



Universitatea Nationala de Stiinta si Tehnologie POLITEHNICA București
Facultatea de INGINERIE CHIMICA SI BIOTEHNOLOGII
Departamentul de Chimie Anorganica, Chimie Fizica si Electrochimie
Domeniul de studii: INGINERIE CHIMICA
Programul de studii de licenta: CHIMIE ALIMENTARA SI TEHNOLOGII BIOCHIMICE

L I S T A

lucrărilor științifice în domeniul de studii INGINERIE CHIMICĂ

A. Teza de doctorat

1. **Racoviță, R.C.**, „*Identification and Quantification of Surface Wax Compounds Covering Aerial Organs of Selected Plant Species*”, The University of British Columbia: Vancouver BC, Canada, **2016**, DOI: 10.14288/1.0308612.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. **Racoviță, R.C.**, Ciucă, M.D. „*Wastewater Treatment Approaches for the Removal of Antidepressant Residues*”, In WASTEWATER TREATMENT AND SLUDGE MANAGEMENT SYSTEMS – THE GUTTER-TO-GOOD APPROACHES; Tașeli, B.K., Jacob-Lopes, E., Costa Depra M., Queiroz Zepka L., Eds.; IntechOpen: London, United Kingdom, 2025, ISBN 978-0-85466-743-7, DOI: 10.5772/intechopen.1001656.
2. Crișciu, A., Mihaly, M., Pilan, L., Sima, S., **Racoviță, R.C.**, Secuianu, C. „*Concursul național de chimie pentru elevi C.D. Nenițescu. Chimie fizică. Subiecte și rezolvări*”, Editura Politehnica Press: București, 2021, ISBN 978-606-515-946-4.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani (va rugam sa precizati la fiecare lucrare felul indexarii!)

1. Comănescu, C., **Racoviță, R.C.*** *An Overview of Degradation Strategies for Amitriptyline*. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES **2024**, 25(7), 3822, ISI Q1.
2. Ciucă, M.D., **Racoviță, R.C.*** *Development of Visible Spectrophotometric Methods for the Determination of Tricyclic Antidepressants Based on Formation of Molecular Complexes with p-Benzoquinones*. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES **2023**, 24(23), 16744, ISI Q1.
3. **Racoviță, R.C.*** , Ciucă, M.D., Catană, D., Comănescu, C., Ciocîrlan, O. *Microemulsions of Nonionic Surfactant with Water and Various Homologous Esters: Preparation, Phase Transitions, Physical Property Measurements, and Application for Extraction of Tricyclic Antidepressant Drugs from Aqueous Media*. NANOMATERIALS **2023**, 13(16), 2311, ISI Q2.

4. Ciucă, M.D., **Racoviță, R.C.*** *Curcumin: Overview of Extraction Methods, Health Benefits, and Encapsulation and Delivery Using Microemulsions and Nanoemulsions*. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES **2023**, 24(10), 8874, ISI Q1.
5. **Racoviță, R.C.**, Secuianu, C., Israel-Roming F. *Quantification and Risk Assessment of Carcinogenic Polycyclic Aromatic Hydrocarbons in Retail Smoked Fish and Smoked Cheeses*. FOOD CONTROL **2021**, 121, 107586, ISI Q1.
6. Ioniță, M., Crișciu, A., **Racoviță, R.C.**, Sima, S., Secuianu C. *Phase Diagram Predictions for Carbon Dioxide + Different Classes of Organic Substances at High Pressures*. UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE **2021**, 83(2), 117-132, ISI Q4.
7. **Racoviță, R.C.**, Secuianu, C., Ciucă, M.D., Israel-Roming F. *Effects of Smoking Temperature, Smoking Time, and Type of Wood Sawdust on Polycyclic Aromatic Hydrocarbon Accumulation Levels in Directly Smoked Pork Sausages*. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY **2020**, 68(35), 9530-9536, ISI Q1.
8. **Racoviță, R.C.**, Crișciu, A.V., Sima, S., Secuianu, C. *A Convenient Hybrid Method for Obtaining Liquid-Liquid Equilibrium Data in Ternary Systems*. JOURNAL OF CHEMICAL & ENGINEERING DATA **2020**, 65, 3384-3392, ISI Q2.
9. Sima, S., **Racoviță, R.C.**, Chirilă, A., Deaconu, D., Feroiu, V., Secuianu, C. *Phase Behaviour Calculations for the Carbon Dioxide + 1,2-Dimethoxyethane Binary System with a Cubic Equation of State*. STUDIA UBB CHEMIA **2019**, LXIV (3), 129-142, ISI Q4.
10. Kim, O.T., Um, Y., Jin, M.L., Kim, J.U., Hegebarth, D., Busta, L., **Racoviță, R.C.**, Jetter, R. *A Novel Multifunctional C-23 Oxidase, CYP714E19, Is Involved in Asiaticoside Biosynthesis*. PLANT AND CELL PHYSIOLOGY **2018**, 59(6), 1200-1213, ISI Q1.
11. Sima, S., **Racoviță, R.C.**, Dincă, C., Feroiu, V., Secuianu, C. *Phase Equilibria Calculations for Carbon Dioxide + 2-Propanol System*. UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE **2017**, 79(4), 11-24, ISI Q4.
12. **Racoviță, R.C.**, Sima, S., Secuianu, C., Feroiu, V. *Phase Behavior Predictions for Carbon Dioxide + Isopropanol Binary System with a Cubic Equation of State*. BULLETIN OF ROMANIAN CHEMICAL ENGINEERING SOCIETY **2017**, 4(2), 2-13, BDI.
13. Apostol, L., Iorga, S., Moșoiu, C., **Racoviță, R.C.**, Niculae, O.M. *The Effects of Partially Defatted Milk Thistle (Silybum marianum) Seed Flour on Wheat Flour*. AGRICULTURE & FOOD **2017**, 5, 74-84, BDI.
14. Apostol, L., Iorga, S., Moșoiu, C., **Racoviță, R.C.**, Niculae, O.M., Vlăsceanu, G. *Alfalfa Concentrate – A Rich Source of Nutrients for Use in Food Products*. AGRICULTURE & FOOD **2017**, 5, 66-73, BDI.
15. **Racoviță, R.C.**, Jetter, R. *Identification of Polyketides in the Cuticular Waxes of Triticum aestivum cv. Bethlehem*. LIPIDS **2016**, 51(12), 1407-1420, ISI Q3.

- 16. Racoviță, R.C.,** Jetter, R. *Identification of In-Chain-Functionalized Compounds and Methyl-Branched Alkanes in Cuticular Waxes of Triticum aestivum cv. Bethlehem.* PLOS ONE **2016**, 11(11), e0165827, ISI Q1.
- 17. Racoviță, R.C.,** Jetter, R. *Composition of the Epicuticular Waxes Coating the Adaxial Side of Phyllostachys aurea Leaves: Identification of Very-Long-Chain Primary Amides.* PHYTOCHEMISTRY **2016**, 130, 252-261, ISI Q1.
- 18. Racoviță, R.C.,** Hen-Avivi, S., Fernandez-Moreno, J.-P., Granell, A., Aharoni, A., Jetter, R. *Composition of Cuticular Waxes Coating Flag Leaf Blades and Peduncles of Triticum aestivum cv. Bethlehem.* PHYTOCHEMISTRY **2016**, 130, 182-192, ISI Q1.
- 19. Wigzell, J.M., Racoviță, R.C.,** Stentiford, B.G., Wilson, M., Harris, M.T., Fletcher, I.W., Mosquin, D.P.K., Justice, D., Beaumont, S.K., Jetter, R., Badyal, J.P.S. *Smart Water Channelling by the Phyllostachys aurea Bamboo through Dual Surface Wettability.* COLLOIDS AND SURFACES A – PHYSICO-CHEMICAL AND ENGINEERING ASPECTS **2016**, 506, 344-355, ISI Q2.
- 20. Hen-Avivi, S., Savin, O., Racoviță, R.C.,** Lee, W.-S., Adamki, N., Malitsky, S., Almekias-Siegl, E., Levi, M., Vautrin, S., Berges, H., Friedlander, G., Kartvelishvily, E., Ben-Zvi, G., Alkan, N., Uauy, C., Kanyuka, K., Jetter, R., Distelfeld, A., Aharoni, A. *A Metabolic Gene Cluster in the Wheat W1 and the Barley Cer-cqu Loci Determines β -Diketone Biosynthesis and Glaucousness.* PLANT CELL **2016**, 28(6), 1440-1460, ISI Q1.
- 21. Fernandez-Moreno, J.-P., Malitsky, S., Lashbrooke, J., Biswal, A., Racoviță, R.C.,** Mellerowicz, E.J., Jetter, R., Orzaez, D., Aharoni, A., Granell, A. *An Efficient Method for Medium-Throughput Screening of Cuticular Wax Composition in Different Plant Species.* METABOLOMICS **2016**, 12(4), 73, ISI Q2.
- 22. Racoviță, R.C.,** Peng, C., Awakawa, T., Abe, I., Jetter, R. *Very-Long-Chain 3-Hydroxy Fatty Acids, 3-Hydroxy Fatty Acid Methyl Esters and 2-Alkanols from Cuticular Waxes of Aloe arborescens Leaves.* PHYTOCHEMISTRY **2015**, 113, 183-194, ISI Q1.

D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referenți (neindexate)
- Reviste

Nu este cazul

- Selecție cu maximum 20 lucrări în volume de conferințe

- 1. Racoviță, R.C.** *Microemulsions - Nanoheterogeneous Fluid Systems Serving as Green Extraction Solvents and Micellar Photoreactors for Water Remediation from Emerging Pharmaceutical Contaminants*, 3rd World Conference on Materials Science and Nanotechnology (WCMSN), Copenhagen, Denmark, 19–21 Jul 2024 (keynote).
- 2. Racoviță, R.C.,** Ciuca, M.D. *Comparative Photostability of Tricyclic Antidepressant Drugs in Aqueous Solution*, 23rd Romanian International Conference on Chemistry and Chemical Engineering RICCE 23, Mamaia, Romania, 4–7 Sep 2024 (poster).

3. Catană, D., **Racoviță, R.C.**, Ciucă, M.D., Mihaly, M. *Efficient Recovery of Antidepressants from Aqueous Media by Microemulsion Extraction System*, 17th International Conference of Physical Chemistry ROMPHYSICHEM 17, Bucharest, Romania, 25–27 Sep 2023 (poster).
4. Murat, N., **Racoviță, R.C.**, Ungureanu, E.M., Bujduveanu, M.R., Catana, D. *Investigation of Tricyclic Active Compounds in Commercial Antidepressant Drugs by Electrochemical Methods*, 17th International Conference of Physical Chemistry ROMPHYSICHEM 17, Bucharest, Romania, 25–27 Sep 2023 (poster).
5. **Racoviță, R.C.**, Ciuca, M.D., Catana, D., Anton, A.M., Mihaly, M. *Photodegradation of Five Tricyclic Antidepressant Drugs from Simulated Wastewaters under Various Conditions*, International Conference on Chemical, Biological and Environmental Engineering (ICCBEE-2023), Marseille, France, 10–11 Sep 2023 (prezentare orală).
6. **Racoviță, R.C.**, Ciuca, M.D., Catana, D., Mihaly M. *Molecular Complexes of Five Tricyclic Antidepressants with Chloranilic Acid: Determination of Stoichiometric Ratios, Molar Absorptivities, and Stability Constants in Acetonitrile-Chloroform Solvent*, EnSci Singapore 2023 – International Conference on Engineering & Sciences, Singapore, Singapore, 24–26 Jun 2023 (prezentare orală).
7. **Racoviță, R.C.**, Catana, D., Ciuca, M.D., Ciocirlan, O., Mihaly M. *Microemulsions Based on Ester Oils and Nonionic Surfactant as Nanoheterogeneous Extraction Systems for Tricyclic Antidepressant Drug Residues in Wastewaters*, 2nd World Conference on Materials Science and Nanotechnology (WCMSN), Bruxelles, Belgium, 26–28 May 2023 (prezentare orală).
8. **Racoviță, R.C.**, Ciuca, M.D., Murat, N., Catana, D., Mihaly, M. *Influence of UV Irradiation Wavelength and of Carboxylated Additives on the Kinetics of Photodegradation of Five Tricyclic Antidepressant Drugs in Aqueous Medium*, 3rd Anatolian Conference on Organic Chemistry ACOC3, Kemer, Turkey, 13–16 Mar 2023 (poster).
9. **Racoviță, R.C.**, Anton, A.M., Catana, D., Ciuca, M.D., Hirjau, A.C., Mihaly, M., Rau, I. *Development and Internal Validation of Spectroscopic and Chromatographic Methods for Monitoring Antidepressant Drug Residues in Wastewaters*, 22nd Romanian International Conference on Chemistry and Chemical Engineering RICCCCE 22, Sinaia, Romania, 7–9 Sep 2022 (poster).
10. Catană, D., Meghea, A., Mihaly, M., **Racoviță, R.C.**, Anton, A.M., Ciuca, M.D., Hirjau, A.C. *Optimization of Extraction Methods into Microemulsion Systems Applied for Photodegradation of Some Aqueous Organic Contaminants*, 22nd Romanian International Conference on Chemistry and Chemical Engineering RICCCCE 22, Sinaia, Romania, 7–9 Sep 2022 (poster).
11. **Racoviță, R.C.**, Catană, D., Anton, A.M., Ciucă, M.D., Hirjău, A.C., Mihaly, M., Rău, I. *Comparison of Photodegradation Rates of Tricyclic Antidepressant Contaminants in Simulated Wastewaters under Natural Light and UV Irradiation*, 2022 Lisbon 32nd International Conference on Advances in Chemical, Biological & Environmental Sciences (ACBES-22), Lisbon, Portugal, 14–15 Jul 2022 (prezentare orală).
12. **Racoviță, R.C.**, Ciuca, M.D., Secuianu, C., Israel-Roming, F. *Studies of Polycyclic Aromatic Hydrocarbon Contamination Levels of Pork Sausages Smoked under Variable Conditions*, Advances in Food Chemistry 2021 Conference, Bucharest, Romania, 15–17 Apr 2021 (prezentare orală).

13. Racoviță, R.C., Israel-Roming, F. *Development and Application of a Gas Chromatography–Mass Spectrometry Method for Detection and Quantification of Polycyclic Aromatic Hydrocarbons in Smoked Food Products*, 10th International Conference on Biology, Environment and Chemistry ICBE 2019, Bangkok, Thailand, 25–27 Sep 2019 (prezentare orală).

14. Racoviță, R.C., Crisciu, A.V., Ciuca, M.D., Popa, I.A., Varzaru, A.C., Sima, S., Secuianu, C. *Experimental Studies of Several Type I Liquid-Liquid Ternary Systems*, 21st Romanian International Conference on Chemistry and Chemical Engineering RICCE 21, Mamaia, Romania, 4–7 Sep 2019 (prezentare orală).

15. Sima, S., Racoviță, R.C., Dinca, C., Feroiu, V., Secuianu, C. *Alternative Green Solvents for CO₂ Capture: Experiments and Modeling*, 21st Romanian International Conference on Chemistry and Chemical Engineering RICCE 21, Mamaia, Romania, 4–7 Sep 2019 (prezentare orală).

16. Sima, S., Varzaru, A.C., Racoviță, R.C., Feroiu, V., Secuianu, C. *Phase Equilibria in Systems of CO₂ and Esters*, 21st Romanian International Conference on Chemistry and Chemical Engineering RICCE 21, Mamaia, Romania, 4–7 Sep 2019 (prezentare orală).

17. Sima, S., Ionita, M., Racoviță, R.C., Feroiu, V., Secuianu, C. *Phase Equilibria and Densities of CO₂ + 1-Hexanol*, 21st Romanian International Conference on Chemistry and Chemical Engineering RICCE 21, Mamaia, Romania, 4–7 Sep 2019 (prezentare orală).

18. Racoviță, R.C., Israel-Roming, F. *Assessment of Polycyclic Aromatic Hydrocarbons in Retail Smoked Foodstuffs on the Romanian Market by Gas Chromatography-Mass Spectrometry*, 6th International Conference on Food Security and Nutrition ICFSN 2019 and 10th International Conference on Biotechnology and Food Science ICBFS 2019, Barcelona, Spain, 8–10 Apr 2019 (prezentare orală).

19. Racoviță, R.C., Israel-Roming, F. *A GC-MS Method for the Determination of PAHs*, 2nd Black Sea Association of Food Science and Technology Congress B-FoST 2018, Yerevan, Armenia, 15–17 Oct 2018 (poster).

20. Sima, S., Racoviță, R.C., Secuianu, C., Feroiu, V. *High-Pressure Phase Equilibrium in the Carbon Dioxide + 1,4-Dioxane System*, 30th European Symposium on Applied Thermodynamics, Prague, Czech Republic, 10–13 Jun 2018 (poster).

E. Brevete obținute în întreaga activitate

Nu este cazul