Curriculum Vitae

Personal information

First name / Surname	**Doina Humelnicu**
Address	11 Bd. Carol I, 700506, Iasi, Romania
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E-mail	doinah@uaic.ro, humelnicud@yahoo.com
Nationality	Romanian
Date of birth	18.02.1967
Gender	Female
	ORCID https://orcid.org/0000-0002-9410-0154
	Web of Science ResearcherID A-3218-2014
	Brainmap: U-1700-034H-4058
	Scopus Author ID: 6506460316

Work experience

Dates	2016-
Occupation or position held	professor
Main activities and responsibilities	teaching and research activities
Name and address of employer	Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania
Type of business or sector	higher education
Dates	2004-2016
Occupation or position held	associate professor
Main activities and responsibilities	teaching and research activities
Name and address of employer	Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania
Type of business or sector	higher education
Dates	1997-2004
Occupation or position held	lecturer
Main activities and responsibilities	teaching and research activities
Name and address of employer	Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania
Type of business or sector	higher education
Dates	1994-1997
Occupation or position held	assistant profesor

Main activities and responsibilities	teaching and research activities
Name and address of employer	Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania
Type of business or sector	higher education
Dates	1991-1994
Occupation or position held	preparator
Main activities and responsibilities	teaching and research activities
Name and address of employer	Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania
Type of business or sector	higher education

Education and training

Dates	1995
Title of qualification awarded	-
Research topics	International Workshop / Symposium on Modern Nuclear Magnetic Resonance
Name and type of organisation providing education and training	Romanian Cultural Foundation and Romanian Academy
Dates	2006
Title of qualification awarded	Summer School «Physics and chemistry of the atmosphere: from laboratory experiments to field campaigns»
Name and type of organisation providing education and training	“Al. I. Cuza" University of Iasi, Romania; ARCUS Program French Ministry of Foreign Affairs Nord/Pas-de-Calais Region, France; "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania; Regional Agency for the Environmental Protection, Iasi, Romania
Dates	2000
Title of qualification awarded	PhD in Chemistry
Principal subjects/occupational skills covered	Study of CRUD products that results in the technology for the obtaining the uranium pure nuclear
Name and type of organisation providing education and training	“Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania
Dates	1986-1991
Title of qualification awarded	BSc.
Principal subjects/occupational skills covered	Inorganic Chemistry
Name and type of organisation providing education and training	“Alexandru Ioan Cuza” University of Iasi, 11 Bd. Carol I, 700506, Iasi, Romania

Personal skills and competences

Mother tongue: Romanian

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	B2	Independent user	B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user
French	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user

(*) Common European Framework of Reference for Languages

Professional skills and competences

Organisational skills and competences	- Editor in Chiefs – Trends in Molecular Science - Academic Editor Journal of Chemistry - Guest editor Coatings journal in 2021 - member in Editorial Board of Journal of Chemistry, International Journal of Environmental Chemistry, International Journal of Nuclear Energy Science and Engineering, Jacobs Journal of Earth Science, - reviewer at Journal of Hazardous Materials, Chemical Engineering Journal, Journal of Fluorescence, Annals of Nuclear Energy, Water Research, Central European Journal of Chemistry, Journal of Environmental Radioactivity, Cellulose Chemistry, American Journal of Applied Chemistry, Polymer Bulletin, African Journal of Microbiology Research, Desalination and Water Treatment, Journal of Environmental Management, Open Chemistry, Green Chemistry – Letters and Review, Journal of Radioanalytical and Nuclear Chemistry, Separation and Purification Technology, Journal of Environmental Chemical Engineering, Molecules, Reactive and Functional Polymers, Nanomaterials, Journal of Alloys and Compounds, Chemosphere, Environmental Science and Pollution Research, Toxics, Water, Chemical Engineering, - member in the research teams of about 30 national research grants - more than 70 scientific article published
Scientific research activity	- removal of some radioisotopes from residual waters by biosorption using algae and hydrophyte plants, - removal of heavy metal ions from wastewaters using different types of inorganic material (zeolites, clays and pillared clays, cellulose, modified cellulose, polymers) - synthesis and characterization of some classes of coordinative compounds of transitional metals - 1421 ISI citations (exclude self citations), H-index = 20 - 3 national patent

Additional information

Member of	Member of the Romanian Society of Chemistry Member of American Nano Society

List of relevant published papers

1. I.-C. Popescu, P. Filip, ***D. Humelnicu,*** I. Humelnicu, T. B. Scott, R. A. Crane, Removal of uranium (VI) from aqueous systems by nanoscale zero-valent iron particles suspended in carboxy-methyl cellulose, *J. Nucl. Mater.,* **443(1-3)**, 2013: 250-255,
2. **D. Humelnicu,** C. Blegescu, D. Ganju, Removal of uranium (VI) and thorium (IV) ions from aqueous solutions by functionalized silica: kinetic and thermodynamic studies, *J. Radioanal. Nucl. Chem.,* **299(3)**, 2014: 1183-1190,
3. I-C Popescu (Hoştuc), P. Filip, I. Humelnicu, M. Mateescu, E. Militaru, **D. Humelnicu,** Removal of uranyl ions by p-hexasulfonated calyx[6]arene acid, *J. Nucl. Mater.*, **453**, 2014: 75-81
4. **D. Humelnicu**, M. Ignat, F. Doroftei, Agricultural by-products as low cost sorbents for the removal of heavy metals from dilute wastewaters, *Environm. Monit. Assess.*, **187(5)**, 2015: 187-198,
5. **D. Humelnicu,** M. Ignat, M. Suchea, Evaluation of adsorption capacity of montmorillonite-K10 and Al-pillared clay towards Pb^{2+}, Cu^{2+} and Zn^{2+} ions, *Acta Chim. Slov*., 62, 2015: 947-957,
6. C. Blegescu, D. Ganju, S. Shova, **D. Humelnicu,** Immobilised Co(II) homodinuclear coordinative compound with terephthalate bridge and o-phenanthroline for catalytic applications, *Croat. Chem. Acta*, **90(1)**, 2017: 59-66,
7. E.S. Dragan, **D. Humelnicu**, M.V. Dinu, O.I. Olariu, Kinetics, equilibrium modeling, and thermodynamics on removal of Cr(VI) ions from aqueous solution using novel composites with strong base anion exchanger microspheres embedded into chitosan/poly(vinyl amine)cryogels, *Chem. Eng. J.*, **330**, 2017: 675-691
8. E. S. Dragan, **D. Humelnicu**, M. V. Dinu, Design of porous strong base anion exchangers bearing N,N-dialkyl 2-hydroxyethyl ammonium groups with enhanced retention of Cr(VI) ions from aqueous solution, *React. Funct. Polym*., **124**, 2018: 55–63
9. E. S. Dragan, **D. Humelnicu**, M. V. Dinu, Development of chitosan-poly(ethyleneimine) based double network cryogels and their application as superadsorbents for phosphate, *Carbohydrate Polym.,* **210**, 2019: 17-25
10. **D. Humelnicu**, L.Soroaga, C. Arsene, I.Humelnicu, R.I. Olariu, Adsorptive performance of soy bran and mustard husk towards arsenic (V) ions from synthetic aqueous solutions, *Acta Chim Slov*. **66**, 2019: 326-336
11. **D. Humelnicu**, M.V. Dinu, M. Ignat, M. M. Lazar, E. S. Dragan, I. A. Dinu, Removal of heavy metal ions from multi-component aqueous solutions by low-cost and eco-friendly composite sorbents with anisotropic pores, *J Hazard Mater.,* **381**, 2020: 120980.

12. M. Shammas, I. Zinicovscaia, **D. Humelnicu**, L. Cepoi, V. Nirwan, Š. Demčák, A.Fahmi, Bioinspired electrospun hybrid nanofibers based on biomass templated within polymeric matrix for metal removal from wastewater, *Polym. Bull.,* **77(6)**, 2020: 3207–3222.
13. E.S. Dragan, **D. Humelnicu**, Contribution of Cross-linker and Silica Morphology on Cr(VI) Sorption Performances of Organic Anion Exchangers Embedded into Silica Pores, *Molecules*, **25(5)**, 2020: 1249,
14. **D. Humelnicu**, A. Pui, Corina Malutan, Th. Malutan, I. Humelnicu, Synthesis, characterization and theoretical investigations of new uranium (VI) and thorium (IV) complexes with 1-furfurylaldehyde-derived Schiff bases as ligands, *J. Saudi Chem. Soc.,* **24(6)**, 2020:451-460,
15. D. Humelnicu, E.S. Dragan, M. Ignat, M.V. Dinu, A Comparative Study on Cu^{2+}, Zn^{2+}, Ni^{2+}, Fe^{3+}, and Cr^{3+} Metal Ions Removal from Industrial Wastewaters by Chitosan-Based Composite Cryogels *Molecules*, **25(11)**, 2020: 2664,
16. E.S. Dragan, **D. Humelnicu**, M. Ignat, C.D. Varganici, Highly efficient composite sorbents composed of poly(amidoxime) resins synthesized into porous silica microspheres by the homo-IPN strategy for the removal of Sr^{2+} and Cs^{+} , *ACS Applied Materials &Interfaces,* **12(40)**, 2020: 44622-44638
17. I. Zinicovscaia, N. Yushin, D. Grozdov, I. Humelnicu, **D. Humelnicu**, T. Mitina, Removal of chromium (III) ions from aqueous solutions using different type of hydroxyapatites: adsorption isotherm, kinetics and thermodynamic studies, *Des. Water Treat.* **204**, 2020: 297-305,
18. **D. Humelnicu**, E.S. Dragan, Highly efficient removal of phosphate by porous strong base anion exchangers as a function of functional groups, *Environ. Sci. Pollut. Res.,* **28(6)**, 2021: 7105-7115
19. C. Mita, I. Bunea, T. Roman, **D. Humelnicu**, Cross-linked and functionalized acrylic polymers: Efficient and reusable sorbents for the sequestration of Zn(II) ions from synthetic wastewaters, *J. Polym. Environment,* **29(7)***,* 2021: 2261-2281
20. M.V. Dinu, **D. Humelnicu**, M. M. Lazar, Analysis of copper(II), cobalt(II) and iron(III) sorption in binary and ternary systems by chitosan-based composite sponges obtained by ice-segregation approach, *Gels*, **7(3)**, 2021: 103
21. I. Zinicovscaia, N. Yushin, D. Abdusamadzoda, D. Grozdov, I. Humelnicu, M. Ignat, **D. Humelnicu**, Removal of vanadium ions from aqueous solutions using different type of hydroxyapatites: adsorption isotherm, kinetics and thermodynamic studies, *Environm. Eng. Manage. J.,* **20(6)**, 2021: 871-881
22. E.S. Dragan, **D. Humelnicu**, M.V. Dinu, Designing smart triple-network cationic cryogels with outstanding efficiency and selectivity for deep cleaning of phosphate, *Chem. Eng. J*., **426**, 2021: 131411
23. **D. Humelnicu**, I. Zinicovscaia, I. Humelnicu, M. Ignat, Experimental studies on the removal of aluminium ions from synthetic aqueous solution by hydroxyapatites, *Acta Chim Slov.,* **68(4)**, 2021: 821-832
24. I. Zinicovscaia, N. Yushin, **D. Humelnicu**, D. Grozdov, M. Ignat, S. Demcak, I. Humelnicu, Sorption of Ce(III) by silica SBA-15 and titanosilicate ETS-10 from aqueous solution, *Water*, **13**, 2021: 3263
25. **D. Humelnicu**, I. Zinicovscaia, I. Humelnicu, M. Ignat, N. Yushin, D. Grozdov, Study on the SBA-15 silica and ETS-10 titanosilicate as efficient adsorbents for Cu(II) removal from aqueous solution, *Water,* **14(6)**, 2022: 857,
26. M.V. Dinu, I. Humelnicu, C.A. Gheorghita, **D. Humelnicu**, Aminopolycarboxylic acids-functionalized chitosan microbeads as valuable heavy metal ions sorbents: fixed-bed column studies and theoretical analysis, *Gels*, **8(4)**, 2022: 221-,
27. **D. Humelnicu**, M. Ignat, M.V. Dinu, E. S. Dragan, Optimization of Arsenic Removal from Aqueous Solutions Using Amidoxime Resin Hosted by Mesoporous Silica, *ACS Omega,* **7(35)**, 2022: 31069-31080
28. C. A. Ghiorghita, **D. Humelnicu**, M. V. Dinu, M. Ignat, S. Bonardd, D. Díaz Díaz, E. S. Dragan, Polyelectrolyte Complex Composite Cryogels with Self-Antibacterial Properties and Wide Window for Simultaneous Removal of Multiple Contaminants, *Chem. Eng. J.,* **459**, 2023: 141562
29. E.S., Dragan, **D. Humelnicu**, M.V. Dinu, Multi-Network Cryogels with Enhanced Performances in Removal of Oxyanions from Aqueous Solutions, *Polymers*, **15(4)**, 2023: 885
30. C.A. Ghiorghita, M.M. Lazar, I. V. Platon, **D. Humelnicu**, M. V. Dinu, Feather-weight cryostructured thiourea-chitosan aerogels for highly efficient removal of heavymetals and bacterial pathogens, *Int. J. Biol. Macrom.,* **235**, 2023: 123910
31. M.M. Lazar, C.A. Ghiorghita, E.S. Dragan, **D. Humelnicu**, M. V. Dinu, Ion-imprinted polymeric materials for selective adsorption of heavy metal ions from aqueous solution, *Molecules*, **28(6)**, 2023: 2798
32. I. Zinicovscaia, N. Yushin, **D. Humelnicu**, D. Grozdov, M. Ignat, I. Humelnicu, Adsorption capacity of silica SBA-15 and titanosilicate ETS-10 toward indium ions, *Materials*, **16(8),** 2023: 3201
33. I. Zinicovscaia, N. Yushin, **D. Humelnicu**, D. Grozdov, I. Humelnicu, M. Ignat, T. Vershinina, Removal of indium ions from aqueous solutions using hydroxyapatite and its two modifications, *Separations,* **10(7)**, 2023: 401,
34. **D. Humelnicu**, C. A. Ghiorghita, I. Humelnicu, E. S. Dragan, Experimental and theoretical investigations on Hg(II) removal by recyclable composite sorbents comprised of polymers bearing thiourea and amidoxime functional groups and mesoporous silica, *Chem. Eng. J*., **479**, 2024: 147690,