

PhD. Student Eng. Emilian GHIBU
List of papers that include data from the thesis

PAPERS LIST

1. **E. Ghibu**, V. Vasile, I. Caraş, E.D. Giol, N.D. Banu, D.M. Vuluga, R. Stan, V.V. Jerca, and F.A. Jerca, Poly(2-isopropenyl-2-oxazoline) hydrogels with biodegradable junction points for drug-delivery applications, *Chemistry of Materials*, **2024**, 36 (15), 7459-7475 (**IF₂₀₂₄ = 7**)
2. **E. Ghibu**, N.D. Banu, D.M. Vuluga, R. Stan, F.A. Jerca, V.V. Jerca, Thermal properties of poly(2-isopropenyl-2-oxazoline) crosslinked networks, *UPB Sci. Bull. Ser. B Chem. Mater. Sci*, **2025**, ISSN 1454-2331, 87(3), 73-84 (**IF₂₀₂₄= 0.3**)
3. E. Olăreţ, **E. Ghibu**, A. Şelaru, S. Dinescu, B. Ş. Vasile, V. V. Jerca, I. C. Stancu, and F. A. Jerca, Electrospinning and crosslinking of gelatin-poly(2-isopropenyl-2-oxazoline) nanofibers: a route to stable hybrid biomaterials, *Macromolecular Rapid Communications*, **2025**, e00576. <https://doi.org/10.1002/marc.202500576> (**IF₂₀₂₄ = 4.3**)
4. **E. Ghibu**, D.M. Vuluga, R. Stan, F.A. Jerca, V.V. Jerca, Poly(2-isopropenyl-2-oxazoline) hydrogels as multipurpose drug delivery systems: Tailoring molecular interactions for controlled loading and release, *European Polymer Journal*, **2026**, 242, 114407 (**IF₂₀₂₄ = 6.3**)
5. C. Tucureanu, **E. Ghibu**, V. Tofan, E.D. Giol, R. Mitran, F.A. Jerca, V.V. Jerca, Assessing protein antifouling performance and hemocompatibility of poly(2-isopropenyl-2-oxazoline) based hydrogels, *Applied Materials Today*, **2026**, 48, 103031 (**IF₂₀₂₄ = 6.9**)

SCIENTIFIC MEETINGS ATTENDED

International Conferences

Oral presentations:

1. V.V. Jerca, F.A. Jerca, M.C. Spiridon, N.D. Banu, **E. Ghibu**, D.M. Vuluga, *Non-linear optical applications or drug controlled release from poly(2-oxazoline) matrix*, 6th International Workshop on Advanced Nano- and Biomaterials and Their Device Applications, 12-16 May 2019, Cluj, Romania.

2. **E. Ghibu**, N.D. Banu, T.V. Iordache, D.M. Vuluga, R. Stan, V.V. Jerca, F.A. Jerca, *Poly(2-isopropenyl-2-oxazoline) hydrogels as drug delivery systems*, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), 4 – 7 September 2019, Constanța, Romania.
3. **E. Ghibu**, N.D. Banu, D.M. Vuluga, R. Stan, F.A. Jerca, V.V. Jerca, *Degradable hydrogels for drug delivery applications based on poly(2-isopropenyl-2-oxazoline)*, Bucharest Polymer Conference (2nd Edition), 9 – 11 June 2021, Bucharest, Romania.
4. **E. Ghibu**, N.D. Banu, D.E. Giol, V.V. Jerca, F.A. Jerca, *Degradable hydrogels for drug delivery applications based on poly(2-isopropenyl-2-oxazoline)*, 32nd Edition of the International Congress of “APOLLONIA” University “PREPARING THE FUTURE BY PROMOTING EXCELLENCE”, 28 February – 2 March 2022, Iasi, Romania
5. **E. Ghibu**, V.V. Jerca, F.A. Jerca, *Poly(2-isopropenyl-2-oxazoline) hydrogels with tunable structures and properties for drug delivery applications*, International Symposium on Polymer and Supramolecular Chemistry, 25 October 2022, Bucharest, Romania.

Poster presentations:

6. **E. Ghibu**, V.V. Jerca, T.V. Iordache, D.M. Vuluga, R. Stan, F.A. Jerca, *Poly(2-isopropenyl-2-oxazoline) based hydrogels for drug release systems*, 14th International Symposium “Priorities of Chemistry for a Sustainable Development” (PRIOCHEM XIV), 10 – 12 October 2018, Bucharest, Romania.
7. **E. Ghibu**, N.D. Banu, T.V. Iordache, D.M. Vuluga, R. Stan, V.V. Jerca, F.A. Jerca, *Hydrogels materials based on poly(2-isopropenyl-2-oxazoline) for controlled drug release*, 29th Edition of the International Congress of “APOLLONIA” University, “PREPARING THE FUTURE BY PROMOTING EXCELLENCE”, 28 February – 3 March 2019, Iasi, Romania.
8. N.D. Banu, **E. Ghibu**, D.M. Vuluga, T.V. Iordache, I.E. Chican, R. Petre, V.V. Jerca, F.A. Jerca, *Polyvinyl alcohol materials for chemically contaminated surfaces*, 30rd Edition of the International Congress of “APOLLONIA” University, “PREPARING THE FUTURE BY PROMOTING EXCELLENCE”, 27 February – 1 March 2020, Iasi, Romania.
9. **E. Ghibu**, N.D. Banu, C.V. Florea, D.M. Vuluga, V.V. Jerca, F.A. Jerca, *In vitro assessment of the chemical stability of poly(2-isopropenyl-2-oxazoline)*, 31st Edition of the

International Congress of “APOLLONIA” University, “PREPARING THE FUTURE BY PROMOTING EXCELLENCE” 1 – 3 March 2021, Iasi, Romania.

10. N.D. Banu, **E. Ghibu**, D.M. Vuluga, T.V. Iordache, I.E. Chican, R. Petre, V.V. Jerca, F.A. Jerca, *Photocrosslinkable polymeric coatings for surface decontamination*, Bucharest Polymer Conference (2nd Edition), 9 – 11 June 2021, Bucharest, Romania.
11. **E. Ghibu**, C.V. Florea, N.D. Banu, D.M. Vuluga, V.V. Jerca, F.A. Jerca, *Poly(2-isopropenyl-2-oxazoline) hydrogels with tunable degradation profiles*, 15th International Conference on Materials Chemistry (MC 15), 12 – 15 July 2021, online attendance.
12. C.V. Florea, **E. Ghibu**, N.D. Banu, D.M. Vuluga, F.A. Jerca, V.V. Jerca, *Process optimization of poly(2-oxazoline)s stabilized polymeric carriers*, 15th International Conference on Materials Chemistry (MC 15), 12 – 15 July 2021, online attendance.
13. D.E. Giol, V. Vasile, C.V. Tofan, I. Caras, A. Salageanu, **E. Ghibu**, N.D. Banu, F.A. Jerca, V.V. Jerca, *In vitro toxicology study of poly(2-isopropenyl-2-oxazoline)s*, 32nd Edition of the International Congress of “APOLLONIA” University “PREPARING THE FUTURE BY PROMOTING EXCELLENCE”, 28 February – 2 March 2022, Iasi, Romania.
14. **E. Ghibu**, C.V. Florea, V.V. Jerca, F.A. Jerca, *Degradable hydrogels for drug delivery applications based on poly(2-isopropenyl-2-oxazoline)*, 49th World Polymer Congress - MACRO2022, 17 – 21 July 2022, Winnipeg, Canada (online attendance).
15. B. Palade, V. Vasile, C.V. Tofan, C. Țucureanu, **E. Ghibu**, N.D. Banu, F.A. Jerca, I. Caras, A. Salageanu, V.V. Jerca, D.E. Giol, *Preliminary toxicology studies of polyoxazolines intended for cancer immuno-therapy*, 32nd Annual Conference of the European Society for Biomaterials, 4 – 8 September 2022, Bordeaux, France.
16. **E. Ghibu**, N.D. Banu, D.M. Vuluga, R. Stan; V.V. Jerca, F.A. Jerca, *Designing degradable poly(2-isopropenyl-2-oxazoline) hydrogels for biomedical applications*, IUPAC MACRO 2024 The 50th World Polymer Congress, 1 - 4 July 2024, Warwick, U.K.

National Conferences:

Oral Presentations:

1. V.V. Jerca, F.A. Jerca, F.A., C.M. Spiridon, N.D. Stanciu, **E. Ghibu**, D.M. Vuluga, *Poly-2-oxazolines – versatile matrix for non-linear optics or bio-medical applications*, XXXV-th Romanian Chemistry Conference, 2 – 5 October 2018, Călimănești-Căciulata, Romania.
2. **E. Ghibu**, F.A. Jerca, V.V. Jerca, *Hidrogeluri inteligente pentru eliberarea de compuși biologic activi*, Symposium: 120 Years Since the Birth of Academician “Costin D. Nenițescu”, 22 – 23 September 2022, Romanian Academy, Bucharest, Romania.
3. **E. Ghibu**, N.D. Banu, D.M. Vuluga, V.V. Jerca, F.A. Jerca, *Mechanically tunable poly(2-isopropenyl-2-oxazoline) based degradable hydrogels*, The XXXVI-th National Chemistry Conference, 4 – 7 October 2022, Călimănești-Căciulata, Romania.
4. **E. Ghibu**, D.M. Vuluga, V.V. Jerca, F.A. Jerca, *Hydrogels with tunable degradability based on poly(2-isopropenyl-2-oxazoline) for drug delivery applications*, New Trends in Chemistry Research, 21 – 22 September 2023, Timișoara, Romania.
5. **E. Ghibu**, R. Stan, F.A. Jerca, V.V. Jerca, *Novel degradable hydrogels based on poly-2-isopropenyl-2-oxazoline for drug delivery applications*, Sesiunea de Comunicări Științifice Studentești ediția a XIX-a, Facultatea de Chimie, Universitatea din București, 24 – 25 May 2024, Bucharest, Romania.
6. **E. Ghibu**, I. Caraș, E.D. Giol, F.A. Jerca, V.V. Jerca, *Poly(2-isopropenyl-2-oxazoline) hydrogels for retention and release of biologically active compounds*, The Annual Scientific Conference of the "Cantacuzino" Institute - Updates in Biomedical Research, 21 – 22 November 2024, Bucharest, Romania.

Poster presentations:

7. **E. Ghibu**, V.V. Jerca, V.T. Iordache, D.M. Vuluga, R. Stan, F.A. Jerca, *New drug release systems based on poly(2-isopropenyl-2-oxazoline) hydrogels*, XXXV-th Romanian Chemistry Conference, 2 – 5 October 2018, Călimănești-Căciulata, Romania.