

Universitatea Politehnica din Bucureşti

Facultatea de Inginerie Chimică și Biotehnologii

Departamentul de Chimie Analitică și Ingineria Mediului

Lucrări publicate în reviste și volume de conferințe cu referență (neindexate) –

1. **Cristina Modrogan**, Liliana Bobirica, Constantin Bobirica, Cristina Costache, Rodica Stanescu, "Removal of Chromium from Tannery Solid Waste", Proceedings of the First International Conference on Environmental Research and Assessment, Bucharest, Romania, March, 23-27, 2003, (p)145-151
2. C. Bobirica, L. Bobirica, O. Butucea, **C. Modrogan**, R. Stanescu, " Stabilization by solidification of hazardous waste with high concentration of chromium", 13th Romanian International Conference on Chemistry and Chemical Engineering, vol .1, 2003, (p) 158-163
3. **Cristina Modrogan**, Liliana Bobirica, Oanamari Daniela Butucea, C. Bobirica, Viky Dicu, Cristina Costache, Rodica Stanescu, Ionel Constantinescu, "Iron removal from natural waters by purolite MZ-10 ion exchange resins", 13th Romanian International Conference on Chemistry and Chemical Engineering, vol .1, 2003, (p) 182-187
4. **Cristina Modrogan**, Cristina Costache, Oanamari Daniela Orbuleț, Rodica Stanescu, Ecaterina Diaconu, "The adsorptive removal of Cr(III) by C100 H cation exchange resin", 14th Romanian International Conference on Chemistry and Chemical Engineering, pag. S06- 270÷275, 2005
5. Cristina Costache, **Cristina Modrogan**, Rodica Stănescu, G.Apostol, Oanamari Butucea, I.Constantinescu, "Fertilizers development of a sustainable agriculture", CIEM, pag. 704- 709 , 2005
6. Cristina Costache, **Cristina Modrogan**, Rodica Stanescu, G.Apostol, Oanamari Butucea, I.Constantinescu, "New fertilizers—a support of a sustainable agriculture", Third International Conference Ecological Chemistry-2005, pag, 174-180
7. **Cristina Modrogan**, Cristina Costache, Oanamari Daniela Orbuleț, Rodica Stanescu, Ionel Constantinescu, "Sustainable development in tourism" The 7th International Conference of Tehnology and Quality for Sustained Development, 2006
8. **Modrogan Cristina**, Costache Cristina, Orbuleț Daniela Oanamari, „Removal of hexavalent Chromium from aqueous solutions by adsorption on peach kernel and nutshell”, The First International Proficiency Testing Conference Sinaia, România 11th – 13th October, 2007
9. **Cristina Modrogan**, Oanamari Daniela Orbuleț, Alexandra Miron, Cristina Costache, Ionel Constantinescu „The nitrate reduction from groundwater by iron at low pH value”, 15th Romanian International Conference on Chemistry and Chemical Engineering, vol .1, 2007
10. Oanamari D. Orbuleț, G. Apostol, **Cristina Modrogan**, Cristina M. Costache, Rodica Stănescu, I. Constantinescu, „Sorption mobile phosphates in soil”, Simpozion Internațional

„Producția de îngrășăminte cu fosfor și intensivizarea fertilizării fosfatice factor important în dezvoltarea producției agricole”, 25-26 Septembrie 2008, Constanța – România

11. **Cristina Modroğan**, Oanamari Orbuleț, Alexandra Miron, Cristina Costache, „New methods for nitrates removal from contaminated wastewaters”, The Second International Proficiency Testing Conference, Sibiu-România, pag. 256-261, ISSN 2066-737X, 2009
12. Oanamari D. Orbuleț, **Cristina Modroğan**, Alexandra R. Miron, Giani d. Apostol, Cristina M. Costache, Rodica Stănescu, Ionel Constantinescu, „The pH influence on phosphates sorption in soil”, 15th World fertilizer congress of the international scientific centre for fertilizers (CIEC) – Meeting the fertilizer demand on a changing globe: biofuels, climate change and contaminants-București, 29-02 septembrie 2011
13. **Modroğan Cristina**, Miron Alexandra Raluca, Butucea Oanamari Daniela and Costache Cristina „COD removal from industrial wastewater using activated carbon prepared from nut shell” 7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC7), Corfu, 2012
14. Miron Alexandra Raluca, **Modroğan Cristina**, Butucea Oanamari Daniela and Costache Cristina „The use of electrocoagulation technique in coloured wastewater treatment” 7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC7), Corfu, 2012
15. **Cristina Modroğan**, Alexandra Raluca Miron, Oanamari Daniela Orbuleț, Cristina Costache, Giani Apostol, Ion exchange processes on weak acid resins for waste water containing cooper ions treatment, 2 nd International Conference on Chemical Engineering, 4-8 noiembrie 2014
16. **Cristina Modroğan**, Irina Pincovschi, Cristina Orbeci, Forecasting study for Cd²⁺ ion removal using ion exchange, INCD ECOIND – International Symposium – SIMI 2015 “The environment and the industry”, 29-30 octombrie 2015
17. C. Orbeci, **C.Modroğan**, A.R. Miron, Removal of pharmaceutical effluents using photocatalytic membranes, 19 th Roamnian International Conference on Chemistry and Chemical Engineering, Sibiu, Romania, 2-5 septembrie, 2015
18. Cristina Orbeci, **Cristina Modroğan**, Alexandra Raluca Miron, Firas Hashim Kamar Removal of heavy metal ions through ion exchange, Of the IIIrd International Conference on Methods and Materials for Separation Processes Separation Science – Theory and Practice 2015, 6-10 september, 2015, Karpacz, Poland, pp. 99
19. **Cristina Modroğan**, Alexandra Raluca Miron and Oanamari Daniela Orbuleț, Removal of heavy metals from wastewaters by electrodialysis in the presence of ion exchange membranes, 5 th Regional Symposium on Electrochemistry South East Europe, Riu Pravetz, Bulgaria, 4-8 iunie 2015, pp. 130
20. **C. Modroğan**, O.D. Orbuleț, C. Costache, A.R. Miron, Neural network modeling and simulation of sorption of Cd²⁺ ions from wastewater using low cost adsorbent, 19 th Roamnian

International Conference on Chemistry and Chemical Engineering, Sibiu, Romania, 2-5 septembrie, 2015

21. **Cristina Modrogan**, Alexandra Raluca Miron, Cristina Costache, Daniela Elena Pascu, Removal of the Cd²⁺ ions from waters and industrial wastewaters by ion-exchange method, 9th International Conference on Materials Science & Engineering, 5-7 martie, 2015, Brasov, Romania, pp. 39
22. Cristina Kravvetz, **Cristina Modrogan**, Alexandra Raluca Miron, Oanamari Daniela Orbulet, Forecasting study for zinc ion removal using reactive barriers, 2th International Conference Geography Environment and GIS, students and young researchers, 21-23 mai 2015, Târgoviste, Romania, pp. 43-44
23. Alexandra Raluca Miron, Daniela Elena Pascu, Oanamari Daniela Orbulet, **Cristina Modrogan**, Mihaela Neagu (Pascu), George Alexandru Popa, "The use of permeable reactive barriers for removal of phosphate from groundwaters", lucrare acceptata ca prezentare orala la 5th International Conference "Advanced Composite Materials Engineering", sectiunea BNS1e, 16- 17 octombrie 2014, Brasov, Romania;
24. Alexandra Raluca Miron, **Cristina Modrogan**, Daniela Elena Pascu, Paul Constantin Albu, Daniela Dumitra Clej, Simona Caprarescu, "The use of Mathcad programme for data processing in the wastewater treatment field", lucrare acceptata ca poster la 9th International Conference on Materials Science & Engineering, sectiunea V – Safety, Modelling and Simulation in Materials Engineering, 5-7 martie 2015, Brasov, Romania;
25. Alexandra Raluca Miron, **Cristina Modrogan**, Daniela Elena Pascu, Simona Caprarescu, Hussam Nadum Abdalraheem Al- Ani, Abbas Abdul Kadhim Klaif Rikabi, Daniela Dumitra Clej, "Mathematical and kinetic modeling of aluminium anodes behavior during electrocoagulation process", lucrare acceptata si prezentata ca poster la Fifth Regional Symposium on Electrochemistry – South East Europe, RSE-SEE, 7-11 iunie 2015, RIU Pravets, Pravets, Bulgaria;
26. Annette Madelene Dancila, **Cristina Modrogan**, Cristina Orbeci, Oanamari Daniela Orbulet, Cadmium and copper sorption in a clayey chernozem soil, INCD ECOIND – International Symposium – SIMI 2016 "The Environment and Industry", Proceedings Book, 301-308
27. Cristina Orbeci, Annette Madelene Dăncilă, **Cristina Modrogan**, Daniela Simina řtefan, Removal of low biodegradable organic compounds from wastewater, 20th Romanian International Conference on Chemistry and Chemical Engineering, Poiana Brasov, ROMANIA - September 6-9, 2017, S5-100
28. 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, Poiana Brasov, ROMANIA - September 6-9, 2017, S5 - 107
29. **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, Poiana Brasov, ROMANIA - September 6-9, 2017, S5-156

30. Oanamari Daniela Orbuleț, **Cristina Modrogan**, Constantin Bobirică, Liliana Bobirică, Cristina Orbeci, Cristina Costache, Application of static and dynamic kinetic models for evaluating phosphate ions sorption processes in soil 20th Romanian International Conference on Chemistry and Chemical Engineering, Poiana Brasov, ROMANIA - September 6-9, 2017, S5 – 183
31. Oanamari Daniela ORBULET, **Cristina MODROGAN**, Madelene DANCILA, Constantin BOBIRICA, Cristina ORBEICI, Cristina COSTACHE, Adsorption competence study of soybean wastes regarding removal of cr (vi) from waste waters 2 th International congress of health and environment October 23-25, 2017 Adana-TURKEY, pag. 433-434
32. Mihai EFTIMIE, Madelene DĂNCILĂ, **Cristina MODROGAN**, Cristina ORBEICI, Alina MELINESCU, COD reduction of wastewater containing ampicillin using crt glass waste as photocatalytic substrate for tio, 2th international congress of health and environment October 23-25, 2017 Adana-TURKEY, pag. 435
33. Dancila A.M., Caprarescu S., Purcaru V., Vasile E. **Modrogan C.**, Melinescu A, Synthesis and characterization of zn₂tio₄ used in desulphurisation processes of waste gases with h₂s content, Oral Presentation vineri/pag 22, section Novel materials for environmental and energy applications, 2017
34. **Cristina Modrogan**, Madalina Pandele, Madelene Dancila, Oanamari Orbuleț, Cristina Orbeci, Constantin Bobirica, Isotherm modelsand kinetics of zinc adsorbtion by using gellan gum/graphene oxides beads, Oral presentation vineri/pag 23, section: Water and wastewater cycles: technologies, recycling, and valorization, 2017
35. Oanamari Orbuleț, **Cristina Modrogan**, Madalina Pandele, Cristina Orbeci, Madelene Dancila, Constantin Bobirica, SO₂ removal from residual gases by solid adsorbents, poster S6P20/ pag 35, Section VI. Monitoring and modelling of environmental pollution, 2017
36. 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, 20 th INTERNATIONAL SYMPOSIUM – SIMI 2017 “THE ENVIRONMENT AND THE INDUSTRY” pag 47
37. S. CAPRARESCU, V. PURCAR, A.L. RADU, E. ALEXANDRESCU, **C. MODROGAN**, Removal of nickel ions from synthetic wastewater by electrodialysis using polymer membranes doped with , plant extract, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, SGEM2017 Conference Proceedings, ISBN 978- 619-7408-09-6 / ISSN 1314-2704, 29 June - 5 July, 2017, Vol. 17, Issue 52, 755-762 pp, DOI: 10.5593/sgem2017/52/S20.097
38. **Modrogan Cristina**, Dăncilă Annette Madelene, Orbuleț Oanamari Daniela, Orbeci Cristina, Bobirică Constantin, Removal of manganese from groundwater by adsorption on gellan gum/magnetite composite, 18th Internatonal Multidisciplinary Scientific GeoConference SGEm 2018, Albena, Bulgaria

39. Oanamari Daniela Orbuleț, **Cristina Modrogan***, Constantin Bobirică, Cristina Orbeci, Dăncilă Madelene, Liliana Bobirică, Phosphate removing from wastewater by using low-cost adsorbent materials, INTERNATIONAL SYMPOSIUM “THE ENVIRONMENT AND THE INDUSTRY”, SIMI 2018
40. Annette Madelene Dăncilă, **Cristina Modrogan**, Cristian Onose, Oanamari Orbulet, Cristina Orbeci, The influence of temperature on SO₂ retention from residual gases by absorption into dilute basic solutions, INTERNATIONAL SYMPOSIUM “THE ENVIRONMENT AND THE INDUSTRY”, SIMI 2018,
41. **Cristina MODROGAN**, Oanamari Daniela Orbulet, Madelene Anette Dancila, Cristina Orbeci, Constantin Bobirică, Cristina Costache, Enlèvement de manganèse et fer contenus dans les eaux souterraines utilisant adsorption, 10ème édition du Colloque Franco-Roumain de Chimie Appliquée (COFrRoCA 2018), Bacau, Romania
42. SCARLAT Adina Alexandra, CAPRARESCU Simona*, PURCAR Violeta, **MODROGAN Cristina**, DANCILA Annette Madelene, PASCU (NEAGU) Mihaela, Application of natural fruit extracts as green corrosion inhibitors for steel in natural water, Prioritatile Chimiei pentru o Dezvoltare Durabila, PRIOCHEM XIV - Bucuresti Romania, 2018
43. Scarlat Adina Alexandra, Căprărescu Simona, Purcar Violeta, **Modrogan Cristina**, Recovery of copper ions from synthetically wastewater using polymer membrane with silane, 5th International Conference“Geography, Environment and GIS”, which will be held in Targoviste, Romania, between 17-19 May 2018.
44. Stancu Elena-Liliana, Căprărescu, Simona, Purcar Violeta, **Modrogan Cristina**, Study of corrosion efficiency of metals using commercial liquid additive in acidic medium, 5th International Conference “Geography, Environment and GIS”, which will be held in Targoviste, Romania, 17-19 May 2018.
45. O. D. Orbuleț, **Cristina Modrogan**, C. Bobirică, C. Orbeci, D. Madelene, L. Bobirică, Use of autoclaved cellular concrete and pumice stone for the removing of phosphates from wastewater, 4 th International Conference on Chemical Engineering inovative Materials and Processes for a Sustainable Developmnet, Iasi 2018
46. 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, III.PO.01 pag 121
47. 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, V.PO.11 pag 207
48. Annette Madelene Dancila, Oanamari Daniela Orbulet, **Cristina Modrogan**, Simona Caprarescu, Soybean waste material as potential adsorbent for heavy metal ions from aqueous

solutions, 19th International Multidisciplinary Scientific Geoconference SGEM 2019, Ecology, Economics, Education and Legislation, Vol 19, Issue: 5.2, pag. 823-830, ISSN 1314- 2704, www.sgem.org <http://doi.org/10.21698/simi.2018.fp19> <https://doi.org/10.5593/sgem2019/5.2>

49. 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,

50. S. Căprărescu, V. Purcar, A. M. Dăncila, **C. Modrogan**, O. D. Orbuleț, Corrosion protection of mild carbon steel using seaweed, 19th International Balkan Workshop on Applied Physics and Materials Science, 16-19 July 2019, Constanța, Romania 81. A. A.

51. Scarlat, S. Căprărescu, V. Purcar, **C. Modrogan**, A. M. Dăncila, O. D. Orbuleț, Treatment of paint wastewater using natural plant, crushed granite and anion exchange resin, 6th International Conference Geography, Environment and GIS for students and young researchers, 23-25 May 2019, Targoviste, Romania

52. 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

53. 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

54. 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, S5_193, Constanța - Romania, 2019

55. **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, S5_154, Constanța - Romania, 2019

56. A. M. Dăncilă, **C. Modrogan**, V. A. M. Dancila, C. Modrogan, E. Vasile, O. Orbuleț, S. Caprarescu, A. Culcea, *New sorbents from pyrite ash waste for H₂S reduction from waste gases*, International Symposium “The Environment And The Industry”, E-SIMI 2020, 24-25 September 2020, Section Sustainable Environmental Technologies 34, DOI: <http://doi.org/10.21698/simi.2020.ab12>, p. 34-35, ISSN 2457-8371 (on-line), ISSN-L 1843-5831 Google scholar

57. S. Căprărescu, P. Violeta, **C. Modrogan**, A. A. Scarlat, L. Barbu, *Natural aqueous extract of root plant as green inhibitor for carbon steel corrosion in seawater*, 24th International Symposium

"Environment and Industry" SIMI 2021, Bucharest, Romania, 24th September 2021, Section Pollution Assessment & Management Systems DOI: <http://doi.org/10.21698/simi.2021.ab26>, p. 68-69

58. A.-A. Matei, L. Barbu, S. Căprărescu, **C. Modrogran**, *Linearity studies in determination of trihalomethanes in drinking water by gas chromatography*, 24th International Symposium "Environment and Industry" SIMI 2021, Bucharest, Romania, 24th September 2021, Section Pollution Control and Monitoring, DOI: <http://doi.org/10.21698/simi.2021.ab43>, p. 103-104

59. S. Căprărescu, A. M. Dăncilă, **C. Modrogan**, V. Purcar, *Corrosion protection of carbon steel using natural seaweeds from seawater*, Virtual International Scientific Workshop “Eurachem2020 - Quality Assurance Elements for Analytical Laboratories in the University Curriculum”, 14-15 July **2020**, Bucharest, Romania