Research topics in the discipline of chemical sciences
in the academic year 2021/2022

Lp.	PhD Supervisor	ORCID	Contact	Research topics
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.
2.	dr hab. Sabina Dołęgowska, prof. UJK	0000-0001-7797-1292	sabina.dolegowska@ujk.edu.pl	Bio- and geoindicators in environmental quality assessment. Estimation of sampling and sample preparation uncertainties of selected environmental samples.
3.	dr hab. Joanna Masternak, prof. UJK	0000-0002-8785-3879	joanna.masternak@ujk.edu.pl +48 41 349 7039	New coordination compounds of selected metal ions in the light of model studies on its biological activity
4.	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. 2. Theoretical studies of intermolecular interactions between the surface of metal nanoparticles and organic compounds from first principles

5.	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
6.	dr hab. Piotr Słomkiewicz, prof. UJK	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. Photochemical studies of model solid-liquid catalytic systems.
7.	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. 2. Evaluation of the methods for enantiomeric enrichment of the chiral compounds.