

Lista de lucrări științifice publicate

Prof. dr. ing. Cristina ORBECI

A. Teza de doctorat

A.1 Cristina Orbeci, „Studii și cercetări privind eliminarea Cr(VI) din soluții apoase prin procese de schimb ionic”, București, 2005; **titlul de doctor** obținut în baza Ordinului Ministrului Educației și Cercetării nr.4802 din 15.08. 2005

A.2. Cristina Orbeci, „Nanomateriale funcționalizate pentru degradarea foto-oxidativă a derivaților fenolici în sisteme membranare”, București, 2013, **teză postdoctorat**, POSDRU/89/1.5/S/54785 "Program postdoctoral de cercetare avansată în domeniul nanomaterialelor-NANOMAT", 2010-2013

A.3. Cristina Orbeci, "Contributions to the field of degradation of organic pollutants from wastewater"; **Atestat de abilitare** Nr. 4629/30.07.2019, în domeniul de studii universitare de doctorat Ingineria Mediului, emis de Ministerul Educației Naționale

B. Brevete de invenție

B. 1. Cristina Orbeci, Annette-Madelene Dăncilă, Cristian Onose, Paul-Octavian Stănescu, RO126666 (B1): „Vopsea fluorescentă cu efect decorativ”; International Patent C09D-005/28: Fluorescent dyes with decorative effect

B. 2. Cristina Orbeci, Ion Untea, Gheorghe Nechifor, RO126662 (B1): "Procedeu foto-Fenton modificat prin generarea in situ a catalizatorului Fe²⁺ pentru oxidarea avansată a compușilor organici din apele reziduale"; International Patent C02F-001/72: Photo-Fenton process modified by in-situ generation of Fe²⁺ catalyst for advanced oxidation of the organic compounds in waste water

B. 3. Cristina Orbeci, Ion Untea, Gheorghe Nechifor, RO128097 (B1): „Sistem fotocatalitic pentru epurarea avansată a apelor reziduale”; International Patent C02F-001/32: Photo-catalytic system for advanced sewage treatment

B.4. Cerere brevet A00056/04.02.2022

Orbeci Cristina, Matei Ecaterina, Râpă Maria, Predescu Cristian, Coman George, Bobirică Constantin și Bobirică Liliana, “Sistem cu membrană polimerică fotocatalitică pentru epurarea foto-oxidativă a apelor reziduale și procedeu de obținere a acestuia”

C. Cărți si capitole de cărți

Ca – Cărți/cursuri (manuale) pentru uzul studentilor, publicate în edituri recunoscute

Ca. 1. Mihaela Mocioi, Cristina Rizea, "Noțiuni de cristalografie și mineralogie", Editura Printech, București, 1999, ISBN 973-9475-94-9

Ca. 2. Cristina Orbeci, Dumitru Turtoi, "Chimia Mediului", Editura Agir, București, 2006, ISBN 973-720-067-5

Ca. 3. Cristian Onose, Cristina Orbeci, Annette-Madelene Dăncilă, „Tehnologii chimice și protecția mediului-îndrumar de laborator”, Editura Politehnica Press, București, 2012, ISBN 978-606-515-414-8

Ca. 4. Cristina Orbeci, Cristina Modrojan, Oanamari Orbulet, Alexandra Raluca Miron, Toxicologie și reactivitate chimică-îndrumar de laborator”, Editura Politehnica Press, București, 2013, ISBN 978-606-515-501-5

Ca. 5. Cristina Orbeci, Toxicologie și reactivitate chimică-note de curs”, Editura POLITEHNICA PRESS, București, 2014 ISBN 978-606-515-566-4

Ca. 6. Cristina Orbeci, Politică și legislație de mediu, Editura Politehnica Press, București, 2015, ISBN 978-606-515-653-1

Cb - Cărți de specialitate publicate în edituri recunoscute (autor, coautor, editor)

Cb. 1. Dumitru Turtoi, Cristina Orbeci, "Protecția Mediului-dicționar explicativ", Editura Universitară, București, 2010, ISBN 978-973-749-828-1

Cb. 2. Cristina Orbeci, Ion Untea „Nanomateriale membranare”; Cap. 3. „Nanomateriale funcționalizate pentru degradarea fotooxidativă a derivaților fenolici in sisteme membranare”, Editor Gh. Nechifor, Editura Printech, Bucuresti 2011, ISBN 978-606-521-624-2

Cb. 3. Cristina Orbeci „Membrane Materials. Membranes. Membrane Processes”, vol. I, Editor Gh. Nechifor, Cap. 6. Materiale si metode performante pentru epurarea apelor uzate”, pag. 125-152, Editura Printech, București 2011, ISBN (volum I) 978-606-521-710-2; ISBN (general) 978-606-521-709-6

Cc - Cărți publicate în edituri internaționale cu ISBN

Cc. 1. Adina Elena Segneanu, Cristina Orbeci, Carmen Lazau, Paula Sfirloaga, Paulina Vlazan, Cornelia Bandas, Ioan Grozescu, chapter 4: Waste Water Treatment Methods, <http://dx.doi.org/10.5772/53755> in "Water Treatment", book edited by Walid Elshorbagy and Rezaul Kabir Chowdhury, ISBN 978-953-51-0928-0, Published: January 16, 2013 under CC BY 3.0 license

Cc. 2. Cristina Orbeci, Constantin Bobirică, Liliana Bobirică, chapter 13: “Photocatalytic degradation of chlorophenols and antibiotics from wastewater” to publish by Springer International Publishing, book title “Water Pollution and Remediation: Photocatalysis”, Edition Number,1, vol 57, 2021, Editors Amir Al-Ahmed, Mohd Imran Ahamed, Eric Lichtfouse, eBook ISBN 978-3-030-54723-3, DOI 10.1007/978-3-030-54723-3, Series ISSN 2213-7114, license to Springer Nature Switzerland AG

D. Articole publicate în reviste cotate ISI

Ris - Reviste de specialitate de circulație internațională recunoscute (cotate ISI)

Ris. 1. I. Untea, C. Orbeci, E. Tudorache, V. Neagu, D. Turtoi - "The evaluation of characteristic parameters at the Cr(VI) retention of aqueous solutions by ion exchange in dynamic conditions on strong base anions, Revista de Chimie, 55(6), p.439-443, 2004, ISSN: 0034-7752, WOS: 000222753600015

Ris. 2. D. Turtoi, G. Zăinescu, El. Tudorache, C. Orbeci, I. Untea, M. Belcu - "Chromium (III) separation from tannery wastewaters by partial freezing", Journal of the Society of Leather Technologists & Chemists, 88(4), p.150-153, 2004, ISSN: 0144-0322, WOS: 000223552500003

Ris. 3. Violeta Neagu, I. Untea, Elena Tudorache, Cristina Orbeci - "Sorption equilibrium of Cr(VI) ions by strong base anion exchangers with pyridine structures", Journal of Applied Polymer Science, 93(4), p.1957-1963, 2004, ISSN: 0021-8995, WOS: 000222481500061

Ris. 4. V. Neagu, I. Untea, E. Tudorache, C. Orbeci – „Etude thermodynamique concernant l'adsorption du phenol des solutions aqueuses sur copolymères styrene-divinylbenzene”, Revue Roumaine de Chimie, 52(4), p.431-435, 2007, ISSN: 0035-3930, WOS: 000250567300018

Ris. 5. Cristina Orbeci, Ion Untea, Georgios Kopsiaftis – „The influence of inorganic species on oxidative degradation of 4-chlorophenol by photo-Fenton type process”, Revista de Chimie 59(9), p.952-955, 2008, ISSN: 0034-7752, WOS: 000260547200002

Ris. 6. Cristina Orbeci, Ion Untea, Madelene Dancila, Daniela Simina Stefan – „Kinetics considerations concerning the oxidative degradation by photo-Fenton process of some antibiotics”, Environmental Engineering and Management Journal, 9(1), 1-5, 2010, ISSN: 1582-9596, WOS: 000275701800001

Ris. 7. Alina Melinescu, Cristina Rizea-Orbeci, Maria Preda – Immobilization of lead ions in solutions by precipitation with calcium hydroxyapatite, Romanian Journal of Materials 40 (3), p.237-241, 2010, ISSN: 1583-3186, WOS:000282120900007

Ris. 8. Cristina Orbeci, Gheorghe Nechifor, Ion Untea, - "Photo-catalytic oxidation of 4-chlorophenol using TiO₂-functionalized membranes", CAS 2011 PROCEEDINGS of International Semiconductor Conference, 34th Edition, October 17-19, 2011, Sinaia, Romania, Vol. 1, p.23-26, ISSN: 1545-827X, ISBN: 978-1-61284-171-7, IEEE catalog Number: CFP11CAS-PRT, WOS: 000320322000004

Ris. 9. Cristina Orbeci, Ion Untea, Rodica Stanescu, Adina Elena Segneanu, Mihaela Emanuela Craciun - A new photo-Fenton procedure applied in oxidative degradation of organic compounds from wastewater, Environmental Engineering and Management Journal, 11 (1), p.141-146, 2012, ISSN: 1582-9596, WOS: 000301546400019

Ris. 10. Cristina Orbeci, Gheorghe Nechifor, Ion Untea, Photocatalytic membrane system: obtaining procedure and environmental application, CAS Proceedings 2012, vol. 2, p.317-320, IEEE Catalog number CFP12CAS-PRT, ISBN 978-1-4673-0736-9, ISSN 1545-827X, WOS: 000314223700063

Ris. 11. Aurelia Cristina Nechifor, Lucian Dănuț Ghindeanu, Cristina Orbeci, Octavian Dorca, Eugenia Eftimie Totu, Magnetite-polyethyleneglycol-cyanuric chloride reactive

nanoparticles, Revista Română de Materiale/Romanian Journal of Materials, 2013, 43 (3), p.285-292, ISSN: 1583-3186, WOS:000324848100007

Ris. 12. Mihaela Pascu (Neagu), Daniela-Elena Pascu, Gina Alina Traistaru, A. A. Bunaciu, Cristina Orbeci, Aurelia Cristina Nechifor, Kinetic Studies of Some Biological Active Extracts with Antioxidant Properties, Revista de Chimie, 64(8), 2013, p.785-790, ISSN 0034-7752, WOS: 000330329400001

Ris. 13. Octavian Dorca, Piotr Szczepanski, Veronica Ionela Panait, Szidonia-Katalin Tanczos, Andreea Raducu, Cristina Orbeci, Transport and Separation of Zn(II)/Mn(II) in a Multimembrane Hybrid System (MHS), Revista de Chimie, 64(9), 2013, p.946-950, ISSN: 0034-7752, WOS: 000326855900005

Ris. 14. Cristiana Olteanu, Piotr Szczepanski, Cristina Orbeci, Carmen Georgiana Lica, Loreta Costache, Ioana Diaconu, Study of the Transport of Chromium, Manganese and Zinc through Bulk Liquid Membrane Using D2EHPA and Cyanex 301 as a Carrier, Revista de Chimie, 64(9), 2013, p.925-930, ISSN 0034-7752, WOS: 000326855900001

Ris. 15. Ramona Balint, Cristina Orbeci, Gheorghe Nechifor, Marinela Plesca, Franco Ajmone-Marsan, Effect of redox conditions on the crystallinity of Fe oxides in soil, Revista de Chimie, 64 (11), 2013, p. 1218-1223, ISSN 0034-7752, WOS: 000328441600003

Ris. 16. C. Orbeci, M. Totu, S. K. Tanczos, E. Vasile, A. Dinu, A. C. Nechifor, Preparation and properties of a photocatalyst with TiO₂ nanoparticles, Optoelectronics and Advanced Materials–Rapid Communications, 7(11-12), 2013, p. 822-827, ISSN 1842-6573, WOS: 000328253100003

Ris. 17. Cristina Orbeci, Veronica Panait, Lacramiora Naftanaila, Octavian Dorca, Szidonia-Katalin Tanczos, Alexandra Raluca Miron, The study of protein recovery using molecular flotation and ultrafiltration, Revista de Chimie 64(12), 2013, p.1335-1339, ISSN 0034-7752, WOS: 000330914400004

Ris. 18. Loreta Nicoleta Costache, Piotr Szczepanski, Cristiana Olteanu, Carmen Georgiana Lica, Sofia Teodorescu, Cristina Orbeci, Bulk Liquid Membrane Separation of Different Cations Using D2EHPA and Cyanex 302 as Carriers, Revista de Chimie, 65(1), 2014, p. 26-32, ISSN 0034-7752, WOS: 000334150300005

Ris 19. Mircea Segarceanu, Daniela Elena Pascu, Gina Alina Traistaru, Mihaela Pascu (Neagu), Sofia Teodorescu, Cristina Orbeci, Optimization of Membrane Processes with Polysulfone/Polyaniline Composite Membranes, Revista de Chimie, 65(1), 2014, p. 8-14, ISSN 0034-7752, WOS: 000334150300002

Ris. 20. Orbeci C., Untea I., Nechifor G., Segneanu A.E., Craciun M.E., Effect of a modified photo-Fenton procedure on the oxidative degradation of antibiotics in aqueous solutions, Separation and Purification Technology 122, 2014, p. 290-296, ISSN 1383-5866, WOS: 000331422800038

Ris. 21. Cristina Orbeci, Gheorghe Nechifor, Rodica Stănescu, Removing toxic compounds from wastewater, Environmental Engineering and Management Journal, 13 (9), 2014, p. 2153-2158, ISSN: 1582-9596, WOS: 000347161400004

Ris. 22. Raluca Isopescu, Mihaela Mihai, Cristina Orbeci, Dumitru Turtoi, Calcium Carbonate Precipitation through Carbon Dioxide Chemisorption from Flue Gas into

Lime Suspension, Revista de Chimie 65 (12), 2014, p. 1490-1494, ISSN: 0034-7752, WOS: 000345946400019

Ris. 23. Nechifor Aurelia Cristina, Abbas Abdul Kadhim Klaif Rikabi, Daniela Dumitra Clej, Szidonia Katalin Tanczos, Corneliu Trisca-Rusu, Cristina Orbeci, Synthesis of TiO₂-Fe₃O₄ composite nanoparticles for ampicillin and penicillin G photo-degradation, Revista Română de Matateriale 45 (1), 2015, p.80-90, WOS: 000352755800011

Ris. 24. Orbeci C., Pascu L. F., Modrogan C., Degradation of Organic Compounds from Industrial Pharmaceutical Effluent Through Advanced Oxidation Processes, Revista de Chimie 66 (4), 2015, p. 482-486, WOS: 000354914500009

Ris. 25. Lucian Constantin, Ines Nitoi, Ionut Cristea, Petruta Oancea, Cristina Orbeci, Aurelia Cristina Nechifor, Degradation of Triclosan by TiO₂-UV Irradiation in Aqueous Solutions, Revista de Chimie 66 (5), 2015, p. 597-600, WOS:000355126000001

Ris. 26. Abbas Abdul Kadhim Klaif Rikabi, Adriana Cuciureanu, Mariana Chelu, Alexandra Raluca Miron, Cristina Orbeci, Alexandru George Popa, Mihaela Emanuela Craciun, Proteins Ultrafiltration using Polysulfone-polyaniline and Polysulfone-magnetite Nanoparticles Composite Membranes, Revista de Chimie 66 (8), 2015, p.1093-1099, WOS:000361124600003

Ris. 27. Cristina Orbeci, Mircea Ștefan, Annette Madelene Dăncilă, Mihai Silviu Tudosie, Removal of Antibiotics from Wastewater Using Photocatalytic Membranes, Revista de chimie, 67 (9), 2016, p. 1666-166, ISSN: 0034-7752, WOS:000385266600003

Ris. 28. Cristina Orbeci, Cristina Modrogan, Annette Madelene Dăncilă, Degradation of pharmaceutical effluents by photo-assisted techniques, Revista de Chimie, 67 (1), p. 166-170, 2016, ISSN: 0034-7752, WOS:000369524300037

Ris 29. Cristina Orbeci, Rodica Stănescu, Viorica Pârvulescu, Daniela Negoescu, Synthesis, Characterization and Functionalisation of MCM-41 For Removal of Organic Compounds from Wastewaters, Environmental Engineering and Management Journal, 16 (3), p. 553-560, ISSN: 1582-9596, 2017, WOS:000403508600006

Ris 30. Orbeci Cristina, Pârvulescu Oana Cristina, Acceleanu Elena, Dobre Tănase, Effects of Process Factors on Carbon Dioxide Reforming of Methane over Ni/SBA-15 Catalyst, Revista de Chimie, 68 (10), p. 2325-2328, 2017, ISSN: 0034-7752, WOS:000416750000023

Ris 31. Orbulet Oanamari Daniela, Modrogan Cristina, Orbeci Cristina, Dancila Madelene Annette, Bobirica Constantin, Bobirica Liliana, Vasile Eugeniu, Influence of Sulfonation of Inert Macroporous and Macronet Resins on the SO₂ Adsorption Capacity, Water Air and Soil Pollution, 229 (12), 2018, WOS:000451653000001

Ris 32. Stefan Daniela Simina, Orbeci Cristina, Stefan Mircea, Optimizing Enzymatic Biodegradation of Skins Waste Using Response Surface Methodology, Revista de Chimie, 70 (6), 2019, p. 2087-2090, ISSN: 0034-7752, WOS:000475860100040

Ris 33. Bobirica Constantin, Bobirica, Liliana, Rapa Maria, Matei Ecaterina, Predescu Andra Mihaela, Orbeci Cristina, Photocatalytic Degradation of Ampicillin Using PLA/TiO₂ Hybrid Nanofibers Coated on Different Types of Fiberglass, Water, 12 (1), 2020, Article Number: 176, DOI: 10.3390/w12010176, WOS:000519847200176

- Ris 34.** Muhulet A., Tuncel C., Miculescu F., Pandele A.M., Bobirica C., Orbeci C., Bobirica L., Palla-Papavlu A., Voicu S.I., Synthesis and characterization of polysulfone-TiO₂ decorated MWCNT composite membranes by sonochemical method, Applied Physics A-Materials Science & Processing, 126 (3), 2020, Article Number: 233, DOI: 10.1007/s00339-020-3408-9, WOS:000516564000001
- Ris 35.** Modrogan Cristina, Pandel, Andreea Madalina, Bobirica Constantin, Dobrota Dan, Dancila Annette Madelene, Garleanu Gabriel, Orbulet Oanamari Daniela, Borda Claudia, Garleanu Delia, Orbeci Cristina, Polymers, 12 (5), 2020, Article Number: 1182, DOI: 10.3390/polym12051182, WOS:000541431100187
- Ris 36.** Bobirica Liliana, Bobirica Constantin, Orbeci Cristina, Examination of Photocatalyzed Chlorophenols for Sequential Photocatalytic-Biological Treatment Optimization, Catalysts 10(9), 2020, WOS:000580907200001
- Ris 37.** Pandele Andreea Madalina, Iovu Horia, Orbeci Cristina, Tuncel Cristina, Miculescu, Florin, Nicolescu Alina, Deleanu Calin, Voicu Stefan Ioan, Surface modified cellulose acetate membranes for the reactive retention of tetracycline, Separation and Purification Technology, 249, 2020, Article Number: 117145, DOI: 10.1016/j.seppur.2020.117145, WOS:000540235100012
- Ris 38.** Bobirica Constantin, Orbeci Cristina, Bobirica Liliana, Palade Petru, Deleanu Calin, Pantilimon Cristian Mircea, Pirvu Cristian, Radu Ionut Cristian, Influence of red mud and waste glass on the microstructure, strength, and leaching behavior of bottom ash-based geopolymer composites, Scientific Reports, 10 (1), 2020, DOI:10.1038/s41598-020-76818-4, WOS:000594649000011
- Ris 39.** Diaconu Ioana, Aboul-Enein Hassan, Orbeci Cristina, Bunaciu Andrei., Serban, Ecaterina, Ruse, Elena, Separation of Indole-3-acetic Acid from Tryptophan by Bulk Liquid Membrane, Current Analytical Chemistry, 17(6), 2021, DOI 10.2174/1573411016999201015143000, WOS:000663126600012
- Ris 40.** Matei Ecaterina, Rapa Maria, Predescu, Andra Mihaela, Turcanu Anca Andreea, Vidu Ruxandra, Predescu Cristian, Bobirica Constantin, Bobirica Liliana, Orbeci Cristina, Valorization of Agri-Food Wastes as Sustainable Eco-Materials for Wastewater Treatment: Current State and New Perspectives, Materials, 14 (16), 2021, DOI 10.3390/ma14164581, WOS:000689458700001
- Ris 41.** Bobirica Liliana, Bobirica, Constantin, Lupu Giovanina Iuliana, Orbeci, Cristina, Influence of Operating Parameters on Photocatalytic Oxidation of 2,4-Dichlorofenol in Aqueous Solution by TiO₂/Stainless Steel Photocatalytic Membrane, Applied Sciences, 11 (24), 2021, DOI 10.3390/app112411664, WOS:000735755300001
- Ris 42.** Egri Diana, Pârvulescu Oana Cristina, Ion Violeta Alexandra, Răducanu, Cristian Eugen, Calcan Suzana Ioana, Badulescu Liliana, Madjar Roxana, Orbeci Cristina, Dobre Tanase, Mot Andrei, Iliescu Lavinia Mihaela, Craciun Mihaela Emanuela, Vine Pruning-Derived Biochar for Agronomic Benefits, Agronomy-Basel, 12 (11), 2022, DOI 10.3390/agronomy12112730, WOS:000883349800001

- Ris 43.** Giovanina - Iuliana Lupu, Liliana Bobirică, Constantin Bobirică, Cristina Orbeci, Photocatalytic oxidation of azithromycin in aqueous solution by TiO₂-coated fiberglass MEMBRANE, University POLITEHNICA of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 85 (2), 2023, WOS:001015437100003
- Ris 44.** Mârsolea Adriana Cornelia, Orbeci Cristina, Bobirică Liliana, Bobirică Constantin, Leaching behavior of polyethylene terephthalate containers used for water bottling, University POLITEHNICA of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 85 (4), 2023, WOS:001126670800012
- Ris 45.** Marin Nicolaie, Orbeci Cristina, Bobirica Liliana, Bosomoiu, Magdalena, Bobirica, Constantin, Long-term leaching assessment of alkali- activated materials based on compliance leaching tests, University POLITEHNICA of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science 85 (4), 2023, WOS:001126670800003
- Ris 46.** Marsolea Adriana C., Chiriac, Florentina L., Orbeci Cristina, Bobirica Liliana, Bobirica Constantin, Migration and leaching behaviour of Bisphenol A from polyethylene terephthalate water bottles under different storage conditions, International Journal of Food Science and Technology, 2023, WOS:001023588100001
- Ris 47.** Lupu Giovanina-Iuliana, Orbeci Cristina, Bobirica Liliana, Bobirica Constantin, Pascu Luoana Florentina, Key Principles of Advanced Oxidation Processes: A Systematic Analysis of Current and Future Perspectives of the Removal of Antibiotics from Wastewater, Catalysts, 13(9), 2023, WOS:001119197200001
- Ris 48.** Marsolea (Cristea) Adriana Cornelia, Orbeci Cristina, Rusen Edina, Stanescu Paul Octavian, Brincoveanu Oana, Irodia Roberta, Pirvu Cristian, Dinescu Adrian, Bobirica Constantin, Mocanu Alexandra, Design of polyurethane composites obtained from industrial plastic wastes, pyrite and red mud, Construction and Building Materials, volume 405, 2023, WOS:001079863600001
- Ris 49.** Marin Nicolaie, Orbeci Cristina, Bobirica Liliana, Rau Ileana, Deleanu Calin, Biru Elena Iuliana, Stanescu Paul Octavian, Berbecaru Andrei Constantin, Matei Ecaterina, Bobirica, Constantin, Alternative Solid Activators from Waste Glass for One-Part Alkali-Activated Fly Ash/Red Mud Cements, Materials, 16(20), 2023, WOS:001095384600001
- Ris 50.** Irodia Roberta, Mindroiu Mihaela, Biru Iuliana, Ionita Gabriela, Mihai Geanina V., Enachescu Marius, Orbeci Cristina, Pirvu Cristian, Double S-Scheme Polydopamine/TiO₂/Chlorophyll as Stable and Efficient Green Photoelectrocatalyst, CHEMELECTROCHEM, 2023, WOS:001087779800001
- Ris 51.** Lupu Giovanina-Iuliana, Orbeci Cristina, Bobirica Constantin, Bobirica Liliana, Lazar Elena Sorana, Pandele-Cusu Jeanina, Verziu Marian Nicolae, Pirvu Cristian, Irodia Roberta-Geanina, Photocatalytic degradation of azithromycin formulation in aqueous solution by doped titanium dioxide/fiberglass-rubberized silicone photocatalytic membrane, Sustainable Environment Research, 33(1), 2023, WOS:001099234800001
- Ris 52.** Marin Nicolaie, Orbeci Cristina, Bobirică Liliana, Pascu Luoana Florentina, Bobirică Constantin, Valorization of waste glass from discarded fluorescent lamps as additional active material in the synthesis of alkali-activated materials, Clean Technologies and Environmental Policy, 2024, WOS: 001163551200003

Ris 53. Satulu Veronica, Pandele Andreea Madalina, Ionică Giovanina-Iuliana, Bobirică Liliana, Bonciu Anca Florina, Scarlatescu Alexandra, Bobirică Constantin, Orbeci Cristina, Voicu Stefan Ioan, Mitu Bogdana, Dinescu, Gheorghe, Robust CA-GO-TiO₂/PTFE Photocatalytic Membranes for the Degradation of the Azithromycin Formulation from Wastewaters, *Polymers*, 16(10), 2024, WOS: 001231754500001

Ris 54. Diaconu Ioana, Parvulescu Oana Cristina, Badea Georgiana Ileana, Rotaru Madalina, Orbeci Cristina, Cernica Georgiana, Use of bulk liquid membranes for the removal of aspartame from aqueous media, *Journal of Molecular Liquids* 409, 2024, WOS: 001275168800001

Ris 55. Mot Andrei, Parvulescu Oana Cristina, Ion Violeta Alexandra, Molosag Ailin, Dobrin Aurora, Badulescu Liliana, Orbeci Cristina, Egri Diana, Dobre Tanase, Loes Anne-Kristin, Cabell Joshua, Salifoglou Athanasios, Matsia Sevasti, Letelier-Gordo Carlos Octavio, Raducanu Cristian, Mocanu Alexandra, Preparation, Characterization, and Testing of Compost Tea Derived from Seaweed and Fish Residues, *Agronomy* 14(9), 2024, WOS: 001323812900001

Ris 56. Bobirica Liliana, Orbeci Cristina, Pirvu Cristian, Constantinescu Alexandra, Biru Elena Iuliana, Ionica Giovanina Iuliana, Matei Ecaterina, Berbecaru Andrei Constantin, Bobirica Constantin, Modular Photocatalytic Reactor for the Removal of Estrogens from Aqueous Solutions, *Catalysts* 14(10), 2024, WOS: 001342877200001

E. Alte articole

Rio - Alte reviste de specialitate de circulație internațională (non-ISI la momentul publicării)

Rio. 1. V. Neagu, I. Untea, I. Bunia, E. Tudorache, C. Orbeci - "Cr(VI) retention from aqueous K₂CrO₄ solutions by means of weak base anion exchangers" - Proceedings of International Conference on Materials Science and Engineering, BRAMAT 2003, 13-14 March, Brasov, Romania, 2003, Vol. IV - (Bio)Ceramics, Functional materials, Polymers and natural products, Environment management and protection, ISBN 973-635-126-2, 416-421, 2003

Rio. 2. I. Untea, C. Orbeci, E. Tudorache, V. Neagu - „Cr (VI) retention capacity and selectivity of some strong and weak base anion exchangers”, *Environmental Engineering and Management Journal*, 3(3), p.221-230, 2004, ISSN: 1582-9596

Rio. 3. I. Untea, C. Orbeci, E. Tudorache - „Oxidative degradation of 4-chlorophenol from aqueous solution by Photo-Fenton advanced oxidation process” - *Environmental Engineering and Management Journal*, 5(4), p.661-674, 2006, ISSN: 1582-9596

Rio. 4. E. Tudorache, I. Untea, C. Orbeci - “L'épuration avancée des eaux résiduelles de l'industrie de cellulose et de papier par des processus d'oxydation de type Fenton” – *Scientific Study & Research*, VII (2), p.337-348, 2006, ISSN 1582-540X

Rns - Reviste de specialitate de circulație națională recunoscute de CNCSIS

Rns. 1. E. Tudorache, I. Untea, C. Orbeci - "Degradation des phenols des eaux residuales par processus d'oxydation de type Photo-Fenton" - Actes du deuxieme Colloque Franco-Roumain de Chimie Appliquee, P.337-340, COFrRoCA 2002, 10-12

octobre 2002 Bacau, Roumanie, Imprime par Alma Mater Bacau, ISBN 973-8392-04-7 et Tehnica-Info Chisinau, ISBN 9975-63-140-1, 337-340, 2002

Rns. 2. I. Untea, Elena Tudorache, Violeta Neagu, Cristina Orbeci - "Aspects cinétiques de l'échange ionique dans les systèmes: anionites basiques pyridiniques forts-solutions aqueuses de Cr(VI). L'influence de la nature du substituant alkyle et de l'anion d'échange" - Buletinul Științific al Universitatii "Politehnica", Chem. Bull "Politehnica" Univ Timisoara, 48 (62), 1-2, 90-95, 2003

Rns. 3. I. Untea, I., C. Orbeci, E. Tudorache, V. Neagu - "Cinétique de l'échange ionique dans les systèmes: anionites basiques forts et faibles-solutions aqueuses de K_2CrO_4 ", Actes du troisieme Colloque Franco-Roumain de Chimie Appliquee, COFrRoCA 2004, Editions Alma Mater Bacau ISBN 973-8392-36-5 et Tehnica-Info Chisinau ISBN 9975-63-183-5, 467-471, 2004

Rns. 4. C. Orbeci – „Thermodynamic and kinetic aspects concerning of Cr (VI) retention from aqueous solutions by strong base anion exchangers with pyridine structures”, Buletinul Științific al UPB, 1 (67), 2005

F. Comunicări la conferințe naționale și internaționale

F. 1. M. Mocioi, C. Orbeci, "Reactive crystallization of calcium and magnesium phosphate; the nature of the solid phases precipitated. The 2-nd International Conference of the Chemical Societies of the South-Eastern European Countries on Chemical Sciences for Sustainable Development, 6-9 June 2000, Halkidiki, Greece

F. 2. E. Tudorache, V. Neagu, I. Untea, C. Orbeci - "Defenolarea apelor reziduale prin adsorbție pe copolimeri porosi stiren-divinilbenzen" - A XXVII-a Conferința Națională de Chimie, 23-25 octombrie 2002, Calimănești-Căciulata, Vâlcea, Romania

F.3. I. Untea, Elena Tudorache, Cristina Orbeci, D. Turtoi - "Monochloroacetic acid oxidative degradation through a photo-Fenton process" Volume 1, 72-77, 2003 - 13th Romanian International Conference on Chemistry and Chemical Engineering RICCE 13, 16-20 sept. 2003, Bucharest, Romania

F. 4. Violeta Neagu, Ion Untea, Elena Tudorache, Cristina Orbeci - "Equilibres d'échange ionique dans les systèmes : anionites basiques pyridiniques forts - solutions aqueuses de Cr(VI). Influence de l'anion d'échange et du pH initial de la solution - VI-eme Colloque Franco-Roumain sur les Polymeres, 8-10 Septembre 2003, Rouen, France

F. 5. Ion Untea, Violeta Neagu, Elena Tudorache, Cristina Orbeci - "Aspects cinétiques de l'échange ionique dans les systèmes: anionites basiques pyridiniques forts-solutions aqueuses de Cr(VI). Influence de la nature du substituent alkyle et de l'anion d'échange" - VI-eme Colloque Franco-Roumain sur les Polymeres, 8-10 Septembre 2003, Rouen, France

F. 6. I. Untea, C. Orbeci, E. Tudorache, V. Neagu - "Cr(VI) retention capacity and selectivity of some strong and weak base anion exchangers" - 2nd International

Conference Environmental Engineering and Management, ICEEM/02, 23-26 sept. 2004, Iași, Romania

F. 7. V. Neagu, I. Untea, E. Tudorache, C. Orbeci - "Étude thermodynamique concernant l'adsorption du phénol des solutions aqueuses sur copolymères styrène-divinylbenzène" - 7eme Colloque Franco-Roumain sur les Polymeres, 2-5 sept. 2005, Iași, Romania

F. 8. I. Untea, C. Orbeci, E. Tudorache, S. Tanczos - "Water softening by synthetic A and X zeolites used as detergent builders. I. Retention capacity and selectivity for Ca^{2+} and Mg^{2+} ions", Romanian International Conference on Chemistry and Chemical Engineering, RICCCE XIV, 22-24 sept. 2005, Bucharest, Romania

F. 9. E. Tudorache, I. Untea, C. Orbeci, D. Turtoi – "Oxidative degradation of mono and trichloroacetic acids in wastewater by hydrogen peroxide", RICCCE XIV 2005 Proceedings –Volume 4, Ed. Printech, ISBN 973-718-284-7, 973-718-288-X, p. S06-25 - S06-32, 2005 -14th Romanian International Conference on Chemistry and Chemical Engineering, 22-24 sept. 2005, Bucharest, Romania

F. 10. E. Tudorache, I. Untea, C. Orbeci - "L'épuration avancée des eaux résiduelles de l'industrie de cellulose et de papier par des processus d'oxydation de type Fenton" - Le Quatrieme Colloque Franco – Roumain de Chimie Appliquee, 28 - 30 Juin 2006, Clermont – Ferrand, France

F. 11. I. Untea, C. Orbeci, E. Tudorache, S. Tanczos -"Water softening by synthetic A and X zeolites used as detergent builders. I. Retention capacity and selectivity for Ca^{2+} and Mg^{2+} ions", RICCCE XIV 2005 Proceedings 2005–Volume 4, Ed. Printech, ISBN 973-718-284-7, 973-718-288-X, p.S06-244 – S06-251, 14th Romanian International Conference on Chemistry and Chemical Engineering, 22-24 sept. 2005, Bucharest, Romania

F. 12. I. Untea, C. Orbeci, E. Tudorache – „Influenta adaosurilor minerale asupra eficienței oxidării în soluție apoasă a 4-clorfenolului prin procedeul Foto-Fenton” - A XXIX-a Conferință Națională de Chimie, 04-06 octombrie 2006, Călimănești-Căciulata, Vâlcea, Romania

F. 13. I. Untea, C. Orbeci, E. Tudorache, G.Kopsiaftis – „The influence of the inorganic species on oxidative degradation of 4-clorophenol by photo-Fenton type process"- 15th Romanian International Conference on Chemistry and Chemical Engineering, Bucharest, 19-22 sept. 2007, RICCCE XV 2007 Proceedings –Ed. Printech, S5-52-S5-54, 2007

F. 14. Cristina Orbeci, Ion Untea, Georgios Kopsiaftis – „Degradarea fotocatalitică a ampicilinei în soluții apoase prin procedeul Foto-Fenton”, A XXX-a Conferință Națională de Chimie, 08 - 10 octombrie 2008, Călimănești-Căciulata, Vâlcea, Romania

F. 15. Ion Untea, Annette Madelene Dancila, Cristina Orbeci, Daniela Simina Stefan - Regeneration of ZnO-TiO_2 desulphurization sorbent - ZnO/TiO_2 molar ratio and the sorbent particles size influence, Conference Proceedings of the 16th Romanian International Conference on Chemistry and Chemical Engineering, RICCCE XVI, 9-12 september 2009, Sinaia, Romania, Ed. Printech, ISBN 978-606-521-349-4, p. S.V. 22-S.V.29, Proceedings RICCCE XVI, ISSN 2066 - 8341

- F. 16.** Annette Madelene Dancila, Ion Untea, Eugeniu Vasile, Cristina Orbeci, Daniela Simina Stefan - Regeneration by air oxidation of ZnO-TiO₂-Al₂O₃ type sorbents for HTGD processes - The 16th Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE XVI, 9-12 september 2009, Sinaia, Romania
- F. 17.** Annette Madelene Dancila, Ion Untea, Cristina Orbeci, Daniela Simina Stefan - High temperature regeneration of ZnO-TiO₂ desulphurization type sorbents - ZnO/TiO₂ molar ratio and the sorbent particles size influence - The 16th Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE XVI, 9-12 september 2009, Sinaia, Romania
- F. 18.** Cristina Orbeci, Ion Untea, Madelene Dancila, Daniela Simina Stefan - The oxidative degradation of some antibiotics in aqueous solutions through photo-Fenton procedure - The 5th International Conference on Environmental Engineering and Management, ICEEM/05, 15-19 September 2009, Tulcea, Romania
- F. 19.** Daniela Simina Stefan, Carmen Iesan, Ion Untea, Cristina Orbeci, Madelene Dancilă – “The selectivity study of NO₃⁻ ions retention from aqueous solutions by ion exchange using A 520E type resin”, International Symposium „The Environment and Industry” Bucharest, Vol. I, p. 275-281, 2009, Ed. Estfalia, ISSN 1843-5831
- F. 20.** A. Melinescu, C. Orbeci, M. Preda – “Imobilizarea ionilor de plumb din soluții prin precipitare cu hidroxiapatită calcică”, al IX-lea Simpozion național de pulberi ceramice, 6 mai 2010, București, Romania
- F. 21.** Raluca Isopescu, Cristina Orbeci, Dumitru Turtoi, Mihaela Mihai, Ion Udrea, „Precipitation of super-fine calcium carbonate by CO₂ absorption from flue gases into lime suspension”, 7th International Conference of Chemical Societies from South-East European Countries on “Chemistry – Beauty and Application”, ICOSECS 7, 15-17 september 2010, Bucharest, Romania, Proceedings of the 7-th International Conference of the Chemical Societies from South-eastern european Countries, ISBN 978-606-515-121-5
- F. 22.** Cristina Orbeci, Ion Untea – „Degradarea oxidativă foto-catalitică în soluții apoase a unor antibiotice de tip amoxicilină, ampicilină și streptomycină”, a XXXI-a Conferință Națională de Chimie, Râmnicu Vâlcea, 06-08 octombrie 2010
- F.23.** Raluca Isopescu, Irina Meghea, Mihaela Mihai, Dumitru Turtoi, Cristina Orbeci, „Definitive CO₂ sequestration from flue gases into lime suspension”, International U.A.B.–B.EN.A. Conference Environmental Engineering and Sustainable Development, 25-28 mai 2011, Alba Iulia, Romania
- F.24.** Cristina Orbeci, Ion Untea, Rodica Stanescu, Adina Elena Segneanu, Mihaela Emanuela Craciun –” A new photo-Fenton procedure applied in oxidative degradation of organic compounds from wastewater”, 6-th International Conference Environmental Engineering and Management, 1-4 septembrie 2011, Balaton, Ungaria
- F. 25.** Cristina Orbeci, Ion Untea, - “Membrane oxidative processes in water treatment”, 17th Romanian International Conference on Chemistry and Chemical Engineering, 7-10 septembrie 2011, Sinaia, Romania
- F. 26.** Cristina Orbeci, Dăncilă Annette Madelene, Dumitru Turtoi, Alina Melinescu, Izabela Cristina Stancu – “Innovative materials used in medical equipment”, 17th

Romanian International Conference on Chemistry and Chemical Engineering, 7-10 septembrie 2011, Sinaia, Romania

F. 27. Cristina Orbeci, Ion Untea, Mihaela Emanuela Craciun, Adina Elena Segneanu, „Oxidative degradation of antibiotics ampicillin and penicillin G type from water using the photo-Fenton procedure modified by in situ Fe²⁺ catalyst generation”, 8th IWA International Conference on Water Reclamation & Reuse, IWA Conference, 26-30 September 2011, Barcelona, Spania

F. 28. Cristina Orbeci, Gheorghe Nechifor, Ion Untea, A new photo-catalyst obtained by direct immobilization of TiO₂ on fiberglass substrate using sodium silicate solution as binder agent, Conference Proceedings AOP6, Contribution: Photocatalysis PC18 3p., IWA Specialist Conference, 6th edition, 7-9 May 2012, Goslar, Germany, ISSN: 1545-827X, ISBN: 978-1-61284-171-7, IEEE catalog Number: CFP11CAS-PR

F. 29. Cristina Orbeci, Ion Untea, Gheorghe Nechifor, Cornelia Bandas, Carmen Lazau, Corina Orha, Synthesis, characterization and environmental applications of a photocatalyst with TiO₂ on glass fibre substrate, International Glass Fiber Symposia 2012, Aachen, Germania, Proceedings of International Glass Fiber Symposia 2012, p. 14-17, ISBN 978-3-00-039860-5

F. 30. Cristina Orbeci, Gheorghe Nechifor, Ion Untea, Removal of Phenolic Derivatives from Wastewater using Photocatalytic Membranes, 15th JCF Frühjahrssymposium, 06 - 09 martie 2013, Berlin, Germania, p.105, Imprint JungChemikerForum Berlin 2013

F. 31. Cristina Orbeci, Performance materials and methods for wastewater treatment, 18th Romanian International Conference on Chemistry and Chemical Engineering, 4-7 septembrie 2013, Sinaia, România

F. 32. Corina Mihalache, Cristina Orbeci, The environmental impact of gold ore mining, 18th Romanian International Conference on Chemistry and Chemical Engineering, 4-7 septembrie 2013, Sinaia, România

F. 33. Cristina Elena Păduraru, Cristina Orbeci, Integrated systems of monitoring environmental quality, 18th Romanian International Conference on Chemistry and Chemical Engineering, 4-7 septembrie 2013, Sinaia, România

F. 34. Cristina Orbeci, Gheorghe Nechifor, Ion Untea, Rodica Stănescu, Removing toxic compounds from wastewater, 7th International Conference Environmental Engineering and Management, 18–21 septembrie, 2013, Viena, Austria

F. 35. Cristina Orbeci, Daniela Simina Ștefan, Annette Madelene Dăncilă, Removal of Antibiotics from Wastewater using Photocatalytic Membranes, Advances on Photocatalysis AdvPhotoCat 2015, International Workshop, 6-8 iulie 2015, Iași, Romania

F. 36. Cristina Orbeci, Cristina Modrojan, Annette Madelene Dancilă, Daniela Simina Ștefan, Degradation of Organic Compounds from Industrial Pharmaceutical Effluent Through Advanced Oxidation Processes, Advances on Photocatalysis AdvPhotoCat 2015, International Workshop, 6-8 iulie 2015, Iași, Romania

F. 37. Cristina Orbeci, Daniela Simina Ștefan, Hybrid membrane for wastewater treatment, 19th Romanian International Conference on Chemistry and Chemical Engineering, 2-5 septembrie 2015, Sibiu, Romania

- F. 38.** Cristina Orbeci, Cristina Modrogan, Alexandra Raluca Miron, Removal of pharmaceutical effluents using photocatalytic membranes, 19th Romanian International Conference on Chemistry and Chemical Engineering, 2-5 septembrie 2015, Sibiu, Romania
- F. 39.** A. M. Dăncila, C. Orbeci, A.M. Diminescu, Regeneration of Titanium Zinc Sorbents with Graphite Addition Used in H₂S-Containing Gas Desulphurisation, 19th Romanian International Conference on Chemistry and Chemical Engineering, 2-5 septembrie 2015, Sibiu, Romania
- F. 40.** Cristina Orbeci, Cristina Modrogan, Alexandra Raluca Miron, Firas Hashim Kamar Removal of heavy metal ions through ion exchange, 06-09 septembrie 2015, Karpacz, Polonia
- F. 41.** Cristina Orbeci, Rodica Stănescu, Viorica Pârvulescu, Daniela Negoescu, Synthesis, characterization and functionalisation of MCM-41 for removal of organic compounds from wastewaters, 8th International Conference on Environmental Engineering and Management (ICEEM 08), 09-12 septembrie 2015, Iași, Romania
- F. 42.** Cristina Modrogan, Irina Pincovschi, Cristina Orbeci, Forecasting study for Cd²⁺ ion removal using ion exchange, International Symposium-SIMI 2015-The Environment and the Industry, ISSN-L 1843-5831, 29-30 octombrie 2015, București, Romania
- F. 43.** Daniela Simina Ștefan, Mircea Ștefan, Cristina Orbeci, Nicolae Sdrula, Cristina Șerbanescu, Carbon dioxide stored in trees a simple way to reducing greenhouse, the XXXIVth Romanian Chemistry Conference, 04 -07 October 2016, Căciulata, Vâlcea, Romania
- F. 44.** Daniela Simina Ștefan, Nicolae Sdrula, Cristina Orbeci, Cristina Șerbănescu, Biogas from algae a new perspective to reducing the natural water pollution and reducing exhausted greenhouses, SICHEM, 8 - 9 September 2016, Bucharest, Romania
- F. 45.** Cristina Orbeci, Daniela Simina Ștefan, Mircea Ștefan, Rodica Anghel, Studies Regarding Succinic Acid Synthesis, SICHEM, 8 - 9 September 2016, Bucharest, Romania
- F. 46.** A. M. Dăncilă, C. Modrogan, C. Orbeci, O. D. Orbuleț, Cadmium and copper sorption in a clayey chernizem soil International Symposium " The environment and the industry" SIMI 2016, 13-14 octomber 2016, Bucharest, Romania
- F. 47.** Cristina Orbeci, Annette Madelene Dăncilă, Cristina Modrogan, Daniela Simina Ștefan, Removal of low biodegradable organic compounds from wastewater, 20th Romanian International Conference on Chemistry and Chemical Engineering, 6-9 September, 2017, Poiana Brasov, Romania
- F. 48.** Cristina Modrogan, Oanamari Daniela Orbulet, Madelene Dancila, Constantin Bobirica, Cristina Orbeci, Cristina Costache Removal of some heavy metals from industrial wastewaters by ion exchange method, 20th Romanian International Conference on Chemistry and Chemical Engineering, 6-9 September 2017, Poiana Brasov, Romania
- F. 49.** Oanamari Daniela Orbulet, Cristina Modrogan, Madelene Dăncilă, Constantin Bobirică, Cristina Orbeci, Cristina Costache, Adsorption competence study of soybean

wastes regarding removal of Cr (VI) from waste waters, International Congress of Health and Environment, 23-25 October 2017, Adana, Turkey

F. 50. Mihai Eftimie, Madelene Dăncilă, Cristina Modrojan, Cristina Orbeci, Alina Melinescu, COD reduction of wastewater containing ampicillin using crt glass waste as photocatalytic substrate for TiO₂, International Congress of Health and Environment, 23-25 October 2017 Adana, Turkey

F. 51. Cristina Orbeci, Daniela Simina Ștefan, Rodica Stănescu, Removal of 2,4-DCP from wastewater, International Congress of Health and Environment, 23-25 October 2017, Adana, Turkey

F. 52. Daniela Simina Ștefan, Cristina Orbeci, Mircea Ștefan, Rodica Stănescu, A fforestation/refforestation, a simply and cheap way to reduce the effect of climate change, International Congress of Health and Environment, 23-25 October 2017 Adana, Turkey

F. 53. Cristina Modrojan, Madalina Pandeale, Madelene Dancila, Oanamari Orbuleț, Cristina Orbeci, Constantin Bobirica Isotherm modelsand kineticsof zinc adsorbtionby using gellan-gum/graphene oxides beads, ICEEM09, 6-9 September 2017, Bologna, Italy

F. 54. Oanamari Orbuleț, Cristina Modrojan, Madalina Pandeale, Cristina Orbeci, Madelene Dancila, Constantin Bobirica, SO₂ removal from residual gases by solid adsorbents, ICEEM09, 6-9 September 2017, Bologna, Italy

F. 55. Mihai Eftimie, Annette Madelene Dancila, Cristina Modrojan, Cristina Orbeci, Alina Melinescu, COD reduction of wastewater containing ampicillin using CRT glass waste as photocatalytic substrate for TiO₂, 20th International Symposium “The Environment and the Industry”, SIMI 2017, 28-29 September 2017, Bucharest, Romania

F. 56. Mihai Eftimie, Madelene Dăncilă, Cristina Modrojan, Cristina Orbeci, Alina Melinescu Recovery of CRT glass waste as photocatalytic substrate, 20th Romanian International Conference on Chemistry and Chemical Engineering, 6-9 September 2017, Poiana Brașov, Romania

F. 57. Cristina Modrojan, Oanamari Daniela Orbuleț, Madelene Annette Madelene Dăncilă, Cristina Orbeci, Constantin Bobirică, Mădălina Andreea Pandeale, Cristina Costache, Enlevement de fer contenus dans les eaux souterrains par adsorption, Dixième Colloque Franco-Roumain de Chimie Appliquée, COFrRoCA 2018, 27 – 29 Juin 2018, Bacău, Romania

F. 58. Cristina Modrojan, Constantin Bobirică, Oanamari Daniela Orbuleț, Liliana Bobirica, Madelene Annette Dancila, Cristina Orbeci, Synthesis and characterization of new materials for advanced groundwater remediation, 21st International Symposium “The Environment and the Industry” – SIMI 2018, 20-21 September 2018, Bucharest, Romania

F. 59. C. Modrojan, C. Bobirică, O.D. Orbuleț, L. Bobirică, C. Orbeci, D. Ioniță, Adsorptive removal of manganese and iron from groundwater, 4th International Conference on Chemical Engineering innovative materials and processes for a sustainable development, ICCE 2018, 31 octombrie – 2 noiembrie 2018, Iași, Romania

- F.60.** C. Bobirică, C. Orbeci, L. Bobirică, O.D. Orbuleț, C. Modrogan, D. Madelene, Examination of Pb immobilization pathways in cementitious systems, 11th International Conference on Materials Science & Engineering-BraMat 2019, Transilvania University of Brasov, Romania
- F. 61.** O.D. Orbuleț, C. Bobirică, C. Modrogan, C. Orbeci, D. Madelene, L. Bobirică, A.I. Pitic, LDHs-type materials for phosphates retention from wastewater, 11th International Conference on Materials Science & Engineering-BraMat 2019, Transilvania University of Brasov, Romania
- F.62.** D. S. Stefan, C. Orbeci, M. Pandele, M. Stefan, Mechanism of active surface of A-520E resin removal of mixture of nitrate and sulfate anions from aqueous solutions, 11th International Conference on Materials Science & Engineering-BraMat 2019, Transilvania University of Brasov, Romania
- F. 63.** Liliana Bobirica, Cristina Modrogan, Constantin Bobirica, Oanamari Daniela Orbuleț, Madelene Annette Dancila, Cristina Orbeci, New materials for removing nitrate, manganese and iron from groundwater, 22nd International Symposium “The Environment and The Industry”, SIMI 2019, Proceedings Book, Bucharest, Romania, pag 84, ISSN-L: 1843-5831, <http://doi.org/10.21698/simi.2019>
- F. 64.** Oanamari Daniela Orbuleț, Cristina Modrogan, Constantin Bobirică, Dăncilă Madelene, Cristina Orbeci, Liliana Bobirică, Nitrates removal from groundwater using nano zerovalent iron supported on anion exchange resin, 10th International Conference on Environmental Engineering and Management - ICEEM10, pag. 285-286, ISSN 2457-7049, ISSN-L 2457-7049, 2019 Iasi, Romania
- F. 65.** Constantin Bobirică, Cristina Orbeci, Cristina Modrogan, Oanamari Daniela Orbuleț, Liliana Bobirică, Use of aluminosilicate waste materials as precursors for geopolymer synthesis, 10th International Conference on Environmental Engineering and Management - ICEEM10, pag. 189-190, ISSN 2457-7049, ISSN-L 2457-7049, 2019 Iasi, Romania
- F. 66.** Oanamari Daniela Orbuleț, Cristina Orbeci, Constantin Bobirică, Cristina Modrogan, Dăncilă Madelene, Liliana Bobirică, Phosphate Removal from Aqueous Solution using Nanosized Zerovalent Iron Supported by Anionic Exchange Resin, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta - Romania, 2019
- F. 67.** Cristina Modrogan, Oanamari Daniela Orbuleț, Liliana Bobirică, Madelene Annette Dăncilă, Constantin Bobirică, Cristina Orbeci, Nitrates removal from aqueous solutions using magnetite nanoparticles functionalized with EDTA, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, 2019
- F. 68.** Roberta Irodia, Cristina Orbeci, Cristina Dumitriu, Cristian Pirvu, Comparison between photocatalytic performance degradation of antibiotics by TiO₂ nanostructures, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, 2019
- F. 69.** Cristina Orbeci, Oana Cristina Pârvulescu, Diana Egri, Mădălina Pandele, Cristina Tuncel, Removal of Pharmaceutical Compounds from Wastewater using

Composite Membranes, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, 2019

F. 70. Oanamari Daniela Orbuleț, Cristina Modrojan, Constantin Bobirică, Liliana Bobirică, Madelene Annette Dăncilă, Cristina Orbeci, Anion exchange resin-supported nZVI permeable reactive barriers for removal of nitrates from groundwater, International Symposium “The environment and the industry”, 24-25 september 2020 (E-SIMI 2020), Section Sustainable Environmental Technologies pp. 14-15, DOI: <http://doi.org/10.21698/simi.2020.ab02>

F. 71. C. Bobirică, L. Bobirică, M. Râpă, E. Matei, A. M. Predescu, C. Orbeci, Degradation of Ampicillin Using PLA/TiO₂ Hybrid Nanofibers Coated on Fiberglass, 8th International Conference on Materials Science and Technologies – RoMat 2020, Bucharest, Romania, 26-27 November 2020

F. 72. S. I. Voicu, F. Miculescu, A. M. Pandele, C. Orbeci, L. Bobirică, C. Bobirică, Composite Membranes based on Polysulfone-decorated Carbon Nanotubes for the Removal of Pharmaceutical Effluents, 8th International Conference on Materials Science and Technologies – RoMat 2020, Bucharest, Romania, 26-27 November 2020

F.73. Giovanina-Iuliana Lupu, Liliana Bobirica, Constantin Bobirica, Cristina Orbeci, Ecaterina Matei, Maria Rapa, Photocatalytic oxidation of azithromycin in aqueous solution by TiO₂-coated fiberglass membrane, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022

F.74. Nicolaie Marin, Constantin Bobirica, Liliana Bobirica, Cristina Orbeci, Synthesis and characterization of new assortments of solid alkaline activators for the manufacture of one-part geopolymers cements, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022

F.75. Adriana Cornelia Mârșolea, Florentina Laura Chiriac, Cristina Orbeci, Constantin Bobirică, Liliana Bobirică, Vasile Ion Iancu, Assessment of Bisphenol a release from PET water bottles under different storage temperature and duration, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022

F.76. Oana Cristina Parvulescu, Violeta Alexandra Ion, Cristian Eugen Raducanu, Diana Egri, Suzana Ioana Calcan, Cristina Orbeci, Tanase Dobre, Roxana Madjar, Liliana Badulescu, Andrei Mot, Lavinia Mihaela Iliescu, Effects of Biochar on Soil Properties and Bell Pepper Growth, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022

F.77. Oanamari Daniela Orbuleț, Cristina Modrojan, Constantin Bobirică, Madelene Annette Dăncilă, Liliana Bobirică, Cristina Orbeci, Simona Căprărescu, Adsorption of Phosphates from Aqueous Solutions using LDH-Type Materials, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022

F.78. Liliana Bobirică, Cristina Orbeci, Constantin Bobirică, Oanamari Daniela Orbuleț, Cristina Modrojan, Kinetics of photocatalytic degradation of chlorophenols from aqueous solutions, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022

- F.79.** Cristina Orbeci, Liliana Bobirică, Constantin Bobirică, Giovanina-Iuliana Lupu, Evaluation of TiO₂-Photocatalytic Membrane to Removal of 2,4-DCP from Wastewater, 21st Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 September 2022
- F.80.** Veronica Satulu, Andreea Madalina Pandele, Anca Bonciu, S.I. Voicu, Giovanina-Iuliana Lupu, Liliana Bobirica, Constantin Bobirica, Cristina Orbeci, Bogdana Mitu, Gheorghe Dinescu, Robust CA-GO-PTFE membranes for azithromycin photo-degradation in wastewaters, E-MRS 2023 - Spring Meeting - SYMPOSIUM C, Advanced materials for environmental challenges, Strasbourg, Franța, 29 mai-2 iunie 2023
- F.81.** Giovanina-Iuliana Lupu, Cristina Orbeci, Liliana Bobirica, Constantin Bobirica, Azithromycin removal from wastewater by photocatalytic degradation, 26th International Symposium "Environment and Industry", Bucharest, România, 27-29 September 2023
- F.82.** C. Orbeci, G.I. Lupu, C. Bobirică, L. Bobirică, Ivermectin removal from wastewater by photocatalytic degradation, 4th International Conference on Environmental Design ICED 2023, Atena, Grecia, 20-22 October 2023
- F.83.** Margareta Elena Nica (Morogan), Cristina Orbeci, Ileana Rău, Larisa Mădălina Meliță, Liliana Bobirică, Giovanina-Iuliana Ionică, Constantin Bobirică, Identification of the Binders Used in Historic Buildings Under Restoration, 23rd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, România, 4-7 septembrie 2024
- F.84.** Liliana Bobirică, Cristina Orbeci, Giovanina-Iuliana Ionică, Roberta Irodia, Cristian Pîrvu, Constantin Bobirică, Photocatalytic Reactor for the Degradation of Estrogens from Wastewater, 23rd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, România, 4-7 septembrie 2024
- F.85.** Giovanina-Iuliana Ionică, Cristina Orbeci, Liliana Bobirică, Constantin Bobirică, Ioan Ștefan Voicu, A Comparative Study on the Efficiency of Degradation of Azithromycin from Wastewater by Different Functionalized Materials, 23rd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, România, 4-7 septembrie 2024
- F.86.** Constantin Bobirică, Cristina Orbeci, Liliana Bobirică, Giovanina-Iuliana Ionică, Oanamari Daniela Orbuleț, Kinetic Modelling of the Photocatalytic Mineralisation of Endocrine Disruptors in Aqueous Solutions, 23rd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, România, 4-7 septembrie 2024
- F.87.** Cristina Orbeci, Giovanina-Iuliana Ionică, Constantin Bobirică, Liliana Bobirică, Annette Madelene Dăncilă, Photocatalytic Degradation of Ivermectin from Wastewater, 23rd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, România, 4-7 septembrie 2024
- F.88.** Liliana Bobirică, Giovanina-Iuliana Ionică, Cristina Orbeci, Andrei Burghelea, Constantin Bobirică, Removal of estrogen from wastewater by photocatalytic degradation – 27th International Symposium "The Environment and Industry", Bucharest, România, 19-20 septembrie 2024

G. Proiecte de cercetare

- G. 1.** Contract MEN 43-99-10/1999, Tema A42:"Cristalizarea și caracterizarea structurilor carbonato-silicaticice ale metalelor alcaline" - *membru în echipa de cercetare*
- G. 2.** Contract ANSTI 43-99-14/1999, Tema B95:"Modelarea proceselor de precipitare a combinațiilor greu solubile" - *membru în echipa de cercetare*
- G. 3.** Contract ANSTI 43-99-16/1999, Tema B96:"Procese de cristalizare din soluții și din fază solidă" - *membru în echipa de cercetare*
- G. 4.** Contract ANSTI 43-99-13/1999, Tema B22:"Lichide ecologice de răcire, ungere și protecție anticorozivă" - *membru în echipa de cercetare*
- G. 5.** Contract Relansin 460/1999:" Produse biologic active și instalație versatilă pentru fabricarea acestora" - *membru în echipa de cercetare*
- G. 6.** Contract Relansin 5364/2000:"Compuși anorganici ai stronțului de puritate tehnică și avansată" - *membru în echipa de cercetare*
- G. 7.** Contract Relansin 3108/2000:"Amestecuri sinergice fertilizanți-erbicide și tehnologii de fabricare" - *membru în echipa de cercetare*
- G. 8.** Contract ANSTI 48-20-25/2000:"Metode noi de identificare a structurilor oxidice cristaline bazate pe utilizarea rețelelor neurale artificiale" - *membru în echipa de cercetare*
- G. 9.** Contract CERES 4-126/2004: "Obținerea și caracterizarea straturilor subțiri foto și electroluminiscente" (LUMILUX) - *membru în echipa de cercetare*
- G. 10.** Proiect nr. 22-116/2009-2010 CNMP - Program 4. Parteneriate în domeniile prioritare: „Sechestrarea dioxidului de carbon prin legare chimică în compuși minerali utili în scopul reducerii emisiilor de gaze cu efect de seră (SEQCARBMIN)”; Parteneri: UB, UPB, ICDFM - *membru în echipa de cercetare*
- G. 11.** Grant/Proiect de cercetare cu finanțare publică internațională, ERA-NET 2021-2024, BLUE BIO (244/2021, ID: 120212510, NR. INTERN UPB: CH 45-21-02), , Sustainable utilization of MARIne resources to foster GREEN plant production in Europe – MARIGREEN, parteneri: 1) UPB, București, 2) Centre for Organic Agriculture (NORSØK), Tingvoll, Norway, 3) University of Thessaloniki (AUTH), Greece, 4) USAMV, București, 5) DTU Aqua, Hirtshals, Denmark, 6) University of Copenhagen (UC), Frederiksberg, Denmark, 7) Norwegian Research Centre (NORCE), Bergen, Norway, 8) ALUMICHEM A/S, Birkerød, Denmark, 9) Fjordlaks AS, Ålesund, Norway, 10) Algea AS, Kristiansund, Norway, 11) Sigurd Folland AS, Averøy, Norway, 12) Snadder & Snaskum AS, Rissa, Norway - *membru în echipa de cercetare*

H. Alte lucrări de cercetare – dezvoltare

- H. 1. Contract 22850/19.12.2006, Nr. int. CH370603: "Studiu de impact asupra mediului privind utilizarea unui polimer fotosensibil în imprimările fotoluminiscente", Beneficiar SC SpaceArt International SRL București - *responsabil/director de proiect*
- H. 2. Contract 6278/09.05.2007, Nr. int. CH 370702: „Posibilități de utilizare a polimerilor fotosensibili în imprimările fotoluminiscente” Beneficiar SC SpaceArt International SRL București - *responsabil/director de proiect*
- H. 3. Contract 637/15.01.2009, Nr. int. CH370902: „Studiu de impact asupra mediului privind utilizarea cernelurilor acrilice serigrafice în impregnările textile”, Beneficiar S.C. Startonight SRL București - *responsabil/director de proiect*
- H. 4. Contract ALRO Slatina 43-98-05/1998, TEMA A22: "Granularea prin compactare a fluorurii de aluminiu"- *membru în echipa de cercetare*
- H. 5. Contract 43-02-01/2002:"Studiul reținerii cromului trivalent din ape reziduale de la tăbăcării", Beneficiar INCDTP - Filiala Inst. de Cercetari Pielarie Incaltaminte Bucuresti -*membru în echipa de cercetare*
- H. 6. Contract 43-04-02/2003:"Analiza calității unor surse de apă din foraje și a celor din rețeaua de alimentare aferentă” Beneficiar PETROM SERVICE Bucuresti - *membru în echipa de cercetare*

I. Proiecte de dezvoltare a capitalului uman

- I. 1. Proiect POSDRU/90/2.1/S/58108 “Restructurarea sistemului de practică productivă a studenților din învățământul tehnic superior (TRIPOD)” - *membru în echipa de lucru (ETS)*
- I. 2. Proiect PODCA “Politici publice fundamentate în Învățământul Superior: o premisă necesară pentru dezvoltarea României” SMIS 34912 - *membru în echipa de lucru/ Expert politici publice (ETS)*
- I. 3. Proiect POSDRU/187/1.5/S/ 155536 „Cunoaștere, inovare și dezvoltare prin burse doctorale” (CID-Doc) - *membru în echipa de lucru (ETL)*
- I. 4. Proiect POSDRU/159/1.5/S/134398 „Dezvoltarea resurselor umane din cercetarea doctorală și postdoctorală” (KNOWLEDGE) - *membru în echipa de lucru (ETS)*
- I. 5. Proiect POSDRU/159/1.5/S/132397 „Excelență în cercetare prin burse doctorale și postdoctorale” (ExcelDOC) - *membru în echipa de lucru (ETS)*
- I.6. Proiect POSDRU/159/1.5/S/132395 „Burse doctorale și postdoctorale în sprijinul inovării și competitivității științifice” (InnoResearch) - *membru în echipa de lucru (ETS)*
- I.7. ACORD DE GRANT G 148 / SGU / NC / II / 10.09.2019 – “Oportunitati de dezvoltare profesională în cadrul procesului educațional din Facultatea de Chimie Aplicată și Știința Materialelor” (ODECHIM) – *Director de proiect*

I.8. Proiect MySMIS 124705 - Sisteme de învățare bazate pe muncă prin burse antreprenor pentru doctoranzi și postdoctoranzi (SIMBA) – *Coordonator mentorat grup țintă*

I.9. Proiect MySMIS 153734 - Pregătirea doctoranzilor și cercetătorilor postdoctorat în vederea dobândirii de competențe de cercetare aplicativă (SMART) – *Mentor cercetare avansată*