Reserach topics in the discipline of chemistry

In the academic year 2025/2026

Sg.	PhD Supervisor	ORCID	Contact e-mail	Research topics	Language of the doctoral dissertation
1.	dr. hab. Anna Adach, prof. UJK	0000-0001-9438-054X	Anna.Adach@ujk.edu.pl	Synthesis, structural and spectroscopic characterization of new coordination compounds of potential anti-cancer properties, isolated in redox reactions, using zerovalent metals as substrates.	polish
2.	prof. dr. hab. inż. Barbara Gawdzik	0000-0002-4355-7381	Barbara.Gawdzik@ujk.edu.pl tel.: 413-497-011	1. Synthesis of organic ligands containing S, N and O donor atoms. 2. Synthesis, structural and spectroscopic characterization of new coordination compounds of catalytic properties. 3. Olefin oligomerization process catalyzed by coordination complexes of transition metals ions.	polish
3.	Dr. hab. Agnieszka Jabłońska-Wawrzycka	0000-0003-3935-0772	Agnieszka.Jablonska-Wawrzycka@ujk.edu.pl	Structure, physicochemical characterisation and biological activity of ruthenium complexes in the context of their potential utilization as antibiofilm agents	polish
4.	Dr. hab. Katarzyna Jedynak, prof. UJK	0000-0002-2894-8800	katarzyna.jedynak@ujk.edu.pl	Obtaining nanoporous carbon materials from organic waste and studying their physicochemical properties. Application of obtained materials in the process of eliminating environmental pollution.	polish

5.	Dr. hab. Paweł Rodziewicz, prof. UJK	0000-0003-4397-5054	pawel.rodziewicz@ujk.edu.pl	1. Theoretical studies of intermolecular interactions in water solution of chemical warfare agents from first principles calculations. 2. Theoretical studies of intermolecular interactions between the surface of carbon nanotubes or fullerenes and organic compounds from first principles calculations.	polish
6.	prof. dr. hab. Przemysław Rybiński	**0000-0001-5131-0699**	przemyslaw.rybinski@ujk.edu.pl Tel. 6437	Polymeric composites and nanocomposites. Composite materials for special applications. Pro-ecological composite materials. Material tests in terms of their thermal stability, fire hazard, smoke emission, toxicometric indicators.	polish
7.	Dr hab. Mieczysław Scendo, prof. UJK	0000-0002-4860-0553	scendo@ujk.edu.pl	Anticorrosive properties of metallic coatings obtained by the cold gas method	polish
8.	Prof. dr. hab. Piotr Słomkiewicz	000-0002-2521-1838	piotr.slomkiewicz@ujk.edu.pl	1. Immobilization of toxic chemicals on mineral-carbonized adsorptive materials from the gas and liquid phases. 2. Determinationl psychoactive compounds on mineral-carbonized adsorption materials from the liquid phases.	polish
9.	Dr. hab. Alicja Wzorek, prof. UJK	0000-0001-9041-7034	awzorek@ujk.edu.pl +48 41 349 7016	1. Synthesis of the new nucleotide analogues containing difluorophosphate or phosphoramidate group (CF_2-ProTide analogues) and evaluation of their biological activities.	polish

				2. Evaluation of the methods for enantiomeric enrichment of the chiral compounds.	
10.	Dr. hab. Walentyna Zubkowa, prof. UJK	0000-0002-7039-2535	walentyna.zubkowa@ujk.edu.pl +48 41 349 70 30	The influence of the method of biomass pre-treatment on the composition and structure of pyrolysis products.	polish