

Curriculum vitae



Personal information

First name / Surname **Ioana Alexandra Plugariu**
 Address 11, Străpungere Str., 700002, Iași, Romania
 E-mail plugariu.ioana@icmpp.ro
 Nationality Romanian
 Gender Female

Employment field

Research Assistant / Research Activities

Work experience

Occupation or position held	2025- Present: Research Assistant , Petru Poni Institute of Macromolecular Chemistry, Iași, Romania
Main activities and responsibilities	2018- July 2024 (maternity leave 2 years): Ph.D. student in Chemistry , Petru Poni Institute of Macromolecular Chemistry, Iași, Romania Research activities in the field of drug delivery and controlled release of water soluble and insoluble drugs
Main area of research	Smart polymer materials based on polymers and proteins; Development and characterization hydrogels from synthetic and natural polymers; Thermoreversible gels for drug delivery; Polysaccharides, biomaterials (membranes, hydrogels) and bioactive compounds
Dates, occupation or position held	2022-2023 Research assistant
Name and address of employer	Al. I. Cuza University of Iași- Petru Poni Institute of Macromolecular Chemistry Research Project: Bioinspired Peptide-Based Scaffold Assemblies PN-III-P2-2.1-PED-2019-2484, PED 494/2020 Member in the team of Partner 1
Dates, occupation or position held	2016 Pharmacist
Name and address of employer	„Sf. Maria” Pharmacy Medicine consultancy and expertise Formulation, preparation and conditioning of medicines, dietary supplements and cosmetics Analysis and control of active substances

Name and type of organisation providing education and training	Education and training	2018-2024 Ph.D. Thesis Development and characterization of polymeric materials for biomedical applications Supervisor: Dr. Maria Bercea 2011-2016 Bachelor Degree University of Medicine and Pharmacy „Gr.T.Popa” Iași 2007-2011 Baccalaureate Diploma National College Iași, Theoretical Highschool 2018 Certificate of natural cosmetics training study program Aesthetic Beauty Lab 2015 Certificate of participation Perform Program a+, Antibiotice Iasi Technologies, laboratory techniques and quality assurance in the pharmaceutical industry																																																											
	Mother tongue(s)	Romanian																																																											
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Computer skills	Technical skills and competences	<table><tr><th colspan="4">Understanding</th><th colspan="4">Speaking</th><th colspan="2">Writing</th></tr><tr><th colspan="2">Listening</th><th colspan="2">Reading</th><th colspan="2">Spoken interaction</th><th colspan="2">Spoken production</th><th colspan="2"></th></tr><tr><td>B2</td><td>Independent user</td><td>B2</td><td>Independent user</td><td>B2</td><td>Independent user</td><td>B2</td><td>Independent user</td><td>B2</td><td>Independent user</td></tr><tr><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td></tr><tr><td colspan="10"></td></tr></table>										Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user										
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MS Office, Excel, Power Point, Word, Chem Draw																																																													
Good skills in using experimental techniques as spectrophotometry (UV-VIS), rheometry/viscometry and morphological characterization of hydrogels by SEM, FTIR.																																																													
Drug delivery studies and formulation of different pharmaceutical forms.																																																													
Good communication skills improved by participating at the scientific communication sessions and interacting with the patient																																																													
Driving licence		B category																																																											

Additional information

Relevant publications

1. Bercea M., Gradinaru L.-M., Morariu S., **Plugariu I.-A.**, Gradinaru, R.V. Tailoring the properties of PVA/HPC/BSA hydrogels for wound dressing applications. *Reactive and Functional Polymers*, 170, 105094 (2022) <https://doi.org/10.1016/j.reactfunctpolym.2021.105094>. (IF₂₀₂₂ = 5.1) (Q1)
2. Bercea M., Constantin M., **Plugariu I.-A.**, Daraba M.O., Ichim D.L., Thermosensitive gels of pullulan and Poloxamer 407 as potential injectable biomaterials. *Journal of Molecular Liquids*, 362, 119717 (2022) <https://doi.org/10.1016/j.molliq.2022.119717> (FI₂₀₂₂ = 6) (Q1)
3. Bercea M., **Plugariu I.-A.**, Gradinaru L.M., Avadanei M., Doroftei F. Gradinaru V.R. Hybrid hydrogels for neomycin delivery: Synergistic effects of natural/synthetic polymers and proteins. *Polymers* 15(3), 630 (2023). <https://doi.org/10.3390/polym15030630>, (FI₂₀₂₂ = 5) (Q1)
4. **Plugariu I.-A.**, Bercea M., Gradinaru L.M., Rusu D., Lupu A., Poly (vinyl alcohol)/Pullulan Composite Hydrogels as a Potential Platform for Wound Dressing Applications. *Gels* 9(7), 580 (2023). <https://doi.org/10.3390/gels9070580>. (FI₂₀₂₂ = 4.6) (Q1)
5. Bercea M., Morariu S., **Plugariu I.-A.**, Bărâlă D., Shear Flow of Bovine Serum Albumin Solutions, *Studia Universitatis Babeş-Bolyai Chimia*, LXIV, 3, 121-128 (2019) <https://doi.org/10.24193/subbchem.2019.3.10>. (FI₂₀₂₂ = 0.3) (Q4)
6. Bercea M., Gradinaru L.M., **Plugariu I.A.**, Mandru M., Tigau D.L. Viscoelastic behaviour of self-assembling polyurethane and poly(vinyl alcohol), *Polymer International*, 69 (2), 149-155 (2020) <https://doi.org/10.1002/pi.5928>. (FI₂₀₂₂ = 3.2) (Q2)
7. Bercea M., **Plugariu I.-A.**, Associative interactions between pullulan and negatively charged bovine serum albumin in physiological saline solutions, *Carbohydrate Polymers*, 246, 116630 (2020) <https://doi.org/10.1016/j.carbpol.2020.116630>. (FI₂₀₂₂ = 11.2) (Q1)
8. Bercea M., Gradinaru L.M., Barbalata-Mandru M., Vlad S., Nita L.E., **Plugariu I.A.**, Albulescu R., Shear flow of associative polymers in aqueous solutions, *Journal of Molecular Structure*, 1238, 130441 (2021) <https://doi.org/10.1016/j.molstruc.2021.130441>. (FI₂₀₂₂ = 3.8) (Q2)
9. **Plugariu I.A.**, Bercea M., The viscosity of globular proteins in the presence of an "inert" macromolecular cosolute, *Journal of Molecular Liquids*, 337, 116382 (2021) <https://doi.org/10.1016/j.molliq.2021.116382>. (FI₂₀₂₂ = 6) (Q1)
10. **Plugariu I.-A.**, Grădinaru L.M., Avădanei M., Rosca I., Nita L.E., Maxim C., Bercea M., Thermosensitive polyurethane-based hydrogels as potential vehicles for meloxicam delivery. *Pharmaceuticals* 16(11), 1510, (2023). <https://doi.org/10.3390/ph16111510>. (FI₂₀₂₂ = 4.6) (Q1)
11. Bercea M., **Plugariu I.-A.**, Dinu M.V., Pelin I.M., Lupu A., Bele A., Grădinaru V.R. PVA/BSA hybrid hydrogels with tunable viscoelastic properties. *Polymers* 15(23), 4611 (2023). <https://doi.org/10.3390/polym15234611>. (FI₂₀₂₂ = 5) (Q1)

Oral publications

- Plugariu I.-A.**, Bercea M., Morariu S., Bărâlă D.
Rheological behaviour of PVA hydrogels suitable for cosmetic applications;
13th International Symposium on Cosmetic and Flavor Products, Iasi, Romania, June 4-7, 2019
- Plugariu I.-A.**, Bercea M., Morariu S.
Viscozitatea soluțiilor de polimeri în prezența proteinelor
Zilele Academice Iesene, Iasi, Romania, 2-4 octombrie, 2019
- Bercea M., **Plugariu I.-A.**, Macromolecular crowding in solutions of bovine serum albumin and neutral polymers, The 9th IEEE International Conference on E-Health and Bioengineering - EHB 2021, Grigore T. Popa University of Medicine and Pharmacy, Iași, Nov. 18-19, 2021.