Research topics in the discipline of chemical sciences
in the academic year 2020/2021

Lp.	PhD Supervisor	ORCID	Contact	Research topics
1	**dr hab. Anna Adach**	0000-0001-9438-054X	anna.adach@ujk.edu.pl	*Physicochemical characteristics of coordination compounds showing potential anti-cancer activity, obtained in one-pot synthesis using zero-valent metals as substrates*
2	**dr hab. Sabina Dołęgowska, prof. UJK**	0000-0001-7797-1292	sabina.dolegowska@ujk.edu.pl	1. *Estimation of uncertainty of sampling and sample treatment of plant sample materials in determinations of selected trace elements* 2. *Application of moss Pleurozium schreberi biomass as a natural sorbent of selected trace elements*
3	**dr hab. Agnieszka Gałuszka, prof. UJK**	0000-0002-2497-2627	agnieszka.galuszka@ujk.edu.pl	*Bioavailability of lanthanides from selected environmental samples*
4	**dr hab. Joanna Masternak**	0000-0002-8785-3879	joanna.masternak@ujk.edu.pl	*New coordination compounds of selected metal ions in the context of modelling of their biological activity*
5	**dr hab. Paweł Rodziewicz, prof. UJK**	0000-0003-4397-5054	pawel.rodziewicz@ujk.edu.pl	*Studies of intermolecular relationships of chemical warfare agents in solutions using computational chemistry methods*
6	**dr hab. Mieczysław Scendo, prof. UJK**	0000-0002-4860-0553	mieczyslaw.scendo@ujk.edu.pl	*Corrosion of metals and metal coatings in acidic salt solutions*

7	**dr hab. Piotr Słomkiewicz, prof. UJK**	000-0002-2521-1838	piotr.slomkiewicz@ujk.edu.pl	1. *Synthesis of mineral adsorption materials (adsorption, phase and surface characteristics, reactivity and surface chemistry of the synthetized materials* 2. *Immobilization of toxic chemical compounds in gaseous and liquid phases using mineral adsorbents* 3. *Studies of photochemical systems in model catalytic solid/liquid phase systems* 4. *Application of GC/MS, LC/MS, FTIR spectroscopy, Raman spectroscopy, UV-VIS-NIR spectroscopy and inverse gas chromatography in the studies on adsorption and catalysis*
8	**prof. dr hab. Volodymyr Starodub**	0000-0001-6403-1736	volodymyr.starodub@ujk.edu.pl	*Radical-anion salts based on 7,7,8,8-tetracyanoquinodimethane*
9	**dr hab. Alicja Wzorek**	0000-0001-9041-7034	alicja.wzorek@ujk.edu.pl	*Methods of enantiomeric enrichment of non-racemic chiral compounds using physico-chemical processes*
10	**dr hab. Walentyna Zubkowa prof. UJK**	0000-0002-7039-2535	walentyna.zubkowa@ujk.edu.pl	*Influence of coal sample storage on their sinterability*