

LISTA DE LUCRĂRI

1. Teza de doctorat, ”Impactul produselor de protecție a plantelor asupra calității strugurilor și vinului”, Ploiesti, 2013;
2. TEZĂ DE ABILITARE, „Impactul tratamentelor aplicate solului și al tehnologiilor de conversie a biomasei asupra mediului”, Bacau, 2025;

I. Lucrări cotate ISI

A. Articole publicate în reviste indexate ISI

1. Maria Tănase, Alin Diniță, Daniela Roxana Popovici*, Alexandra-Ileana Portoacă, **Cătălina Călin***, Elena-Emilia Sirbu, Comprehensive Bibliometric Review on the Sustainability and Environmental Impact of Fiber-Reinforced Polymers, *Fibers*, **2024**; <https://doi.org/10.3390/fib12120104>;
2. **Călin, C.**, Sîrbu, E.-E., Tănase, M., György, R., Popovici, D.R., Banu, I., A Thermogravimetric Analysis of Biomass Conversion to Biochar: Experimental and Kinetic Modeling, *Applied Sciences*, **2024**, 14; <https://doi.org/10.3390/app14219856>;
3. Sîrbu EE, Dinita, A., Tanase, M., Portoaca, A., Bondarev A., Enascuta C.E., **Calin C.**, Influence of Plasticizers Concentration on Thermal, Mechanical, and Physicochemical Properties on Starch Films, *Processes*. **2024**, 12(9), 2021; <https://doi.org/10.3390/pr12092021>;
4. Madjar R.M., **Călin C.**, (Vasile) Scăețeanu G., Sîrbu E-E., Grigoriu N., Metal Chelator Effect Of Glyphosate Application In Soil On Micronutrients Availability, *AgroLife Scientific Journal* - Volume 13, Number 1, **2024**;
5. **Calin C.**, Dinita, A., Branoiu, G., Popovici DR., Tanase, M., Sirbu, EE., Portoaca, A., Mihai S., Assessment of Environmental Impact of Glass-Fiber-Reinforced Polymer Pipes Mechanical and Thermal Properties, *POLYMERS*, 16(13), p. 1779, **2024**;
6. Portoaca, A., Dinita, A., Tanase, M., Savulescu, A., Sirbu, EE., **Calin, C.**, Branoiu, G., Analyzing Sustainable 3D Printing Processes: Mechanical, Thermal, and Crystallographic Insights, *POLYMERS*, 16(10), p. 1364, **2024**;

7. Mihai, S., Bondarev, A., **Calin, C.**, Sirbu, EE., Adsorbent Biomaterials Based on Natural Clays and Orange Peel Waste for the Removal of Anionic Dyes from Water, **PROCESSES**, 12(5), p.1032, **2024**;
8. Gheorghe, V., Gheorghe, CG., Popovici, DR., Mihai, S., **Calin, C.**, Sarbu, EE., Doukeh, R., Grigoriu, N., Toader, CN., Epure, C., Matei, V., Synthesis, Purity Check, Hydrolysis and Removal of o-Chlorobenzyliden Malononitrile (CBM) by Biological Selective Media, **TOXICS**, 11(8), p. 672, **2023**;
9. Bondarev, A., Popovici, DR., **Calin, C.**, Mihai, S., Sîrbu, EE., Doukeh, R., Black Tea Waste as Green Adsorbent for Nitrate Removal from Aqueous Solutions, **MATERIALS**, 16(12), p.4285, **2023**;
10. **Calin C.**, Leostean C., Trifoi Ancuta, Oprescu E.-E., Wiita E, Banu I., Mutual inhibition effect of sulfur compounds in the hydrodesulfurization of thiophene, 2-ethylthiophene and benzothiophene ternary mixture, **Scientific Reports**, 11(1), p.19053, **2021**;
11. Oprescu, E.-E., Enascuta C.-E., Doukeh, R., **Calin, C.**, Lavric, V., Characterizing and using a new bi-functional catalyst to sustainably synthesize methyl levulinate from biomass carbohydrates, **Renewable Energy**, 176, p. 651-662, **2021**;
12. Doukeh, R., Bombos, D., Bombos, M., Oprescu, E.-E., Dumitrascu, G., Vasilievici, G., **Calin, C.** Catalytic hydrotreating of bio-oil and evaluation of main noxious emissions of gaseous phase, **Scientific Reports**, 11(1), p. 6179, **2021**;
13. Bombos, M., Oprescu, E.E., **Calin, C.**, Vasilievici, G., Velea, S., Bombos, D. Slow pyrolysis of biomass in acidic or metallic catalysis, **Revista de Chimie**, 70(9), p.3148-3151, **2019**; WOS:000489958900012, FI = 1.755;
14. Georgescu, V., Bombos, M., **Calin, C.**, Bombos, D, Physico - Chemical and Morphologic Structural Characterization of the Red Mud Obtained in the Romanian Alumina Plant, **Revista de Chimie**, 70(2), p. 565-570, **2019**; WOS:000461982200041, FI = 1.755;
15. Grigoriu, N., **Calin, C.**, Scaeteanu, GV., Madjar, RM., Lungu, RM., Epure, G., Monitoring the breakdown of Dinocap in spiked soil, wine and grape samples by GC/MS and FTIR/ATR, **Environmental Engineering and Management Journal**, 17(9), p. 2179-2188, **2018**;
16. Emanuela C.E., Stepan E., Bolocan I., Bombos D., **Calin C.**, Oprescu E.-E., Vasile L., Simultaneous production of oil enriched in ω -3 polyunsaturated fatty acids and biodiesel from fish wastes, **Waste Management**, 75, p.205-214, **2018**;
17. Ilie, L., Mihalache, M., Madjar, RM., **Calin, C.**, Scaeteanu, GV., Effect of Sewage Sludge Amended Soil on Maize Crop I. Influence on yield and mineral nutrition, **Revista de Chimie**, 69(3), p. 561-566, **2018**; WOS:000430946500006, FI = 1.605;

18. Radu, E., Oprescu, E.-E., Enascuta, C.E., **Calin, C.**, Stoica, R., Scaeteanu, G.V., Vasilievici, G., Capra, L., Ivan, G., Ion, A.C., Kinetic adsorption of humic acids mixture obtained from microalgae on exfoliated graphite nanoplatelets, **Revista de Chimie**, 69(1), p. 191-195, **2018**; WOS:000425369600040, FI= 1.605;
19. **Calin, C.**, Scaeteanu, G.V., Madjar, R.M., Cangea, O., Influence of Applied Phytosanitary Treatments and Climatic Crop Year on Zinc Content in Wines from Tohani Vineyard, **Revista de Chimie**, 68(9), p. 2092-2097, **2017**; WOS:000416748800031, FI = 1.412;
20. Neagu, M., Popovici, D.R., Vijan, L.E., **Calin, C.**, Adsorption of p-Cresol by Mesoporous Activated Carbon II. Mechanism studies and data modeling, **Revista de Chimie**, 68(3), p. 496-499, **2017**; WOS:000400731900015, FI = 1.412;
21. Neagu, M., Popovici, D.R., Dutescu, C.M., **Calin, C.**, Adsorption of p-Cresol by Mesoporous Activated Carbon I. Kinetics studies and data modeling, **Revista de Chimie**, 68(1), p.139-142, **2017**; WOS:000395499200030, FI = 1.412;
22. Scaeteanu, G.V., Madjar, R.M., **Calin, C.**, Peticila, A.G., Pantea, O., Impact of Soil Properties on Variability of Iron Content in Wines from Tohani Vineyard, **Revista de Chimie**, 67(9), p. 1751-1757, **2016**; WOS:000385266600021, FI = 1.232;
23. Mihai, O., **Calin, C.**, Marinescu, C., Natu, N., Pantea, O., Matei, D., The Adsorption Study of the Cyanides Using Solid Adsorbents, **Revista de Chimie**, 67(8), p. 1594-1598, **2016**; WOS:000384514200040, FI = 1.232;
24. Cangea, O., **Calin, C.**, Popa, C., Pantea, O., Radu, E., Estimating the Selectivity Coefficient of Cl-ISE using Polynomial Regression, **Revista de Chimie**, 67(8), p. 1613-1617, **2016**; WOS:000384514200043, FI = 1.232;
25. Bondarev, A., Pantea, O., Mihai, S., **Calin, C.**, Gheorghe, C.G., Removal of Cadmium from Aqueous Solutions Using Low Cost Sorbents, **Revista de Chimie**, 67(4), p. 728-733, **2016**; WOS:000376549200029, FI = 1.232;
26. Radu E., Stoica, R., **Calin, C.**, Oprescu E.-E., Bolocan, I., Ion, I., Ion, C.A., Validation of a RP-HPLC-UV method for the determination of bisphenol a at low levels in natural mineral water, **Revista de Chimie**, 67(2), p. 236-240, **2016**; WOS:000372170700007, FI = 1.232;
27. Peticila, A.G., Madjar, R., Scaeteanu, G.V., **Calin, C.**, Rooting Evaluation for Green Cuttings at Actinidia Sp under Rhizogene Hormonal Treatments, **Romanian Biotechnological Letters**, 21(1), p. 11160-11165, **2016**; WOS:000371434300010, FI = 0.396;

28. Nicolescu, F., Lupu, F., Pantea, O., Gheorghe, CG., Bondarev, A., **Calin, C.**, Toxicity Study of Benzene, Toluene and Xylene (BTX) at Exposure on Some Experimental Groups, **Revista de Chimie**, 66(8), p. 1181-1183, **2015**; WOS:000361124600022, FI = 0.956;
29. Mihalache, M., Ilie, L., Madjar, RM., **Calin, C.**, Scaeteanu, GV., .Effect of Sewage Sludge Amended Soil on Mineral Nutrition and Metal Accumulation on Sunflower Crop, **Revista de Chimie**, 66(7), p. 951-957, **2015**; WOS:000359179900007, FI = 0.956;
30. Stancu, A., **Calin, C.**, Pantea, O., Ene, C., Identification of Correlations Between Chemical Substances and Sensory Characteristics of Feteasca Alba via Bravais-Pearson Coefficient, **Revista de Chimie**, 66(6), p. 778-783, **2015**; WOS:000357403600005, FI = 0.956;
31. Grigore, E., Pantea, O., Bombos, D., **Calin, C.**, Bondarev, A., Gheorghe, C., Effect of Inhibitors based Amine Derivates on Some Carbon Steel Corrosion, **Revista de Chimie**, 66(5), p. 685-690, **2015**; WOS:000355126000018, FI = 0.956;
32. Ilie, L., Scaeteanu, GV., Mihalache, M., Madjar, RM., **Calin, C.**, Assessment of Metal Contents in Soil after Sewage Sludge Treatments Associated or not with Mineral Fertilization, **Revista de Chimie**, 65(12), p. 1485-1489, **2014**; WOS:000345946400018, FI = 0.81;
33. Madjar, RM., Scaeteanu, GV., Mihalache, M., **Calin, C.**, Dan, VS., Peticila, A., Nutrition Intensity in Ternary Diagrams Interpretation for Some Ornamental Species Cultivated on Organic Substrate with Increased Biological Activity, **Notulae Botanicae Horti Agrobotanici Cluj-Napoca**, 42(2), p. 573-578, **2014**;
34. **Calin, C.**, Scaeteanu, G., Pantea, O., Ilie, L., Bondarev, A., Mihai, S., .Influence of Dithiocarbamates used for Phytosanitary Treatments on the Microelement Contents from Vineyard Soil in Tohani Region of Romania, **Revista de Chimie**, 65(4), p. 497-501, **2014**; WOS:000338605100023, FI = 0.81;
35. Lupu, F., Gheorghe, CG., Pantea, O., **Calin, C.**, Biotreatment of the Oil Pollutants, **Revista de Chimie**, 64(2), p.210-212, **2013**; WOS:000315756400021, FI = 0.677;
36. **Calin, C.**, Scaeteanu, G., Pele, M., Ilie, L., Pantea, O., Bombos, D., Assessment of Copper Content in Wines from Tohani-Dealul Mare by Flame Atomic Absorption Spectrometry, **Revista de Chimie**, 63(10), p. 1062-1064, **2012**; WOS:000311927200018, FI = 0.538;
37. **Calin, C.**, Vasile, G., Bombos, D., Pele, M., Lupu, F., Modification of Macronutrients and Copper Content from Soil Before and After P Phytosanitary Treatments in Vineyard from

Tohani-Dealul Mare, **Revista de Chimie** 62(10), p. 1042-1045, **2011**; WOS :000296933300018, FI = 0,599;

B. Articole publicate la conferințe indexate ISI

1. Oprescu, E.-E., Enascuta, C.E., Vasilievici, G., **Calin, C.**, Popa, C., Lavric, V., Conversion of biomass under heterogeneous catalyst into levulinic esters (**Conference Paper**), International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, Albena; Bulgaria, Volume 19, Issue 4.1, Pages 107-114; **2019**;

C. Articole BDI

1. M. Mihalache, L. Ilie, G. (Vasile) Scaeteanu, **C. Calin**, R. M. Madjar, Impacts of Using Mineral Fertilization Combined with Sewage Sludge in the Amendment of Luvisol on Oat Crop.II. Influence on Metal Accumulation, *Revista de Chimie*, 71 (5), 2020, 363-372;

2. L. Ilie, M. Mihalache, R. M. Madjar, **C. Calin**, G. (Vasile) Scaeteanu, Impacts of Using Mineral Fertilization Combined with Sewage Sludge in the Amendment of Luvisol on Oat Crop I. Influence on Yield and Mineral Nutrition, *Revista de Chimie (Rev. Chim.)*, Year 2020, Volume 71, Issue 4, 119-127;

II. Participare la conferințe naționale și internaționale

A. Lucrări prezentate sub formă de poster (publicate sub formă de rezumat)

1. **Catalina Calin**, Daniela Roxana Popovici, Cristina Maria Dutescu Vasile, Elena-Emilia Sirbu, Conversion of Food Waste Into Bioadsorbent, 9th EuChemS Chemistry Congress, Dublin, Ireland, July 7-11, **2024**;

2. Bombos M., Bombos D., Valea S., Vasilievici G., Enascuta C.-E., **Calin C.**, Oprescu E.-E., Catalytic pyrolysis of biogas digestate, ECCE12 & ECAB5 Congress, 15-18 september, Florence, Italy, **2019**;

3. Bombos Dorin, **Calin Catalina**, Velea Sanda, Bombos Mihaela, Enascuta Cristina-Emanuela, Vasilievici Gabriel, Oprescu Elena-Emilia, "Stabilization of the biogas digestate suspension for optimal processing", Simpozionul International, PRIOCHEM XIV, 10-12.10.2018, Bucuresti, Romania, **2018**;

4. Oprescu E.-E., **Calin C.**, Bombos M., Vasilievici G., Enascuta C.E., Velea S., Bombos D., “The pyrolysis of biogas digestate in order to obtain biochar and biofuel”, 7Th EuCheMS Chemistry Congress, 26-30.08., Liverpool, United Kingdom, **2018**;
5. G.Vasile Scăețeanu, R.M.Madjar and **C.Călin**, Metal levels in wine between toxicity and beneficial effects on human health, International Conference on New Research in Agri-food and Tourism BIOATLAS, Brasov-Romania, **2014**;
6. R.M.Madjar, G.Vasile Scaeteanu, **C.Calin**, Perspective on human exposure to pesticides and their metabolites in different media, International Conference on New Research in Agri-food and Tourism BIOATLAS, Brasov-Romania, **2014**;
7. Elena Grigore, Octav Pântea, Dorin Bomboș and **Catalina Călin**, Corrosion and corrosion control of OL37 steel in Cl^- and S^{2-} solutions by different corrosion inhibitors, International Conference of Physical Chemistry ROMPHYSICHEM 15, September 11-13, Bucharest-Romania; **2013**;
8. S.Mihai, O.Pantea, A.Bondarev, **Cătălina Călin**, Synthesis of gold nanoparticles using Schiff base, **Nobelgrade Conference** , 26-28 sept., Belgrade, Serbia, **2012**;
9. G.Scăețeanu, **Cătălina Călin**, L. Ilie, M. Pele, O. Pântea, Manganese content in wine samples from Tohani-Dealul Mare, International Conference on New Research in Agri-food and Tourism BIOATLAS, Brasov-Romania, **2012**;
10. **Cătălina Călin**, G. Vasile, O.Pantea, A. Bondarev, S. Mihai, The influence of dithiocarbamates used for phytosanitary treatments of vineyard on the microelements contents from soil, 15th International Biodeterioration & Biodegradation Symposium, September 19 – 24, Viena, Austria, **2011**;
11. **Cătălina Călin**, G. Vasile, O. Pântea, M. Pele, M. Artimon, The variation of microelements content from soil influenced by phytosanitary treatments applied to vineyard, 2nd edition of International Conference "Science and Technology in the Context of Sustainable Development", Petroleum-Gas University of Ploiești, November 4 -5, **2010**;
12. C. Ciuculescu, G. Epure, P. Pușcasu, O. Oprisor, M. Potorac, **Cătălina Călin**, Metoda de separare și identificare a benzilatului de chinuclidinil prin HPLC cu detecție UV-VIS, a XXX-a Sesiune de Comunicări Științifice a agenției de Cercetare pentru Tehnica și Tehnologii Militare, București, **1998**;

B. Lucrări prezentate sub formă de poster și publicate in extenso în volumele conferințelor (B+)

1. Popescu Mihaela Alexandra, Elena-Emilia Sirbu, **Catalina Calin**, Cristina Popa, Cristina Emanuela Enascuta, PHOSPHATE REMOVAL ON BIOCHAR, SGEM, Bulgaria, Mai **2024**;
2. Enascuta, C.-E., Oprescu, E.-E., **Calin, C.**, Vasilievici, G., Popa, C., ADSORPTION OF NITRATE ON MAGNETIC MICROALGAL BIOCHAR, Volume 22, Issue 6.1, Pages 57 - 64, 2022 22nd International Multidisciplinary Scientific Geoconference: Nano, Bio, Green and Space - Technologies for a Sustainable Future, SGEM Albena 4 July 2022 through 10 July 2022 Code 187361, **2022**;
3. D. Bombos, **C. Calin**, S. Velea, M. Bombos, R. Doukeh, G. Vasilievici, E.-E. Oprescu, Bio-Fluxing Agent for Bitumen Road Based on Pyrolysis Bio-Oil, Proceedings, 29, 108; doi:10.3390/proceedings2019029108, **2019**;
4. Oprescu E.-E., C. E. Enascuta, Stepan E., E. Radu, **C. Calin**, Radu A., Vasile Scaeteanu G., Madjar R. M., „The importance of humic substances in agricultural systems”, International Conference AGRI-FOOD “AGRICULTURE AND FOOD FOR THE XXI CENTURY”, p.110-117, **2017**;
5. R.M.Madjar, G.Vasile Scaeteanu, **C.Calin**, Perspective on human exposure to pesticides and their metabolites in different media, Journal of EcoAgriTourism vol.10, nr.1(28), p.118, **2014**, ISSN 1844-8577, cota B (cod CNCSIS 910), indexat în Cab Abstracts, Global Health.
6. G.Vasile Scăețeanu, R.M.Madjar and **C.Călin**, Metal levels in wine between toxicity and beneficial effects on human health, Journal of EcoAgriTourism, vol.10, nr.1(28), p.109, **2014**, ISSN 1844-8577, cota B (cod CNCSIS 910), indexat în Cab Abstracts, Global Health.
7. G.Scăețeanu, **Cătălina Călin**, L. Ilie, M. Pele, O. Pântea, Manganese content in wine samples from Tohani-Dealul Mare, Journal of EcoAgriTourism- Bulletin of Agri-Ecology, Agri-Food, Bioengineering and Agritourism, 8, 1(24), p.227, **2012**;

C. Lucrări sub formă de prezentări orale (publicate sub formă de rezumat)

1. The study of extracted humic matter from biomass, Oprescu Elena-Emilia, **Călin Cătălina**, Cristea Steliana, Mihai Oana, 2nd International Colloquium Energy and Environmental Protection 9-11 November **2016**, Ploiești-România, <http://tppconferinte.upg-ploiesti.ro/>

2. An overview of copper accumulation in vineyard soils and wine, **Călin Cătălina**, Madjar Roxana Maria, Scăteanu Vasile Gina, Oprescu Emilia-Elena, 2nd International Colloquium Energy and Environmental Protection 9-11 November **2016**, Ploiești-România, <http://tppconferinte.upg-ploiesti.ro/>;

3. G. Vasile Scăteanu, R. M. Madjar, **C. Călin**, A. Peticilă, *Good Agricultural Practices Minimize the Risks of Environmental Pollution*, 1st International Colloquium Energy and Environmental Protection 20-21 November **2014**, Ploiești-România, <http://tppconferinte.upg-ploiesti.ro/>;

4. E. Grigore, O. Pânteș, **C. Călin**, S. Mihai, A. Bondarev, *Corrosion behaviour of OL37 in sulphurous wastewater*, 1st International Colloquium Energy and Environmental Protection 20-21 November **2014**, Ploiești-România, <http://tppconferinte.upg-ploiesti.ro/>;

5. **C. Călin**, O. Pânteș, G. Vasile Scăteanu, R. M. Madjar, N. Grigoriu, *Environmental pollution associated with application of metal-based phytosanitary products*, 1st International Colloquium Energy and Environmental Protection 20-21 November 2014, Ploiești-România, <http://tppconferinte.upg-ploiesti.ro/>;

6. E. Oprescu, D. Bomboș, S. Cristea, C. Călin, E. Stepan, I. Bolocan, *Glycerol acetal ester as biofuel additive*, 1st International Colloquium Energy and Environmental Protection 20-21 November **2014**, Ploiești-România, <http://tppconferinte.upg-ploiesti.ro/>;

III. Alte publicatii

1. Octav Pantea, **Catalina Calin**, Fundamentele analizei chimice si instrumentale. Soluții si echilibre chimice, Editura Universitatii Petrol-Gaze din Ploiesti, **2018**;

IV. Activități de cercetare pe bază de contract

1. 10841/06.06.2023, Cercetari privind obtinerea unor parametri tehnici ai biomaterialului care face obiectul brevetului A202300003-06.01.2023, beneficiar CAHM Europe SA- **Director de contract**;

2. Proiect de cercetare, GO-GISC-9249/15.05.2023, Energie din deșeuri alimentare -EDA, beneficiar UPG-Ploiești, **membru**;

3. 375/390051/30.09.2021-Competitia:63/POC/163/1/3/LDR, Dezvoltarea de ambalaje alimentare inovative fără impact negativ asupra mediului ambiant - AMBAL-INOV, My SMIS: 120994-**membru**;

4. Proiect de cercetare PN III CI nr. 8701/23.08.2018- “ Chelatizanti pentru micronutrienti pe baza de resurse regenerabile (NUTRIL) “, beneficiar UEFISCDI- **Responsabil proiect;**

5. PN III, 2622/2018, Creșterea eficienței energetice a instalațiilor de biogaz prin elaborarea sistemului integrat: biogaz-microalge-biocombustibili, în cadrul conceptului de biorafinare” acronim (AlgalBiogazConcept – Energie) ABC-ENERGIE, UEFISCDI- **membru;**

6. 14/08.06.2015, Caracterizarea fizico-chimică a condensatului de la sondele de extracție a gazelor, S.C. Strattu Energy România LLC Wilmington, Sucursala Blejoi-**membru;**

7. 33/17.11.2015, Analiza cantitativa a unor probe de cenușă grea rezultată din procesul tehnologic al cazanului de abur nr. 4 din cadrul CET-2, prin analiza de absorbție atomică și analiza gravimetrică, în vederea determinării conținutului de CaSO_4 , S.C.Lukoil Energy & Gas România S.R.L. Ploiesti- **Director de contract;**

8. 26/31.07.2014, Conversia deșeurilor de biomasă în derivați ai furanului, în scopul utilizării ca biocarburanți (CARFURAL), UEFISCDI- **membru;**

V. Brevete si cereri de brevete

1. Bombos D., Bombos M., **Calin C.**, Oprescu E.-E., Velea S, Vasilievici G., Catalizator bifuncțional pe baza de Cu-Pd / WO_3 - Nb_2O_5 si procedeu de hidrotratare a bio-uileiului de piroliza pe acesta”/Osim, Nr. 135717/28.03.2025-brevet;

2. Bombos D., Bombos M., **Calin C.**, Oprescu E.-E., Velea S, Vasilievici G.,Catalizator bifuncțional pe baza de Ni-Pt / MoO_3 - SnO_2 si procedeu de hidrocracare a bio-uileiului de piroliza”/Osim, Nr. A00780/25.11.2020;

3. Velea S., Bombos M., Doukeh R., Vasilievici G., Bombos D., Oprescu E.-E., **Calin C.**, "Catalizator pe bază de Mo și procedeu de piroliză lentă a biomasei pe acest catalizator”/Osim, Nr. 819/29.11.2019-brevet;

4. **Calin Catalina**, Bombos Dorin, Oprescu Emilia, SC Atica Chemicals SRL „Procedeu de obtinere a acizilor humici”/Osim, Nr 134216/29.11.2024-brevet.