

LISTA DE PUBLICAȚII

Titlul tezei de doctorat: Studiul chitinazelor cu activitate și stabilitate crescute prin tehnici de evoluție direcționată.

ARTICOLE PUBLICATE ÎN REVISTE CATEGORIA A (COTATE ISI)

1. Constantina Bianca Vulpe, Mariana Adina Matica, Renata Kovačević, Daniela Dascalu, Zoran Stevanovic, Adriana Isvoran, Vasile Ostafe, **Gheorghita Menghiu**, *Copper accumulation efficiency in different recombinant microorganism strains available for bioremediation of heavy metal-polluted waters*, International Journal of Molecular Sciences, 2023, 24(8):7575, IF 5,60
2. **Gheorghita Menghiu**, Radivoje Prodanovic, Marija Blazic, Manuela Mincea, Cristina Moraru, Vasile Ostafe, *Non-conventional expression of recombinant chitinase A originated from Bacillus licheniformis DSM8785, in Saccharomyces cerevisiae INVSc1*, Journal of the Serbian Chemical Society, 2022, 87(6) pp 677-692; IF 1.240.
3. **Gheorghita Menghiu**, Vasile Ostafe, Radivoje Prodanovic, Rainer Fischer, Raluca Ostafe, *A high-throughput screening system based on fluorescence-activated cell sorting for the directed evolution of chitinase A*, International Journal of Molecular Sciences, 2021, 22(6): p. 3041; IF 5.923.
4. Zoran Stevanovic, Renata Kovacevic, Radmila Markovic, Vojka Gardic, Bianca Constantina Vulpe, Bianca Boros, **Gheorghita Menghiu**, *State of the surface waters in cross border region of eastern Serbia and Caras Severin county – Moldova Noua in Romania*, Studia UBB Chemia, 2021, 66(4), pp 309-328; IF 0.447.
5. Cristina Moraru, Manuela Mincea, **Gheorghita Menghiu**, Vasile Ostafe, *Understanding the factors influencing chitosan-based nanoparticles-protein corona interaction and drug delivery applications*, Molecules, 2020, 25(20), p 4758; IF 4.412.
6. **Gheorghita Menghiu**, Vasile Ostafe, Radivoje Prodanovic, Rainer Fischer, Raluca Ostafe, *Biochemical characterization of chitinase A from Bacillus licheniformis DSM8785 expressed in Pichia pastoris KM71H*, Protein Expression and Purification, 2019, 154, pp 25-32; IF 1.513.
7. **Gheorghita Menghiu**, Lauriana-Eunice Zbîrcea, Vasile Ostafe, *Use of factorial design to optimize the efficiency of bacterial transformation*, Studia UBB Chemia, 2019, 64, pp 23-34; IF 0.494.

8. **Gheorghita Menghiu**, Amalia Nicoleta Iancu, Vasile Ostafe, *A fast and sensitive zymography method of peroxidase activity determination using sodium acetate buffer*, Studia UBB Chemia, 2019, 64, pp 536-539; IF 0.494.

ARTICOLE PUBLICATE ÎN REVISTE CATEGORIA B⁺ (INDEXATE BDI)

1. Adina Matica, **Gheorghita Menghiu**, Vasile Ostafe, *Biodegradability of Chitosan Based Products*, New Frontiers in Chemistry, 26(1) (2017), pp 75-86.
2. Adina Matica, **Gheorghita Menghiu**, Vasile Ostafe, *Toxicity of Chitosan Based Products*, New Frontiers in Chemistry, 26(1) (2017), pp 65-74.
3. Adina Matica, **Gheorghita Menghiu**, Vasile Ostafe, *Antifungal Properties of Chitosans*, New Frontiers in Chemistry, 26(1) (2017), pp 55-63.
4. Adina Matica, **Gheorghita Menghiu**, Vasile Ostafe, *Antibacterial Properties of Chitosans*, New Frontiers in Chemistry, 26(1) (2017), pp 39-54.
5. Monica Elena Gușă, **Gheorghita Menghiu**, Vasile Ostafe, *Improvement of staining / destaining steps of proteins SDS – PAGE*, New Frontiers in Chemistry, 25 (2) (2016), pp 115-124.
6. Ovidiu Silviu Cotreanti, **Gheorghita Menghiu**, Vasile Ostafe, *Preliminary outcomes regarding the optimization of separation of plasmids by agarose gel electrophoresis*, New Frontiers in Chemistry, 25 (2) (2016), pp 107-113.
7. Bianca Vanesa Boros, **Gheorghita Menghiu**, Adina Matica, Vasile Ostafe, *Use of ninhydrin reaction for estimation of acetylation degree of chitosan*, New Frontiers in Chemistry, 25 (2) (2016), pp 95-105.
8. Bianca Vulpe, **Gheorghita Menghiu**, Adina Matica, Vasile Ostafe, *Estimation of the molecular weight of chitosan by PAGE*, New Frontiers in Chemistry, 25 (2) (2016), pp 135-143.
9. Rahela Ioana Zbîrcea, **Gheorghita Menghiu**, Adina Matica, Vasile Ostafe, *Use of 3,5-dinitrosalicylic acid reaction to study the chitosan hydrolysis*, New Frontiers in Chemistry, 25 (2) (2016), pp 145-153.
10. **Gheorghita Menghiu**, Alexandra Murvay, Marija Blazic, Nevena Zelenovic, Diana-Larisa Vlădoiu, Vasile Ostafe, *Transfer of a gene from a bacterial cloning plasmid to an yeast expression plasmid*, Annals of West University of Timișoara, ser. Chemistry, 22 (3 - 4) (2013) 55-66.

11. **Gheorghita Menghiu**, Marius Cuțitar, Marija Blazic, Beatrice Vlad-Oros, Vasile Ostafe, *Use of factorial design as an application of the optimization of expression of Taq DNA polymerase I cloned in E. coli*, Annals of West University of Timișoara, ser. Chemistry, 22 (3 - 4) (2013) 67 – 80.
12. **Gheorghita Menghiu**, Elena Iriza, Adelina Danciu, Orsolya Tünde Zsombori, Cecilia Găman, Hanelore - Elena Muntean, *Biomonitoring of urban area by anatomical leaf changes*, Annals of West University of Timișoara, ser. Biology, 2012, vol XV (2), pp. 125-130.

COMUNICĂRI INTERNAȚIONALE ȘI NAȚIONALE

1. Alexandra Dobritoiu, Constantina Bianca Vulpe, Vasile Ostafe, **Gheorghita Menghiu**, *Analysis regarding the determination of the activity of acidophilic bacterial strains in synthetic media containing preliminary different concentrations of heavy metals*, 15th Edition of the Conference "New Trends in Chemistry Research", 21-22 septembrie, 2023, Institutul de Chimie Coriolan Drăgulescu, Timișoara, România.
2. Calcatinge Dumitrita, Elena Ana, Gamart Corina, Ostafe Vasile, **Menghiu Gheorghita**, *Antimicrobial effect of a recombinant chitinase against different strains of bacteria and fungi*, Multidisciplinary Conference on Sustainable Development, 25-26 mai, 2023, Universitatea de Științele Vieții „Regele Mihai I”, Timișoara, România.
3. **Menghiu Gheorghita**, Vulpe Bianca Constantina, Matica Mariana Adina, Kovacevic Renata, Ostafe Vasile, *Preliminary results regarding using of microorganisms in decontamination of mining water polluted with copper*, International Scientific Symposium "Young people and scientific research in Animal Husbandry and Biotechnology", 17-18 noiembrie, 2022, Universitatea de Științele Vieții „Regele Mihai I”, Timișoara, România.
4. Eliza Maria Mihalache, Vasile Ostafe, **Gheorghita Menghiu**, *Glycosylated recombinant chitinase A, a suitable enzyme for biotechnological processes of chitin conversion*, 14th Edition of symposium with international participation - New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection – 20-21 octombrie, 2022, Institutul de Chimie Coriolan Drăgulescu, Timișoara, România.
5. **Gheorghita Menghiu**, Renata Kovacevic, Mariana Adina Matica, Daniela Dascalu, Bianca Vanesa Boros, Zoran Stevanovic, Adriana Isvoran, Vasile Ostafe, *Cleaning metal-polluted water using microorganisms generally recognized as safe for humans*, 7th International Congress "Engineering, Environment and Materials in Process Industry", 17-19 martie, 2021, Jahorina, Bosnia și Herțegovina.

6. **Gheorghita Menghiu**, Vasile Ostafe, *Chitinazele cu proprietăți îmbunătățite: soluție pentru managementul și valorificarea deșeurilor de chitină*, Conferința Școlilor Doctorale din Consorțiu, Ed. a III-a – 2020 / Chimie, online, 12 Decembrie 2020, Universitatea din București, Romania.
7. **Gheorghita Menghiu**, Bianca-Vanesa Boros, Adina Mariana Matica Vasile Ostafe, *Chitinases – Enzymes suitable for the production of chitooligosaccharides used in wound healing*, International Conferene on Cell and Gene Therapy, 26-27 noiembrie, 2019, Lisabona, Portugalia.
8. **Gheorghita Menghiu**, Vasile Ostafe, *Chitinazele termostabile: biocatalizatori pentru obținerea de chitooligozaharide folosite în industria biocombustibililor*, Conferința Școlilor Doctorale din Consorțiu, Ed. a II-a – 2019 / Chimie, 11-14 Noiembrie 2019, Universitatea de Vest din Timișoara, Romania.
9. **Gheorghita Menghiu**, Vasile Ostafe, *Chitinases: An option for the future of nanomedicine, nanobiotechnology and nanoagriculture*, Workshop Nano-Mod, 22-23 aprilie, 2019, Universitatea de Vest Timisoara, Romania.
10. **Gheorghita Menghiu**, Vasile Ostafe, Raluca Ostafe, *Development of high-throughput screening systems based on FACS or microfluidic devices for the directed evolution of chitinases* 15th FEBS Young Scientists Forum (YSF), 2 – 4 iulie, 2015, Berlin, Germania; Book of Abstracts p. 116 (2015).
11. **Gheorghita Menghiu**, Vasile Ostafe, Raluca Ostafe, *Development of high-throughput screening systems based on FACS or microfluidic devices for the directed evolution of chitinases* 40th Congress of The Federation of European Biochemical Societies (FEBS), 4 – 9 iulie, 2015, Berlin, Germania; Book of Abstracts p. 63 (2015).