

Lista de lucrări
Cristina ORBECI
[obținerea atestatului de abilitare]

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

B. Brevete de invenție

B. 1. Cristina Orbeci, Annette-Madeline 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 Fe^{2+} pentru oxidarea avansată a compușilor organici din apele reziduale"; International Patent C02F-001/72: Photo-Fenton process modified by in-situ generation of Fe^{2+} 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: Photocatalytic system for advanced sewage treatment

C. Cărți si capitole de cărți

Ca – Cărți/cursuri (manuale) pentru uzul studenților, 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-Madeline 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 Modrogan, 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

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 copolymeres 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.** **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. 8.** **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. 9.** **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. 10.** 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. 11.** 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. 12.** Octavian Dorca, Piotr Szczepanski, Veronica Ionela Panait, Szidonia-Katalin Tanczos, Andreea Raducu, **Cristina Orbeci**, Transport and Separation of Zn(II)/Mn(II) in a MultimembraneHybrid System (MHS), Revista de Chimie, 64(9), 2013, p.946-950, ISSN: 0034-7752, WOS: 000326855900005
- Ris. 13.** 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. 14.** 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. 15. 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. 16. 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. 17.** 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 18.** 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. 19. 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. 20. 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. 21.** 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. 22.** 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. 23. 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. 24.** 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. 25.** 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. 26. 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. 27. Cristina Orbeci, Cristina Modroagan, 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 28. 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 29. 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 30. Orbulent Oanamari Daniela, Modroagan 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. 31. 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

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 residuaires 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 RICCCCE 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-TiO₂ desulphurization sorbent - ZnO/TiO₂ 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, RICCCE 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, RICCCE 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”, s7th 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, Spain

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 AdvPhotoCat2015, International Workshop, 6-8 iulie 2015, Iași, Romania

F. 36. Cristina Orbeci, Cristina Modrojan, Annette Madelene Dăncilă, Daniela Simina Ștefan, Degradation of Organic Compounds from Industrial Pharmaceutical Effluent Through Advanced Oxidation Processes, Advances on Photocatalysis AdvPhotoCat2015, 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 Modrojan, 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 Modrogan, **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, 23-25October 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, 23-25October 2017 Adana, Turkey

- F. 53.** Cristina Modrogan, Madalina Pandelescu, Madelene Dancila, Oanamari Orbuleț, **Cristina Orbeci**, Constantin Bobirica Isotherm models and kinetic of zinc adsorption by using gellan-gum/graphene oxides beads, ICEEM09, 6-9 September 2017, Bologna, Italy
- F. 54.** Oanamari Orbuleț, Cristina Modrogan, Madalina Pandelescu, **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 Modrogan, **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 Modrogan, **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 Modrogan, Oanamari Daniela Orbuleț, Madelene Annette Madelene Dăncilă, **Cristina Orbeci**, Constantin Bobirică, Mădălina Andreea Pandelescu, Cristina Costache, Enlèvement de fer contenu dans les eaux souterraines par adsorption, Dixième Colloque Franco-Roumain de Chimie Appliquée, COFrRoCA 2018, 27 – 29 Juin 2018, Bacău, Romania
- F. 58.** Cristina Modrogan, 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. Modrogan, 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

G. Proiecte de cercetare

- G. 1.** Contract MEN 43-99-10/1999, Tema A42: "Cristalizarea și caracterizarea structurilor carbonato-silicatică 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 biologice 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*

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)*

20.04.2019

Prof. dr. ing. Cristina Orbeci