

LISTA LUCRĂRILOR ȘTIINȚIFICE

Conf.univ.dr.ing Lăcrămioara Rusu

Articole publicate în reviste cotate ISI

1. **Rusu, L.***, Grigoraș, C. G., Simion, A. I., Suceveanu, E. M., Blaga, A. C., & Harja, M. (2022). Encapsulation of *Saccharomyces pastorianus* Residual Biomass in Calcium Alginate Matrix with Insights in Ethacridine Lactate Biosorption. *Polymers*, eISSN:2073-4360, 14(1), 170.; <https://doi.org/10.3390/polym14010170>
2. **Rusu, L.***, Grigoraș, C. G., Simion, A. I., Suceveanu, E. M., Dediu Botezatu, A. V., & Harja, M. (2022). Biosorptive Removal of Ethacridine Lactate from Aqueous So-lutions by *Saccharomyces Pastorianus* Residual Bio-mass/Calcium Alginate Composite Beads: Fixed-bed Column Study. *Materials*, eISSN:1996-1944, 15, 4657. <https://doi.org/10.3390/ma15134657>
3. Istrate, A. M., Dabija, A., Codină, G. G., & **Rusu, L.*** (2021). Influence of hemp flour on dough rheology and bread quality. *Scientific Study & Research. Chemistry & Chemical Engineering, Biotechnology, Food Industry*, ISSN 1582-540X, 22(4), 521-531.
4. **Rusu, L.***, Grigoraș, C. G., Simion, A. I., Suceveanu, E. M., Șuteu, D., & Harja, M. (2021). Application of *Saccharomyces cerevisiae*/calcium alginate composite beads for cephalixin antibiotic biosorption from aqueous solutions. *Materials*, eISSN:1996-1944, 14(16), 4728. <https://doi.org/10.3390/ma14164728>
5. **Rusu, L.***, Grigoraș, C. G., Suceveanu, E. M., Simion, A. I., Dediu Botezatu, A. V., Istrate, B., & Doroftei, I. (2021). Eco-friendly biosorbents based on microbial biomass and natural polymers: Synthesis, characterization and application for the removal of drugs and dyes from aqueous solutions. *Materials*, eISSN:1996-1944, 14(17), 4810. <https://doi.org/10.3390/ma14174810>
6. Horciu, L. I., Zaharia, C., Blaga, A. C., **Rusu, L.**, & Suteu, D. (2021). Brilliant Red HE-3B Dye Biosorption by Immobilized Residual Consortium *Bacillus* sp. Biomass: Fixed-Bed Column Studies. *Applied Sciences*, eISSN:2076-341711, 11(10), 4498. <https://doi.org/10.3390/app11104498>
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8. Suteu, D., **Rusu, L.**, Zaharia, C., Badeanu, M., & Daraban, G. M. (2020). Challenge of utilization vegetal extracts as natural plant protection products. *Applied Sciences*, eISSN: 2076-3417, 10(24), 8913. <https://doi.org/10.3390/app10248913>
9. Horciu, I. L., Blaga, A. C., **Rusu, L.**, Zaharia, C., & Suteu, D. (2020). Biosorption of reactive dyes from aqueous media using the *Bacillus* sp. residual biomass. *Desalination and Water Treatment*, ISSN:1944-3994 (Print), ISSN:1944-3986(Online), 195, 353-360. doi: 10.5004/dwt.2020.25901
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Brevete de invenție

1. Nedeff, V., Ciobanu, D., Macoveanu, M., Chiriac, A, **Rusu, L.**, Simion, A.I. (2017). Ecological aerobic process for the biodegradation of the mixture formed by the use of excess by-products from the wood working industry and beer making industry, and the resulting products: ecological organic biofertilizers/ Procedeu ecologic aerob de

biodegradare a amestecului format din valorificarea subproduselor excedentare din industria lemnului și industria berii, cu produsele realizate; biofertilizatori organici ecologici, **RO129229-A2**, C05F 5/00 (2006.01)

2. Nedeff, V., Ciobanu, D., Macoveanu, M., Chiriac, A, **Rusu, L.**, Simion, A.I. (2017). Anaerobic biodegrading process for industrial organic by-products mixture and ecological organic biofort-type products obtained thereby/ Procedeu de biodegradare anaerob pentru amestecul format din subprodusele organice industriale și produsele tip biofort organic ecologic realizate, **RO129161-A2**, C05F 5/00 (2006.01)

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1. Turcov, D., Zbranca, A., Rusu, L., & Șuteu, D. (2021). Lycopene–Background, perspectives and challenges in dermato-cosmetic formulas. *Bull. Polytech. Inst. Iasi Sect. Chem. Chem. Eng*, 67 (71), No. 2, 9-21.
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8. Simion, A.I., Dobrovici, P., **Rusu L.**, Gavrilă, L., (2011). Modeling of the Thermo-Physical Properties of Grapes Juice III. Viscosity and Heat Capacity, *Scientific Study & Research - Chemistry & Chemical Engineering, Biotechnology, Food Industry* (ISSN 1582-540X), XII (4), 409-420.
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Contracte de cercetare

Director de proiect

1. **Obținerea de Materiale cu Valoare Adăugată prin Valorificarea Subproduselor Industriale (AddValueMat), PN-III-P2-2.1-PED-2019-1063**, Contract finanțare: **490PED/2020**, Valoare contract: 200 000 lei, Perioada: **2020-2022**
2. Study regarding the influence of pollutant factors of S.C. PAL EKC S.R.L. Company on the environment, No. 3318 / 09.05.2005, **2005 – 2006**
3. Obținerea unui îngrășământ ecologic pentru zonele montane. Grant de cercetare științifică, Beneficiar MCT, 1999.
4. Îngrășăminte lichide cu efect fungicid pentru cultura viței de vie și a pomilor fructiferi. Grant de cercetare științifică, Beneficiar MCT, 1997-1998.
5. Elaborarea tehnologiilor de recuperare a cuprului și magneziului și de obținere a stearatului de magneziu prin valorificarea catalizatorului uzat $\text{Cu-Mg-Al}_2\text{O}_3$; Contract de cercetare științifică, Beneficiar. SC Fibrex SA Săvinești, 1993-1995.
6. Tehnologie de obținere a auxiliarelor pentru industria firelor și fibrelor sintetice, a prelucrării maselor plastice și a cauciucului. Grant de cercetare științifică, Beneficiar MCT, 1993-1994.
7. Valorificarea catalizatorului uzat de la fabricarea margarinei, Grant de cercetare științifică, Beneficiar MCT, 1993.

Membre în echipă

1. Environment and wastes – Sustainable development and wastes, No. 3/376/30.07.2007, Valoare =11000 lei, **2007 – 2008**.
2. Elaborarea unor tehnologii de obținere de îngrășăminte chimice, corelată cu cercetările privind procesul de degradare și tehnologiile de conservare a solurilor din Podișul Moldovei. Contract de cercetare științifică, Beneficiar Comisia teritorială inter-disciplinară pentru cercetare –dezvoltare MOLDOVA I, Iași, **1998**.

3. Obținerea unor compuși pentru sertizarea semințelor cu efect nutritiv, stimulent și antidăunător. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1996-1997**,
4. Valorificarea deșeurilor menajere din marile aglomerări urbane pentru obținerea unor îngrășăminte tip compost. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1995-1997**.
5. Valorificarea carbonatului de calciu rezidual de la obținerea îngrășămintelor complexe în industria farmaceutică și cosmetică. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1995-1996**.
6. Tehnologie de obținere a extractelor din plante pentru industria alimentară și cosmetică. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1994-1995**.
7. Obținerea unui îngrășământ azotos pentru utilizare în horticultură și legumicultură. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1994-1995**.
8. Soluție tehnologică privind modificarea tehnologiei de fabricare a îngrășămintelor cu fosfor prin atac nitric în vederea eliminării deșeurilor de carbonat de calciu. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1994-1995**.
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10. Obținerea îngrășămintelor azotoase cu un conținut de maxim 2% Zn. Grant de cercetare științifică, Beneficiar Ministerul Cercetării și Tehnologiei, **1992-1993**.

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Manager proiect

1. Titlu proiect: „Parteneriat pentru stagii de practică - Primul pas pentru o carieră în industria alimentară” Cod SMIS 108612, Programul Operațional Capital Uman 2014-2020, Axa prioritară 6, Obiectivul tematic 10, Prioritatea de investiții 10.iv, OS. 6.13 și 6.14, Apel nr. POCU/90/6.13/6.14– Stagii de practică elevi și studenți în sectorul agroalimentar, industrie și servicii.” ID Cod SMIS 2014+:108612, 2.
Contract de finanțare nr: **POCU/90/6.13/6.14/108612/05.07.2018** (49063/05.07.2018),
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04.07.2022

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