław Ł. Błasiak , Piotr K. Kolasiński Design, integration, and control of organic rankine cycles with thermal energy storage and two-phase expansion system utilizing intermittent and fluctuating heat sources - a review. <i>Energies</i> . 2023, vol. 16, nr 16, art. 5948, s. 1-25.	2023
2.	Sindu Daniarta , Magdalena A. Nemś , Piotr K. Kolasiński A review on thermal energy storage applicable for low- and medium-temperature organic Rankine cycle. <i>Energy</i> . 2023, vol. 278, Pt. A, art. 127931, s. 1-16.	2023
3.	Daria Krasota , Przemysław Ł. Błasiak , Piotr K. Kolasiński Literature review of frost formation phenomena on domestic refrigerators evaporators. <i>Energies</i> . 2023, vol. 16, nr 7, art. 2945, s. 1-30.	2023
4.	Przemysław Ł. Błasiak , Piotr K. Kolasiński , Sindu Daniarta Numerical analysis of heat transfer within a rotary multi-vane expander. <i>Energies</i> . 2023, vol. 16, nr 6, art. 2794, s. 1-32.	2023
5.	Sindu Daniarta , Attila R. Imre*, Piotr K. Kolasiński Thermodynamic efficiency of subcritical and transcritical power cycles utilizing selected ACZ working fluids. <i>Energy</i> . 2022, vol. 254, pt. A, art. 124432, s. 1-16.	2022
6.	Sindu Daniarta , Piotr K. Kolasiński , Attila R. Imre* Thermodynamic efficiency of trilateral flash cycle, organic Rankine cycle and partially evaporated organic Rankine cycle. <i>Energy Conversion and Management</i> . 2021, vol. 249, art. 114731, s. 1-14.	2021
7.	Piotr K. Kolasiński Układy Organic Rankine Cycle (ORC) małej i średniej mocy wykorzystujące rozprężarki wyporowe. Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej, 2021. 201 s.	2021



8.	Piotr K. Kolasiński Application of volumetric expanders in small vapour power plants used in distributed energy generation – Selected design and thermodynamic issues. Energy Conversion and Management. 2021, vol. 231, art. 113859, s. 1-19.	2021
9.	Piotr K. Kolasiński Domestic organic rankine cycle-based cogeneration systems as a way to reduce dust emissions in municipal heating. Energies. 2020, vol. 13, nr 15, art. 3983, s. 1-22.	2020
10.	Piotr K. Kolasiński The method of the working fluid selection for organic rankine cycle (ORC) systems employing volumetric expanders. Energies. 2020, vol. 13, nr 3, art. 573, s. 1-28.	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.)	principal investigator
	Project title	H2 HUB Nowa Sarzyna: Magazynowanie Zielonego Wodoru (H2 HUB Nowa Sarzyna: Green Hydrogen Storage)
	Sources of funding	NCBiR
	Name of the call	NTE I
	Implementation period	2022-2029
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	principal investigator
	Project title	Opracowanie wysokosprawnej kompaktowej siłowni kogeneracyjnej małej mocy zasilanej biomasą (BioCHP) dla energetyki rozproszonej (Development of a high-efficiency compact low-power biomass-fuelled cogeneration power plant (BioCHP) for distributed power generation)
	Sources of funding	POIR.01.02.00-00-0261/16
	Name of the call	POIR
	Implementation period	2017-2019
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	expert
	Project title	CE-HEAT - Comprehensive model of waste heat utilization in CE regions
	Sources of funding	European Union
	Name of the call	Interreg
	Implementation period	2016-2019
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	expert
	Project title	ENERGYREGION - Effective development of dispersed renewable energy in combination with conventional energy in Regions



	Sources of funding	European Union
	Name of the call	Interreg
	Implementation period	2011-2014
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.	IsAR Institute, Technical University of Munich	2010
2.	Budapest University of Technology and Economics	2019-present

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

7. Prizes and awards

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

No.	Description	Year
1.		
2.		
3.		



8. Other significant achievements

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

The most important scientific achievement is conducting a series of experimental analyzes and model studies on the possibility of application of volumetric expanders in ORC CHP systems using two in house-designed and developed experimental micro ORC systems, and based on the results of these works development of an author's generalized method of selecting the working medium for this type of systems. This method is based on a comparison of the selected thermal properties of working fluids by the application of the rating parameters describing the thermal properties of the working fluids. The proposed method is universal and can be easily adopted for different working fluids, different assumptions, and ORCs employing turbines or volumetric expanders.