

Europass Curriculum Vitae



Personal information

First name / Surname

Laura Bulgariu

Address

Bd. Prof. D. Mangeron, no. 73, "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management, 700050 – Iași, Romania

Telephone

0232-271759 / 2244

Mobile:

Fax

+ 04-0232-271759

E-mail

lbulg@ch.tuiasi.ro

Nationality

Romanian

Gender

Female

Work experience

Dates

2019 - present

Occupation or position held

Professor

Main activities and responsibilities

Teaching and research activities

Name and address of employer

Technical University Gheorghe Asachi of Iasi, Faculty of Chemical Engineering and Environmental Protection

Type of business or sector

Higher education

Dates

2014 - 2019

Occupation or position held

Associate Professor

Main activities and responsibilities

Teaching and research activities

Name and address of employer

Technical University Gheorghe Asachi of Iasi, Faculty of Chemical Engineering and Environmental Protection

Type of business or sector

Higher education

Dates

2009 - 2014

Occupation or position held

Assistant Professor

Main activities and responsibilities

Teaching and research activities

Name and address of employer

Technical University Gheorghe Asachi of Iasi, Faculty of Chemical Engineering and Environmental Protection

Type of business or sector

Higher education

Dates

2000 - 2009

Occupation or position held

Teaching Assistant

Main activities and responsibilities

Teaching and research activities

Name and address of employer

Technical University Gheorghe Asachi of Iasi, Faculty of Chemical Engineering and Environmental Protection

Type of business or sector

Higher education

Education and training	
Dates	2013
Title of qualification awarded	Habilitation degree
Principal subjects/occupational skills covered	Environmental-friendly methods for the removal of heavy metals from aqueous media
Name and type of organisation providing education and training	Ministry of National Education
Dates	2001 - 2006
Title of qualification awarded	Ph.D degree
Principal subjects/occupational skills covered	Solvent extraction of some toxic metal ions
Name and type of organisation providing education and training	Technical University Gheorghe Asachi of Iasi
Dates	1997 - 1999
Title of qualification awarded	Master degree
Principal subjects/occupational skills covered	Molecular dynamic and thermodynamic of irreversible systems
Name and type of organisation providing education and training	"Al. I. Cuza" University of Iasi
Dates	1991 - 1996
Title of qualification awarded	Degree in chemistry and physics - diplomatist
Principal subjects/occupational skills covered	Chemistry – physical specialization
Name and type of organisation providing education and training	"Al. I. Cuza" University of Iasi
Dates	April – May 2008
Title of qualification awarded	Specialization training
Principal subjects/occupational skills covered	Analysis of solid materials by atomic force microscopy
Name and type of organisation providing education and training	Institute of Physics of the ASCR, Praga, Czech Republic
Dates	November 2006 – September 2008
Title of qualification awarded	Post doctoral specialization
Principal subjects/occupational skills covered	Remediation of water containing heavy metals by adsorption on natural and synthetic adsorbent materials
Name and type of organisation providing education and training	Technical University Gheorghe Asachi of Iasi
Dates	February 2003 – July 2003
Title of qualification awarded	Doctoral specialization training
Principal subjects/occupational skills covered	Amperometric sensors and impedance spectrometry
Name and type of organisation providing education and training	Università degli Studi di Milano, Italia, Dipartimento di Chimica Fisica ed Elettrochimica, Milano, Italy – Marie Curie Fellowship
Dates	March 2002 – August 2002
Title of qualification awarded	Doctoral specialization training
Principal subjects/occupational skills covered	Potentiometric and amperometric biosensors

Name and type of organisation providing education and training	Animal Reproduction and Food Research of the Polish Academy of Science, Olsztyn, Poland – Framework IV Programm								
Personal skills and competences									
Mother tongue(s)	Romanian language								
Other language(s)	-								
Self-assessment									
<i>European level (*)</i>									
English									
French									
(*) Common European Framework of Reference for Languages									
Social skills and competences	Collaboration skills with people and multi-disciplinary teams								
Organisational skills and competences	Coordination and management skills (people, projects, budgets)								
Technical skills and competences	In working with the computer, with different types of laboratory research equipments								
Scientific Portfolio	<p>198 scientific papers</p> <ul style="list-style-type: none"> - 79 papers in ISI Journals - 60 papers in BDI Journals - 37 papers in CNCSIS Journal - 22 papers in Conferences Proceedings - over 260 papers presented at Scientific Meetings <p>40 books, books chapters and laboratory guides</p> <p>Member in 35 research grants and contracts (24 as Director)</p>								
Annexes	List of papers – Annex 1								

2.12.2019

Professor dr.habil.chem.Laura Bulgariu

ANNEX 1 – LIST OF PAPERS

I. Books and Books Chapters

1. Coord. M. Macoveanu, **Laura Bulgariu**, B. Robu, C. Cojocaru, *Remediation of water polluted by oil and accidentally heavy metal ions using unconventional natural and synthetic sorbents* (in Romanian), Ed. EcoZone, Iași, 2009, ISBN: 978-973-7645-61-6, 208 p.
2. **Laura Bulgariu**, G. Rusu, *Instrumental methods of analysis. Practical Guide*, Ed. Performantica, Iași, 2010, ISBN 978-973-730-713-2, 130 p.
3. **Laura Bulgariu**, *Analytical control of products quality. Practical Guide*, Ed. Performantica, Iași, 2010, ISBN 978-973-730-740-6, 117 p.
4. **Laura Bulgariu**, *Instrumental methods of analysis*, Editura Politehnium, Iași, 2011, ISBN: 978-973-621-317-5, 260 p.
5. **Laura Bulgariu** – Analytical control of products quality, Editura Politehnium, Iași, 2013, ISBN 978-973-621-423-3, 215 p.
6. D. Bulgariu, **Laura Bulgariu**, Instrumental methods of analysis – Principles, Vol. 2, "Al.I. Cuza" University Publishing House Iași, 2014, ISBN 978-606-714-093-4, 314 p.
7. D.Bulgariu, C.Rusu, **Laura Bulgariu**, F. Filipov, Introduction of analytical geochemistry, Vol. 1, "Al.I. Cuza" University Publishing House Iași, 2014, ISBN 978-606-714-096-5, 255 p.
8. **Laura Bulgariu** – Chapter 12: Extraction of potentially toxic heavy metals in aqueous PEG-based two-phase systems, in Current topics, concepts and research priorities in environmental chemistry (I), edited by Carmen Zaharia, Editura Univeristății "Al.I.Cuza" Iasi, 2012, p. 267 – 286. ISBN: 978-973-703-798-5.
9. **Laura Bulgariu**, D. Bulgariu – Chapter 8: Removal of toxic heavy metals from aqueous media by sorption on low-cost materials, in Current topics, concepts and research priorities in environmental chemistry (II), edited by Carmen Zaharia, Editura Univeristății "Al.I.Cuza" Iasi, 2013, p. 153 – 188. ISBN: 978-973-703-939-2.
10. D. Bulgariu, C. Rusu, **Laura Bulgariu** – Chapter 3: Current best practices for inorganic analysis, in Contaminated soils: a guide to sampling and analysis, Edited by M. Gavrilescu and **Laura Bulgariu**, Future Science, London, 2013, ISBN: 978-1-909453-15-9, 112 pgs., pp. 32-49, doi:10.4155/EBO.13.490.
11. **Laura Bulgariu**, D. Bulgariu – Chapter 2: Simple chemical treatments used to improve the adsorptive characteristics of low-cost materials for environmental applications, in Current topics, concepts and research priorities in environmental chemistry (III), edited by Carmen Zaharia, Editura Univeristății "Al.I.Cuza" Iasi, 2014, p. 29 – 46. ISBN: 978-606-714-062-0.
12. **Laura Bulgariu**, D. Bulgariu, C. Rusu, - Chapter 25: Marine algae biomass for removal of heavy metal ions, in Hb25_Springer Handbook of Marine Biotechnology, Edited by: Se-Kwon Kim, Springer Berlin Heidelberg, Berlin, 2015, ISBN: 978-3-642-53970-1, 1425 pgs, pp. 611-642, DOI: 10.1007/978-3-642-53971-8_25.
13. **Laura Bulgariu**, D. Bulgariu, - Chapter 33: Algae Waste Biomass: A New Class of Low-Cost Material with Potential Applications in Environmental Engineering, in Marine Algae Extracts: Processes, Products, and Applications, Edited by: Se-Kwon Kim and Katarzyna Chojnacka, Wiley-VCH Verlag GmbH & Co. KGaA, 2015, ISBN: 9783527337088, 722 pgs, pp. 575-602, DOI: 10.1002/9783527679577.ch33.
14. **Laura Bulgariu**, M. Gavrilescu – Chapther 30: Bioremediation of heavy metals by microalgae, in Handbook of Marine Microalgae: Biotechnology Advances, Edited by: Se-Kwon Kim, Academic Press (Elsevier Amsterdam), 2015, ISBN: 978-0-12-800766-1, 605 pgs, pp. 457-469.
15. **Laura Bulgariu**, D. Bulgariu – Chapter 21: Biodiesel production from marine macroalgae, in Marine Bioenergy: Trends and developments, Edited by: Se-Kwon Kim and Choul-Gyun Lee, CRC Press (Taylor and Francis), 2015, ISBN: 978-1-4822-2237-1, 751 pgs, pp. 459-486.
16. G. Nacu, **Laura Bulgariu** – Chapter 3: Sawdust: A sustainable low-cost asdorbent for environmental remediation, in Sawdust: Properties, Potential uses and Hazard, Edited by: E. Stefan and K. Olaf, Nova Science Publishers Inc., New York, 2017, ISBN: 978-1-53612-493-4, 219 pgs, pp. 111-146.
17. **Laura Bulgariu**, D. Bulgariu – Chapter 3: Environmental Applications of and Ion-Exchange method: Achievements, Opportunities and Challenges, in Ion Exchange: Theory and Applications, Edited by: N. Spencer and J. Thornton, Nova Science Publishers Inc., New York, 2017, ISBN: 978-1-53612-352-4, 319 pgs, pp. 101-126.
18. **Laura Bulgariu**, D. Bulgariu – Chapter 6: Sustainable Utilization of Marine Algae Biomass for Environmental Bioremediation, in Prospects and Challenges in Algal Biotechnology, Edited by: Bhumi Nath Tripathi, Dhananjay Kumar, Springer Singapore, 2017, ISBN: 978-981-10-1949-4 (e-book: 978-981-10-1950-0), 326 pgs, pp. 179-217, DOI: 10.1007/978-981-10-1950-0_6.
19. **Laura Bulgariu**, D. Bulgariu – Chapter 3: Use of Aqueous PEG-based Two Phase Systems for Extraction of Heavy Metal Ions in Aqueous Two-Phase Systems: Properties, Functions and Advantages, Edited by: V.A. Xanthopoulos, Nova Science Publishers Inc., New York, 2018, ISBN: 978-1-53614-242-6, 114 pgs, pp. 55-88.
20. **Laura Bulgariu**, D.Bulgariu – Chapter 4: Bioremediation of Toxic Heavy Metals Using Marine Algae Biomass, in Green Materials for Wastewater Treatment, Edited by: Mu. Naushad and E. Lichfouse, Springer Nature, 2019, ISBN: 978-3-030-17723-2. DOI: 10.1007/978-3-030-17724-9_4

II. Papers published in ISI Thomson Journals

1. **Laura Bulgariu**, H. Radecka, M. Pietraszkiewicz, O. Pietraszkiewicz – Potentiometric response of Liquid Membrane Electrode Incorporated with Macrocyclic Polyamine Towards Benzoate, *Anal. Lett.* 36(7), (2003), 1325-1334.
2. **Laura Bulgariu**, D. Bulgariu, I. Sârghie - Spectrophotometric determination of Cadmium (II) using p,p'-dinitro-sym-diphenylcarbazide in aqueous solutions, *Anal. Lett.* 38(14), (2005), 2365-2375.
3. J. Radecki, I. Szymanska, **Laura Bulgariu**, M. Pietraszkiewicz – Covalent and embedment immobilization of macrocyclic polyamines on gold electrodes and their voltammetric response towards ethene dicarboxylic acids, *Electrochim. Acta*, 51, (2006), 2289-2297.
4. **Laura Bulgariu**, D. Bulgariu - Hg(II) extraction PEG-based aqueous two-phase system in the presence of halide ions. I. Liquid phase analysis. *Central Europ. J. Chem.*, 4(2), (2006), 246-257.
5. **Laura Bulgariu**, D. Bulgariu, *The extraction of Zn(II) in aqueous PEG(1550) – (NH₄)₂SO₄ two-phase system using Cl⁻ ions as extracting agent*. *Journal of the Serbian Chemical Society*, 72(3) (2007) 289-297.
6. **Laura Bulgariu**, D. Bulgariu, *The partition of Zn(II) using halide ions extractants in aqueous PEG-based two-phase systems*. *Separation Science and Technology*, 42(5) (2007) 1093-1106.
7. **Laura Bulgariu**, D. Bulgariu, I. Sârghie, Th. Măluțan, *Cd(II) Extraction in PEG-based two-phase aqueous systems in the presence of iodide ions. Analysis of PEG-rich solid phases*. *Central European Journal of Chemistry*, 5(1) (2007) 291-302.
8. **Laura Bulgariu**, C. Cojocaru, B. Robu, M. Macoveanu, *Equilibrium isotherm studies for sorption of lead ions from aqueous solutions using Romanian peat sorbent*. *Environmental Engineering and Management Journal*, 6(5) (2007) 425-430.
9. **Laura Bulgariu**, D. Bulgariu, *Cd(II) extraction in PEG (1550) – (NH₄)₂SO₄ aqueous two-phase system using halide extractants*. *Journal of the Serbian Chemical Society*, 73(3) (2008) 341-350.
10. **Laura Bulgariu**, D. Bulgariu, *The influence of phase forming salt on Cd(II) extraction in aqueous PEG-based two-phase systems*. *Revue Roumain de Chimie*, 53(2) (2008) 141-147.
11. **Laura Bulgariu**, D. Bulgariu, *Extraction of metal ions in aqueous PEG-inorganic salt two phase systems in presence of inorganic extractants: correlation between extraction behaviour and stability constants of extracted species*. *Journal Chromatography A*, 1196-1197(1-2) (2008) 117-124.
12. **Laura Bulgariu**, M. Rățoi, D. Bulgariu, M. Macoveanu, *Equilibrium study of Pb(II) and Hg(II) sorption from aqueous solutions by moss peat*. *Environmental Engineering and Management Journal*, 7(5) (2008) 211-215.
13. B. Robu, **Laura Bulgariu**, D. Bulgariu, M. Macoveanu, *Quantification of impact and risk induced in surface water by heavy metals: Case study - Bahlui River Iasi*. *Environmental Engineering and Management Journal*, 7(3) (2008) 263-267.
14. D. Bulgariu, D. Juravle, **Laura Bulgariu**, M. Macoveanu, C. Rusu, *Distribution and migration of chrome in urban soils - Case study: Iași City (industrial zone)*. *Environmental Engineering and Management Journal*, 7(3) (2008) 277-288.
15. D. Bulgariu, **Laura Bulgariu**, D. Juravle, D. Condurachi, *Separation of uranium(VI) from soils by extraction in aqueous PEG (1550)-Na₂SO₄-Na₂CO₃ two-phase systems. I. Preliminary results*. *Environmental Engineering and Management Journal*, 7(4) (2008) 389-395.
16. **Laura Bulgariu**, B. Robu, M. Macoveanu, *The Pb(II) Sorption from Aqueous Solutions by Sphagnum Moss Peat*. *Revista de Chimie*, 60(2) (2009) 171-175.
17. **Laura Bulgariu**, M. Rățoi, D. Bulgariu, M. Macoveanu, *Adsorption potential of mercury(II) from aqueous solutions onto Romanian peat moss*. *Journal of Environmental Science and Health, Part A*, 44(7) (2009) 700-706.
18. **Laura Bulgariu**, M. Rățoi, D. Bulgariu, M. Macoveanu, *The sorption of lead(II) ions from aqueous solutions on peat: kinetics study*. *Environmental Engineering and Management Journal*, 8(2) (2009) 289-295.
19. **Laura Bulgariu**, D. Bulgariu, Th. Malutan, M. Macoveanu, *Adsorption of Lead(II) Ions from Aqueous Solution onto Lignin*. *Adsorption Science & Technology*, 27(4) (2009) 435-445.
20. D. Asandei, **Laura Bulgariu**, E. Bobu, *Lead (II) removal from aqueous solutions by adsorption onto chitosan*, *Cellulose Chemistry and Technology*, 43(4-6) (2009) 211-216.
21. C. Caramalau, **Laura Bulgariu**, M. Macoveanu, *Kinetic study of cobalt(II) adsorption on peat activated by simple chemical treatments*. *Environmental Engineering and Management Journal*, 8(6) (2009) 1351-1358.
22. C. Caramalau, **Laura Bulgariu**, M. Macoveanu, *Adsorption characteristics of Co(II) ions from aqueous solutions on Romanian peat moss*, *Environmental Engineering and Management Journal*, 8(5) (2009) 1089-1095.
23. V. L. Pavel, D. Bulgariu, **Laura Bulgariu**, R. M. Hlihor, M. Gavrilescu, *Studies on sorption and transport processes of cadmium in soils*, *Environmental Engineering and Management Journal*, 8(6) (2009) 1315-1320.
24. F. A. Caliman, L.C. Apostol, D. Bulgariu, **Laura Bulgariu**, M. Gavrilescu, *Study regarding the sorption of erythrosine from aqueous solution onto soil*. *Environmental Engineering and Management Journal*, 8(6) (2009) 1339-1346.
25. F. A. Caliman, L.C. Apostol, D. Bulgariu, **Laura Bulgariu**, M. Gavrilescu, *Influence of soil particle size onto sorption of tetrazine from aqueous solutions*. *Environmental Engineering and Management Journal*, 8(5) (2009) 1081-1087.
26. **Laura Bulgariu**, D. Bulgariu, *Use Aqueous PEG-Inorganic Salt Two-Phase Systems for Bi(III) Extraction in the Presence of Inorganic Extractants*. *Studia Universitatis Chemia*, 4(II), (2009) 273-284.
27. F.A. Caliman, L.C. Apostol, D. Bulgariu, **Laura Bulgariu**, M. Gavrilescu, *Sorption of Acid Yellow 23 from aqueous solutions onto soils*, *Afinidad*, LXVI 544 (2009) 465-473.

28. D. Humelnicu, **Laura Bulgariu**, M. Macoveanu, *On the retention of uranyl and thorium ions from radioactive solution on peat moss*, Journal of Hazardous Materials 174 (2010) 782–787.
29. L. Tofan, C. Păduraru, **Laura Bulgariu**, R. Wenker, *Perspectives on Analytical Methodology of Platinum Metals*. Advanced Materials Research, 95 (2010) 9-16. (doi:10.4028/www.scientific.net/AMR.95).
30. V.L. Pavel, D. Bulgariu, **Laura Bulgariu**, R.M. Hlihor, M. Gavrilescu, *Analysis of factors determining the behaviour of chromium in some Romanian soils*. Environmental Engineering and Management Journal, 9(1) (2010) 89-94.
31. **Laura Bulgariu**, D. Bulgariu, M. Macoveanu, *Kinetics and equilibrium study of nickel(II) removal using peat moss*. Environmental Engineering and Management Journal, 9(5) (2010) 659-666.
32. **Laura Bulgariu**, A. Ceica, L. Lazar, I. Cretescu, I. Balasanian, *Equilibrium and Kinetics Study of Nitrate Removal from Water by Purolite A100 Resin*. Revista de Chimie, 61(11) (2010) 1136-1141.
33. C. Leonte, **Laura Bulgariu**, B. Robu, T. Robu, D. Simioniu, *Study of biodiesel production from oilseed plants. II. Evaluation of biodiesel production from some cultivars of rapes*. Environmental Engineering and Management Journal, 9(9) (2010) 1311-1316.
34. **Laura Bulgariu**, D. Bulgariu, M. Macoveanu, *Adsorptive Performances of Alkaline Treated Peat for Heavy Metal Removal*. Separation Science and technology, 46(6) (2011) 1023 – 1033 (doi:10.1080/01496395.2010.536192).
35. **Laura Bulgariu**, D. Bulgariu, *Extraction of gold(III) from chloride media in aqueous polyethylene glycol-based two-phase system*. Separation and Purification Technology, 80(3) (2011) 620 – 625.
36. A. Ceica, **Laura Bulgariu**, L. Lazar, I. Cretescu, I. Balasanian, *Influence of some parameters on nitrate removal from water by purolite A-520E resin*. Environmental Engineering and Management Journal 10(10) (2011) 1553-1559.
37. D. Bulgariu **Laura Bulgariu**, *Equilibrium and kinetics studies of heavy metal ions biosorption on green algae waste biomass*. Bioresource Technology, 103 (2012) 489–493, doi:10.1016/j.biortech.2011.10.016.
38. **Laura Bulgariu**, D. Bulgariu, M. Macoveanu, *Characteristics of sorption of uncomplexed and complexed Pb(II) from aqueous solutions onto peat*. Chemical Papers, 66 (4) 239–247 (2012), DOI: 10.2478/s11696-012-0149-z.
39. **Laura Bulgariu**, A. Ceica, L. Lazar, I. Cretescu, I. Balasanian, *Equilibrium and kinetics study of nitrate removal from water by Purolite A520-E resin*. Environmental Engineering and Management Journal, 11(1) (2012) 37-45.
40. I.O. Sandu, **Laura Bulgariu**, M. Macoveanu, *Evaluation of atmospheric pollution by using natural low-cost sorbents*. Engineering and Management Journal, 11(1) (2012) 177-184.
41. M. Lupea, **Laura Bulgariu**, M. Macoveanu, *Biosorption of Cd(II) from aqueous solutions on marine algae biomass*. Environmental Engineering and Management Journal, 11(3) (2012) 607-615.
42. I.O. Sandu, **Laura Bulgariu**, M. Macoveanu, *Evaluation of Environmental Impact using Active Biomonitoring Studies of Air Pollution*, Environmental Engineering and Management Journal, 11(8), (2012), 1527-1534.
43. **Laura Bulgariu**, R. Hlihor, D. Bulgariu, M. Gavrilescu, *Sorptive removal of cadmium(II) ions from aqueous solution by mustard biomass*, Environmental Engineering and Management Journal, 11(8), (2012), 1969-1976.
44. **Laura Bulgariu**, D. Bulgariu, Direct determination of nitrate in small volumes of natural surface waters using a simple spectrophotometric method, Review in Analytical Chemistry, 31(3-4), 201–207, DOI: 10.1515/revac-2012-0004, September 2012.
45. D. Bulgariu, **Laura Bulgariu**, Sorption of Pb(II) onto a mixture of algae waste biomass and anion exchanger resin in a packed-bed column, Bioresource Technology, 129, (2013), 374–380, <http://dx.doi.org/10.1016/j.biortech.2012.10.142>
46. G.D. Suditu, C.G. Piuleac, **Laura Bulgariu**, S. Curteanu, Application of a neuro-genetic technique in the optimization of heavy metals removal from wastewaters for environmental risk reduction, Environmental Engineering and Management Journal, 12(1), (2013), 167-174.
47. **Laura Bulgariu**, M. Lupea, D. Bulgariu, C. Rusu, M. Macoveanu, Equilibrium study of Pb(II) and Cd(II) biosorption from aqueous solution on marine green algae biomass, Environmental Engineering and Management Journal, 12(1), (2013), 183-190.
48. L. M. Doubova, S. Rondinini, A. Vertova, **Laura Bulgariu**, Studying electron transfer reaction at the Au/n-decanethiol/aqueous solution of NaNO₃ interface by electrochemical impedance spectroscopy, Russian Journal of Electrochemistry, 49(1), (2013), 26-37.
49. G. Suditu, S. Curteanu, **Laura Bulgariu**, Neural networks-based modeling applied to a process of heavy metals removal from wastewaters, Journal of Environmental Science and Health, Part A, 48(11), (2013), 1399-1412.
50. **L.Bulgariu**, D. Bulgariu, Selective extraction of Hg(II), Cd(II) and Zn(II) ions from aqueous media by a green chemistry procedure using aqueous two-phase systems, Separation and Purification Technology, 118, (2013), 209-216. (30 October 2013), <http://dx.doi.org/10.1016/j.seppur.2013.07.007>.
51. D. Bulgariu, C. Rusu, **Laura Bulgariu**, Adsorptive characteristics of histosol modified by simple chemical treatments for Ni(II) removal from aqueous media, STUDIA UBB CHEMIA, LVIII (4), (2013), 121-136.
52. **Laura Bulgariu**, C. Bălan, D. Bulgariu, M. Macoveanu, Valorisation of Romanian peat for the removal of some heavy metals from aqueous media, Desalination and Water Treatment, 52, (2014), 5891-5899. doi: 10.1080/19443994.2013.811105.
53. L. Lazar, B. Brandabur, R.E. Tataru-Fărmaş, M. Drobotă, **Laura Bulgariu**, G. Gutt, FTIR analysis of ion exchange resin with applications in permanent hard water softening, Environmental Engineering and Management Journal, 13(9), (2014), 2145 – 2152.
54. L. Lazar, A. Ceica, **Laura Bulgariu**, L. Pascu, I. Balasanian, I. Cretescu, Removal of nitrate ions from water using non-selective Purolite A847 resin, Journal of Environmental Protection and Ecology 15(4), (2014), 1564–1573.

55. R.M. Hlihor, **Laura Bulgariu**, D. L. Sobariu, M. Diaconu, T. Tavares, M. Gavrilescu, Recent advances in biosorption of heavy metals: support tools for biosorption equilibrium, kinetics and mechanism, *Revue Roumaine de Chimie*, 59(6-7), (2014), 527-538.
56. O. Axinte, I.S. Bădescu, C. Stroe, V. Neacșu, **Laura Bulgariu**, D. Bulgariu, Evolution of trophic parameters from Amara Lake, *Environmental Engineering and Management Journal*, 14(3), (2015), 559-565.
57. I. Volf, N.G. Rakoto, **Laura Bulgariu**, Valorization of *Pistia stratiotes* Biomass as Biosorbent for Lead(II) Ions Removal from Aqueous Media, *Separation Science and Technology*, 50(10), (2015), 1577-1586.
58. D. Bulgariu, D.T. Juravle, **Laura Bulgariu**, Removal of Zn(II) ions from aqueous solution by adsorption on mustard husks, *Studia UBB Chemia*, LX(2), (2015), 147-159.
59. T. Todorciuc, **Laura Bulgariu**, V.I. Popa, Adsorption of Cu(II) from aqueous solution on wheat straw lignin: Equilibrium and kinetic studies, *Cellulose Chemistry and Technology*, 49(5-6), (2015), 439-447.
60. M. Harja, G. Buema, **Laura Bulgariu**, D. Bulgariu, D.M. Sutiman, G. Ciobanu, Removal of cadmium(II) from aqueous solution onto modified algae and ash, *The Korean Journal of Chemical Engineering*, 32(9), (2015), 1804-1811. DOI: 10.1007/s11814-015-0016-z.
61. D. Bulgariu, **Laura Bulgariu**, Potential use of alkaline treated algae waste biomass as sustainable biosorbent for clean recovery of cadmium(II) from aqueous media: batch and column studies, *Journal of Cleaner Production*, 112, (2016), 4525-4533. DOI: 10.1016/j.jclepro.2015.05.124.
62. D. Bulgariu, G. Nacu, T. Măuțan, **Laura Bulgariu**, Kinetic study of lead(II) removal from aqueous solution onto lignin-based materials, *Cellulose Chemistry and Technology*, 50, (2016), 339-347.
63. G. Nacu, D. Bulgariu, M. Harja, C.M. Popescu, D.T. Juravle, **Laura Bulgariu**, Removal of Zn(II) ions from aqueous media on thermal activated sawdust, *Desalination and Water Treatment*, 57(46), (2016), 21904-21915. DOI: 10.1080/19443994.2015.1128366.
64. G.N. Moroi, E. Avram, **Laura Bulgariu**, Adsorption of Heavy Metal Ions onto Surface-Functionalised Polymer Beads. I. Modelling of Equilibrium Isotherms by Using Non-Linear and Linear Regression Analysis, *Water Air Soil Pollution*, 227(8), (2016), 260-278. DOI 10.1007/s11270-016-2953-5
65. L. (Negrilă) Nemeş, **Laura Bulgariu**, Optimization of process parameters for heavy metals biosorption onto mustard waste biomass, *Open Chemistry*, 14, (2016), 175-187.
66. G.N. Moroi, E. Avram, **Laura Bulgariu**, Erratum to: Adsorption of Heavy Metal Ions onto Surface-Functionalised Polymer Beads. I. Modelling of Equilibrium Isotherms by Using Non-Linear and Linear Regression Analysis, *Water Air Soil Pollution*, 227(8), (2016), 401-402. DOI 10.1007/s11270-016-2996-7
67. I.S. Bădescu, D. Bulgariu, **Laura Bulgariu**, Alternative utilization of algal biomass (*Ulva sp.*) loaded with Zn(II) ions for improving of soil quality, *Journal of Applied Phycology*, 29(2), (2017), 1069-1079. DOI: 10.1007/s10811-016-0997-y.
68. O. Axinte, I. Volf, **Laura Bulgariu**, Adaptive management for sustainable development of Amara Lake (S-E Romania), *Environmental Engineering and Management Journal*, 16(3), (2017), 625-631.
69. G. Nacu, L. (Negrila) Nemeş, **Laura Bulgariu**, Batch adsorption of Zn(II) ions from aqueous solution onto sawdust, *Revue Roumaine de Chimie*, 62(4-5), (2017), 439-447.
70. M.J. Akhtar, S. Ullah, I. Ahmad, S.M. Nadeem, M.Y. Khan, A. Rauf, S. Hussain, **Laura Bulgariu**, Nickel phytoextraction through bacterial inoculation in *Raphanus sativus*, *Chemosphere*, 190, (2018), 234-242. doi: 10.1016/j.chemosphere.2017.09.136.
71. B. Cojocariu, A.M. Mocanu, G. Nacu, **Laura Bulgariu**, Possible utilization of PET waste as adsorbent for Orange G dye removal from aqueous media, *Desalination and Water Treatment*, 104 (2018) 338–345. Doi: doi: 10.5004/dwt.2018.21909.
72. **Laura Bulgariu**, D. Bulgariu, Functionalized soy waste biomass - A novel environmental-friendly biosorbent for the removal of heavy metals from aqueous solution, *Journal of Cleaner Production*, 197(1), (2018), 875-885. <https://doi.org/10.1016/j.jclepro.2018.06.261>
73. I.S. Bădescu, D. Bulgariu, I. Ahmad, **Laura Bulgariu**, Valorisation possibilities of exhausted biosorbents loaded with metal ions – A review, *Journal of Environmental Management*, 224 (2018), 288-297. <https://doi.org/10.1016/j.jenvman.2018.07.066>.
74. **Laura Bulgariu**, L.B. Escudero, O.S. Bello, M. Iqbal, J. Nisar, K.A. Adegoke, F. Alakhran, M. Kornaros, I. Anastopoulos, The utilization of leaf-based adsorbents for dyes removal: A review, *Journal of Molecular Liquids*, 276, (2019), 728-747. <https://doi.org/10.1016/j.molliq.2018.12.001>.
75. G. Nacu, D. Șuteu, L.Tofan, C. Păduraru, **Laura Bulgariu**, Removal of Zn(II) ions from aqueous solution by sorption using cellulose functionalized with reactive dyes as adsorbents, *Environmental Engineering and Management Journal*, 18(2), (2019), 321-327.
76. S. Mazhar, A. Ditta, **Laura Bulgariu**, I. Ahmad, M. Ahmed, A.A. Nadiri, Sequential Treatment of Paper and Pulp Industrial Wastewater: Prediction of Water Quality Parameters by Mamdani Fuzzy Logic Model and Phytotoxicity Assessment, *Chemosphere*, 227, (2019), 256-268. <http://doi.org/10.1016/j.chemosphere.2019.04.022>.
77. M.A. Naeem, M. Imran, M. Amjad, G. Abbas, M. Tahir, B. Murtaza, A. Zakir, M. Shahid, **Laura Bulgariu**, I. Ahmad, Batch and Column Scale Removal of Cadmium from Water Using Raw and Acid Activated Wheat Straw Biochar, *Water*, 11, (2019), 1438; doi:10.3390/w11071438.
78. A.R. Lucaci, D. Bulgariu, I. Ahmad, G. Lisă, A.M. Mocanu, **Laura Bulgariu**, Potential Use of Biochar from Various Waste Biomass as Biosorbent in Co(II) Removal Processes, *Water*, 11, 1565, (2019), doi:10.3390/w11081565.
79. M. Ghercă, D. Bulgariu, A.M. Mocanu, **Laura Bulgariu**, Green chemistry extraction method for recovery of gold ions from cyanide wastewaters, *Environmental Engineering and Management Journal*, 18(8), (2019), 1747-1754.

III. Papers published in International Databases Indexed Journals

1. **Laura Bulgariu**, I. Sârghie – Separation of Cd(II) from Zn(II) by extraction in polyethylene glycol - based aqueous two- phases system in presence of iodide ions., Bul. Inst. Polit. Iasi, Tom. LI (LV), fasc. 1-2, (2005), p. 7-15
2. Bulgariu D., **Laura Bulgariu**, Rusu C., Robu B. *Decontamination of Polluted Soils with Heavy Metals by Electrokinetic Methods (I)*. Environm. Engin. Management J., 5(3), (2006), 307-318.
3. Bulgariu D., **Laura Bulgariu**. *The Natural Risk Potential – Natural Stability of the Ground. Case Study: Galata Perimeter – Iasi City*. Environm. Engin. Management J., 5(6), (2006), 1393-1406.
4. **Laura Bulgariu**, Bulgariu D., Sârghie I. - Selective extraction of Hg(II) in aqueous PEG(1550) – (NH₄)₂SO₄ two-phase system in presence of iodide ions. Bulletin of the Polytechnic Institute of Iasi, s. Chemistry and Chemical Engineering, Tom 51, no. 1-2, (2006), 1-8.
5. Bulgariu D., Rusu C., **Laura Bulgariu** - The impact of heavy metals pollution on the buffering and ionic exchange capacity of soils. Universitatea de Științe Agricole și Medicină Veterinară Iași, Lucrări Științifice – vol. 49, seria Agronomie, (2006), 47– 62.
6. Bulgariu D., **Laura Bulgariu** - The applications of extraction in aqueous two-phase systems to decontamination of polluted soils with heavy metals. Științe Agricole și Medicină Veterinară Iași, Lucrări Științifice – vol. 49, seria Agronomie, (2006), 1213-1218.
7. **Bulgariu L.**, Robu B., Bîlbă D., Maconeanu M. (2007). *Analysis by conductometric titration of chlorides from waste waters than contains heavy metals*. Anal. Sti. Univ. West Timișoara, vol. 16, no. 1, 1-9.
8. **Bulgariu L.**, Bulgariu D., Robu B., Maconeanu Matei. (2007). *The impact of urban soils pollution with heavy metals (Cd, Pb). Case study: Industrial Zone, Iași City*. Anal. Sti. Univ. West Timișoara, vol. 16, no. 1, 65-82.
9. Bulgariu D., Rusu C., **Bulgariu L.**, Stângă I.C. (2007). Mineralogy and geochemistry of andosols from Gurghiu Mountains (Part I). *USAMV Iași, Lucrări Științifice* – vol. 50, 113 – 123, seria Agronomie, 113-128.
10. **Bulgariu L.**, Bulgariu D. (2007). Distribution and mobility of cadmium and lead in urban soils – case study: Iași City – Industrial zone. *USAMV Iași, Lucrări Științifice* – vol. 50, 177 – 185, seria Agronomie, 177-191.
11. Robu B., **Bulgariu L.**, Robu E., Macoveanu M. (2007). The influence on soil and ground water quality by organic compounds use in orchards. *USAMV Iași, Lucrări Științifice* – vol. 50, seria Agronomie, 163-170.
12. Filipov F., Bulgariu D., **Bulgariu L.** (2007). Orientate chemical tests for organic material with mineral parts of pedogenetic horizons from green houses. *USAMV Iași, Lucrări Științifice* – vol. 50, seria Agronomie, 134-143.
13. D. Bulgariu, C. Rusu, **Laura Bulgariu**, I. Stanga, Mineralogy and geochemistry of andosols from Gurghiu Mountains (Part I), USAMV Iași, Scientific papers, Agronomy Series, 50, (2007), 113-128.
14. **Laura Bulgariu**, Rățoi M., Robu B., Măluțan Th., Macoveanu M. *Lead sorption by moss peat and its different main fractions*. USAMV Iași, Lucrări Științifice – seria Agronomie, 51, 2008.
15. Robu B., **Laura Bulgariu**, Macoveanu M. *The impact induced in environment by presence in soil of chrom ions*. USAMV Iași, Lucrări Științifice – seria Agronomie, 51, 2008, 185-190.
16. D. Bulgariu, **Laura Bulgariu**, C. Rusu, F. Filipov (2009) - *Distribution, mobility and bioavailability of phosphorus into soils from glass houses*. Lucrări științifice USAMV Iași, seria Horticultură", Tom LII / vol. 52 /2009, 869-874.
17. D. Bulgariu, **Laura Bulgariu**, F. Filipov (2009) - *The polymeric material effects on chemical and biochemical equilibriums in integrated soil – water – plants systems from glass houses. I - experimental setting and preliminary results*. Lucrări științifice USAMV Iași, seria Horticultură", Tom LII / vol. 52 /2009, 863-868.
18. F. Filipov, D. Bulgariu, I. Avarvarei, **Laura Bulgariu** (2009) - *The polymeric material effects on the salinization process of soils from glass houses*. Lucrări științifice USAMV Iași, seria Horticultură", Tom LII / vol. 52 /2009, 881-886.
19. **Laura Bulgariu**, Bulgariu D. (2009). *The utilization of aqueous PEG(1550) – NaNO₃ two-phase system for efficient extraction of Pb(II) with iodide extractants*. Annals of West University of Timisoara, s. chemistry, vol 18(1), 73-80.
20. C.Caramalau, **Laura Bulgariu**, M.Macoveanu (2009). Cobalt(II) removal from aqueous solutions by adsorption on modified peat moss. Chem. Bull. "Politehnica" Timisoara, 54(68), 13-17.
21. V.L. Pavel, D. Bulgariu, **Laura Bulgariu**, M. Gavrilescu, Study of chromium sorption from aqueous solution onto soils, USAMV Iași, Scientific papers, Agriculture Series, 52(1), (2009), 421-424.
22. **Laura Bulgariu**, A. Ceică, I. Crețescu, I. Balasanian (2010). *Influence of nitrate removal parameters from water by using purolite A 100*. Annals of "Dunarea de Jos" University of Galati, Mathematics, Physics, Theoretical Mechanics, Fascicle II, year II (XXXIII) 2010, No.1, pp. 48-52 (indexata in: 2/ http://www.csa2.com/ids70/serials_source_list.php?db=computer-set-c).
23. **Laura Bulgariu**, M. Lupea, C. Ciubotă-Roșie, M. Macoveanu, Possibility of using algae biomass for removing Pb(II) ions from aqueous solutions, Lucrări științifice USAMV Iași, seria Agronomie, vol. 53, (2010), 79-83.
24. C. Caramalau, **Laura Bulgariu**, M. Macoveanu, Removal of Nickel(II) from Aqueous Solituons by Adsorption on Peat, Bull. I.P. Iasi, seria chimie și inginerie chimică, tom LVI(LX), fasc. 1, (2010), 17-27.
25. T. Todorciuc, **Laura Bulgariu**, V.I. Popa, Operational Conditions Studies Concerning Complexation Ability of Wheat Straw Lignin for Copper (II) Ions, Bull. I.P. Iasi, seria chimie și inginerie chimică, tom LVI(LX), fasc. 1, (2010), 117-126.
26. **Laura Bulgariu**, A. Ceică, I. Balasanian, Spectrophotometric Method for Nitrate Analysis, Bull. I.P. Iasi, seria chimie și inginerie chimică, tom LVI(LX), fasc. 1, (2010), 127-135.
27. D. Asandei, **Laura Bulgariu**, E. Bobu, Kinetic study of lead(II) adsorption on chitosan, Bull. I.P. Iasi, seria chimie și inginerie chimică, tom LVI(LX), fasc. 4, (2010), 41-49.

28. A. Ceica, **Laura Bulgariu**, L. Lazar, I. Crețescu, I. Balasanian, Removal of nitrate from water in presence of competitors anions using purolite resins, Bull. I.P. Iasi, seria chimie și inginerie chimică, tom LVI(LX), fasc. 4, (2010), 119-131.
29. Bulgariu D., Stoleru V., Munteanu N., **Bulgariu L.**, Aștefanei D. (2010). The Distribution and mobility of cadmium in soils cultivated with vegetables. (I) Traditionals crops. *Lucrări științifice – seria Horticultură*, vol. LIII (53), 207 – 212; ISSN 1454-7376, USAMV Iași (ISSN: Cota CNCSIS: B+).
30. Bulgariu D., Munteanu N., Stoleru V., **Bulgariu L.**, Buzgar N. (2010). The distribution and mobility of chrome in soils cultivated with vegetalbles. (I) Traditional crops. *Lucrări științifice – seria Horticultură*, vol. LIII (53), 213 – 219, USAMV Iași (ISSN: Cota CNCSIS: B+).
31. Filipov F., Bulgariu D., **Bulgariu L.** (2010). Residual effects of polymeric materials used to treat soils from glasshouses and solariums. *Lucrări științifice – seria Horticultură*, vol. LIII (53), 485 – 490, USAMV Iași (ISSN: Cota CNCSIS: B+).
32. Filipov F., Bulgariu D., Avarvarei I., **Bulgariu L.** (2010). Comparative study of some conditioning and improvement procedures of soils from glasshouses and solariums by treating with polymeric materials. *Lucrări științifice – seria Horticultură*, vol. LIII (53), 491 – 495, USAMV Iași (ISSN: Cota CNCSIS: B+).
33. A. Ceica, **Laura Bulgariu**, L. Lazar, I. Cretescu, I. Balasanian, Influence of cations on nitrate removal using Purolite Resins, Bull. I.P.Iasi, s. Chemistry and chemical engineering, tome 57(2), (2011), 99 – 107.
34. M. Lupea, **Laura Bulgariu**, M. Macoveanu, Adsorption of Cobalt(II) from aqueous solution using marine green algae – *Ulva Lactuca* sp., Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome 58(1), (2012), 41-47.
35. B. Brandabur, L. Lazar, R.E. Tataru-Farmus, **Laura Bulgariu**, G. Gutt, Permanent Hard Water Softening Using Different Cation Exchange Resins, Bulletin of the Polytechnic Institute of Iasi, Sectiona Chemistry and Chemical Engineering, Tome 58(3), (2012), 141-150.
36. B. Brandabur, L. Lazar, R.E. Tataru-Farmus, **Laura Bulgariu**, G. Gutt, Use of strong acid resin Purolite C100E for removing permanent hardness of water – Factors affecting cationic exchange capacity, *Scientific Study & Research, Chemistry & Chemical Engineering, Biotechnology, Food Industry*, 13 (3), (2012), 295 – 304
37. **Laura Bulgariu**, T. Malutan, D. Bulgariu, Removal of Pb(II) ions from aqueous solution by adsorption on lignin obtained from rape wastes, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LIX (LXIII),(1), (2013), 75-86.
38. A. Anastasia-Sandu, S. Bîrzu, I. Dițu, **Laura Bulgariu**, Direct determination of menthol using a simple spectrophotometric method, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LIX (LXIII),(2), (2013), 71-80.
39. G. Gavriluță, **Laura Bulgariu**, Water Monitoring of the Commune Holboca, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LX (LXIV),(1), (2014), 35-42.
40. L. Flueraru, G. Răul, M. Tătaru, **Laura Bulgariu**, Analysis Methods of Chloride Ions with Industrial Applications, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LX (LXIV),(2), (2014), 45-56.
41. I.S. Bădescu, O. Axinte, **Laura Bulgariu**, Badescu I.S. (2015) Management Possibilities of Plants Used for Phytoremediation of Soils Polluted with Heavy Metals, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LXI (LXV),(1), (2015), 23-38.
42. **Laura Bulgariu**, D. Bulgariu, Enhancing Biosorption Characteristics of Marine Green Algae (*Ulva lactuca*) for Heavy Metals Removal by Alkaline Treatment, Journal of Bioprocess and Biotechniq, (2014), 4(1), <http://dx.doi.org/10.4172/2155-9821.1000146>.
43. **Laura Bulgariu**, I. Cretescu, D. Bulgariu, M. Macoveanu, Valorisation of low-cost materials in depollution processes of wastewater, Chemistry Journal of Moldova, 9(1), (2014), 53-58.
44. C.D. Radu, O. Parteni, M. Popa, I.E. Mureșan, L. Ochiuz, **Laura Bulgariu**, C. Munteanu, B. Istrate, E. Ulea, Comparative Study of a Drug Release from a Textile to Skin, Journal of Pharmaceutics & Drug Delivery Research, (2015), 4:2 <http://dx.doi.org/10.4172/2325-9604.1000134>
45. M.C. Pastia, F. Stătescu, V.L. Pavel, **Laura Bulgariu**, S.I. Cojocaru, Research regarding the estimated relationship between soil salinity index, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(1), (2016), 9-16.
46. M. Harja, G. Ciobanu, L. Favier, **Laura Bulgariu**, L. Rusu, Adsorption of crystal violet dye onto modified ash, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(1), (2016), 27-37.
47. V. Fornea, S. Trupină, A.V. Iosub, **Laura Bulgariu**, Spectrophotometric determination of Cu(II), Co(II) and Ni(II) ions in mono and multi-component systems, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(2), (2016), 9-20.
48. M.M. Roman, I. Ciurdea, C. Lazarev, **Laura Bulgariu**, Determination of mineral acids from mixtures by conductometric titration, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(2), (2016), 21-31.
49. L. Negrilă, D. Bulgariu, **Laura Bulgariu**, Biosorption of Zn(II) ions from aqueous solution onto mustard waste biomass, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(3-4), (2016), 9-19.
50. T. (Ionel) Arsenie, **Laura Bulgariu**, Rapid and efficient removal of Pb(II) ions from aqueous media using low quality rapeseeds biomass as biosorbent, Process Engineering Journal, 1, (2017), 34-40.

60. M. Ghercă, **Laura Bulgariu**, Studies regarding Au(III) extraction in aqueous two phase systems based on polyethyelene glycol with different molecular weights, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 63(1), (2017), 39-47.
61. G.T. Dogaru, E. Filipov, I. Văileanu, **Laura Bulgariu**, Simple and rapid spectrophotometric determination of Au(III) ions using Rhodamine B as colour reagent, The Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 65(69), no.1, (2019), 45-55.

IV. Papers published in national Journals

1. Odochian L, Šabliovski M, Pantea D M, Chiochină O, **Bulgariu (Dragomir) Laura** (1999). An improved method for quantitative analysis of a gaseous complex mixture by gas chromatography, Anal. St. Univ. "Al. I. Cuza" Iași, s. Chemistry, tom VII, no. 2, pp 205 – 212.
2. Odochian L, **Bulgariu (Dragomir) Laura**, Dumitras M. (2000). Thermal decomposition of Ammonia (I). Kinetics Study under Dynamic Conditions, Anal. St. Univ. "Al. I. Cuza" Iași, s. Chemistry, tom VIII, no. 1, pp 15 – 20.
3. Bulgariu D., **Dragomir (Bulgariu) Laura** (2000). The Investigation of the Acido-Basic Reactivity of Natural Silicates (II). Apreciations About the Mechanism of Olivine` Hydrolysis in Acid Medium. Anal. Șt. Univ. „Al.I.Cuza” Iași, s. Geologie, Tom XLV-XLVI, pp 75-94.
4. Bulgariu D., **Dragomir (Bulgariu) Laura**, Secară M, Sabliovski V. (2000). Contribution to the Study of Acido-Basic Reactivity of Natural Silicates (I). Nesosilicates. Anal. Șt. Univ. „Al.I.Cuza” Iași, s. Geologie, Tom XLV-XLVI, pp 107-121.
5. Bulgariu D., Secară M., **Dragomir (Bulgariu) Laura** (2000). Physical and Chemical Considerations Concerning the Process of Volcanic Tuff Zeolitization. The Influence of the Ionic Force of the Natural Solutions. Anal. Șt. Univ. „Al.I.Cuza” Iași, s. Geologie, Tom XLV-XLVI, pp 123-136.
6. **Bulgariu (Dragomir) Laura**, Bulgariu D. (2001). Some Observation upon the Reduction Reaction of Silicomolibdate Complex with Sodium Sulphite. Annals of West University of Timișoara, s. Chemistry 10(2), pp 783-788.
7. Bulgariu D., **Bulgariu (Dragomir) Laura**. (2001). The Spectrophotometrical Determination of Silica Under from by Reduced Silicomolibdenic Complex. The Influence of Polymerization Process to H_4SiO_4 . Annals of West University of Timișoara, s. Chemistry 10(2), pp 789-794.
8. Bulgariu D., **Dragomir (Bulgariu) Laura**. (2001). The Experimental Study of the Systems Dynamic $SiO_{2(aq)}-SiO_{2(s)}$ in Acid Solutions (II). Considerations on Transformation Mechanism. Anal. Șt. Univ. „Al.I.Cuza” Iași, s. Geologie, Tom XLVII, pp 107-116.
9. Bulgariu D., **Dragomir (Bulgariu) Laura**. (2001). The Experimental Study of the Systems Dynamic $SiO_{2(aq)}-SiO_{2(s)}$ in Acid Solutions (I). Preliminary Results. Anal. Șt. Univ. „Al.I.Cuza” Iași, s. Geologie, Tom XLVII, pp 97-105.
10. Tofan L, řuteu D, Toma O, **Bulgariu Laura**. (2003). Biosorption in treatment of waste water. Analele Univ. "Al. I. Cuza" Iași, s. Genetică și Biologie Moleculară, tom IV, pp 29-38.
11. Bulgariu D., **Laura Bulgariu**, řabliovschi V. (2003). The Influence of BTX (Benzene, Toluene, Xylene) of the Stability of Carbonates an Iron Oxi-Hydroxides from Soils. Environment & Progres, 1, 75-78, Cluj (ISBN: 973-8254-46-9. Cota CNCSIS: C).
12. Bejan D, **Bulgariu Laura**, Rusu G. (2004). Spectrophotometrical variants for determination of tanins in wines. Bull. I.P.Iași, serie Chimie și inginerie chimică, tom L(LIV), fasc. 1-2 pp 15-23.
13. Bulgariu D., **Laura Bulgariu**. (2004). The Clay Intercalation Role in Atenuation of Some Heavy Metals Migration in Soils. Environment & Progress, 2, 61-64, Cluj-Napoca, (ISBN: 973-8254-46-9. Cota CNCSIS: C).
14. Bulgariu D., **Laura Bulgariu**, Breabăñ I.G. (2004). Study on geochemical mobility of trace metals in supergene conditions by means of experimental modelling of mineral / solution interactions. Factori și procese pedogenetice din zona temperată, vol 2 (Serie Nouă), 200-208, Iași (ISSN: 1582-4616. Cota CNCSIS: D).
15. Bulgariu D., **Laura Bulgariu**, Breabăñ I.G. (2004). Contribuții la studiul distribuției metalelor grele (Cd; Pb) dintr-un cernoziom cambic din perimetru Hudești, județul Botoșani. Factori și procese pedogenetice din zona temperată, vol 3 (Serie Nouă), 199-217, Iași (ISSN: 1582-4616. Cota CNCSIS: D).
16. Bulgariu D., **Laura Bulgariu**, Pui A. (2004). The extraction and determination of cadmium from Soils (I). Analele Șt. Univ. „Al.I.Cuza” Iași, s. Geologie, XLIX-L, 31-44, Iași (ISSN: 1223-5342. Cota CNCSIS: D).
17. **Laura Bulgariu**, I. Sârghe – The extraction of Cd(II) in polyethylene glycol-based aqueous two-phase systems in presence of iodide ions. I. The preliminary results. , Anal. Ști. Univ. „Al.I.Cuza”, tom XIII, (2005), 27-34.
18. Bulgariu D., Rusu C., **Laura Bulgariu** (2005). The pH Determination in Heterogeneous solid / aqueous solution Systems. (I) Applications in Analytical Geochemistry. Anal. Șt. Univ. Oradea, fascicula Chimie–XII, 37-52 (ISSN: 1224-7626. Cota CNCSIS: D).
19. **Laura Bulgariu**, Bulgariu D. (2005). The Extraction Behaviour of Hg(II) in PEG-(NH₄)₂SO₄ Aqueous Two Phases System in Presence of Iodide Ions. Anal. Șt. Univ. Oradea, fascicula Chimie–XII, 53-64, Oradea (ISSN: 1224-7626. Cota CNCSIS: D).
20. Bulgariu D., Rusu C., **Laura Bulgariu**, Breabăñ I.G., Aștefanei D. (2005). Contribuții la studiul distribuției unor elemente minore (Zn, Pb, Cd, Bi, Cu) în soluri din Munții Giurgeu (Partea I). Factori și Procese Pedogenetice din Zona Temperată 4 S, Nouă, 207-230, Iași (ISSN: 1582-4616. Cota CNCSIS: D).
21. Bulgariu D., **Laura Bulgariu**, Breabăñ I.G. (2005). Considerații privind influența ionilor metalici asupra stabilității carbonațiilor din soluri. Factori și Procese Pedogenetice din Zona Temperată 4 S, Nouă, 289-304 (ISSN: 1582-4616. Cota CNCSIS: D).

22. Bulgariu D., Brânzilă M., Jitaru R., **Laura Bulgariu**, Pintilei M., Popescu C. (2005). Contributions to the study of chalcedony and opal quartered in the andesites from Bucuresci-Criscior perimeter (Brad, Hunedoara County) – Part 1. Anal. St. Univ. "Al.I.Cuza" Iași, seria Geologie, XLX-L (2004-2005), 27-44 (ISSN: 1223-5342. Cota CNCSIS: D).
23. Bulgariu D., Rusu C., Iancu O.G., Breabă I.G., **Laura Bulgariu** (2006). Contributions to the study of clay minerals separation from soils by plane electrophoresis. Factori și Procese Pedogenetice din Zona Temperată, vol. 5 S, nouă, 49-61, Iași (ISSN: 1582-4616. Cota CNCSIS: D).
24. **Laura Bulgariu**, Bulgariu D. (2007). The Zn(II) extraction in PEG-based aqueous two-phase systems using tiocyanate ions as extracting agents. Bull. I.P.Iasi, seria Chimie și Inginerie Chimică, Tom LIII, fascicula 1-2, 14-25, Iași (ISSN: 1582-7011. Cota CNCSIS: C).
25. Bulgariu D., Rusu C., **Laura Bulgariu**. (2007). Applicability and limits of sequential liquid-solid extraction for determination of heavy metals from soils. Anal. Șt. Univ. Oradea, fascicula Chimie, Vol. XIV, 12-25, Oradea (ISSN: 1224-7626. Cota CNCSIS: D).
26. **Laura Bulgariu**, Bulgariu D. (2007). Selective separation of Cd(II) from cobalt, nickel, iron (III) and lead by extraction in PEG-based aqueous two-phase system. Anal. Șt. Univ. Oradea, fascicula Chimie, Vol. XIV, p. 6-12, Oradea (ISSN: 1224-7626. Cota CNCSIS: D).
27. **Laura Bulgariu**, Bulgariu D. (2008). Use PEG-based aqueous two-phase systems for selective extraction of Zn(II) from cobalt, nickel, iron (III) and lead. Bull. I.P.Iasi, seria Chimie și Inginerie Chimică, Tom LIV, fascicula 1-2, p.15-24 (ISSN: 1582-7011. Cota CNCSIS: C).
28. **Laura Bulgariu**, D. Bulgariu (2008). Bi(III) extraction in aqueous PEG-based two-phase systems in presence of inorganic extractants. II. Analysis of PEG-rich solid phases. Anal. Univ. Oradea-fascicula Chimie Vol. XV, 2008, 6-12, (ISSN: 1224-7626. Cota CNCSIS: D).
29. Mioara Ratoi, **Laura Bulgariu**, Matei Macoveanu Increasing the sorption capacity of sphagnum moss peat for lead ions by a simple chemical treatment. Anal. Univ. Oradea-fascicula Chimie Vol. XV, 2008, 179-186.
30. **Laura Bulgariu**, D. Bulgariu, Self-Assembled Monolayer of Thiols on Gold Electrodes Prepared by Gold Electrochemical Deposition on Platinum Wire. Chem. Bull. "POLITEHNICA" Univ. (Timișoara) Volume 53(67), 1-2, 2008, 163-167.
31. M. Rățoi, **Laura Bulgariu**, M. Macoveanu, Removal of Lead from Aqueous Solutions by Adsorption Using Sphagnum Moss Peat. Chem. Bull. "POLITEHNICA" Univ. (Timișoara) Volume 53(67), 1-2, 2008, 183-187.
32. L.Tofan, C. Păduraru, **Laura Bulgariu** (2008). Investigations on the Usefulness of Thermal Power Plants Ash for Lead Adsorption. Chem. Bull. "POLITEHNICA" Univ. (Timișoara) Volume 53(67), 1-2, 2008, 188-191.
33. D. Bulgariu, **Laura Bulgariu**, F. Filipov (2008). Effects of Heavy metals on Chemical equilibriums from antropic Soil. Studia Universitatis Babeș-Bolyai Ambientum, vol LIII (1-2), 23-32.
34. I. Sarghie, **Laura Bulgariu** (2009). Kinetics of nickel extraction with 8-hydroxyquinoline in carbon tetrachloride. ACTA CHEMICA IASI, 17, 97-106.
35. Camelia Ciubotă-Roșie, **Laura Bulgariu**, Cezar Catrinescu, Irina Volf, Matei Macoveanu, Study of biodiesel obtained through valorification of biomass, Bull I. P. Iasi, Tomul LVI (LX), Fasciculele 3a și 3b, secția Construcții de mașini, 2010, p. 371 – 380. – revista de categorie B.
36. **Laura Bulgariu**, D.I. Tudorache Fertu, M. Gavrilescu (2014). Sustainable use of biomass for cleaning-up aqueous effluents contaminated with heavy metals, Annals of the Academy of Romanian Scientists series on Chemistry Science, 1(1),5-18.
37. I.S. Bădescu, O. Axinte, **Laura Bulgariu**, Management Possibilities of Plants Used for Phytoremediation of Soils Polluted with Heavy Metals, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LXI (LXV),(1), (2015), 39-50.
38. I.S. Bădescu, L. Negrilă, G. Nacu, **Laura Bulgariu**, Removal of Cu(II) ions from aqueous solution by biosorption on marine algae biomass, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, Tome LXI (LXV),(2), (2015), 57-66.
39. M.C. Pastia, F. Stătescu, V.L. Pavel, **Laura Bulgariu**, S.I. Cojocaru, Research regarding the estimated relationship between soil salinity index, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(1), (2016), 9-16.
40. M. Harja, G. Ciobanu, L. Favier, **Laura Bulgariu**, L. Rusu, Adsorption of crystal violet dye onto modified ash, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(1), (2016), 27-37.
41. V. Fornea, S. Trupină, A.V. Iosub, **Laura Bulgariu**, Spectrophotometric determination of Cu(II), Co(II) and Ni(II) ions in mono and multi-component systems, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(2), (2016), 9-20.
42. M.M. Roman, I. Ciurdea, C. Lazarev, **Laura Bulgariu**, Determination of mineral acids from mixtures by conductometric titration, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(2), (2016), 21-31.
43. L. Negrilă, D. Bulgariu, **Laura Bulgariu**, Biosorption of Zn(II) ions from aqueous solution onto mustard waste biomass, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 62(3-4), (2016), 9-19.
44. M. Ghercă, **Laura Bulgariu**, Studies regarding Au(III) extraction in aqueous two phase systems based on polyethyelene glycol with different molecular weights, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 63(1), (2017), 39-47.

45. S. Pruteanu, **Laura Bulgariu**, M. Gavrilescu, Biosorption Potential of the Main Fractions Separated from Peat (Poiana Stampei, Romania), Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 63(3), (2017), 47-56.
46. T.D. Arsenie, D. Bulgariu, **Laura Bulgariu**, Kinetics study of Pb(II) and Hg(II) removal from aqueous media on rapeseeds biomass. Scientific Papers Journal, Horticulture Series, 60(1), (2017), 201-206.
47. I.S. Bădescu, L.Negrilă, G. Nacu, D. Bulgariu, **Laura Bulgariu**, Biosorption potential of various waste biomasses for Cu(II) ions removal from aqueous solution. Scientific Papers Journal, Horticulture Series, 60(1), (2017), 213-218.
48. A.R. Lucaci, **Laura Bulgariu**, Comparative study of alginate extraction methods from red marine algae *Callithamnion Corymbosum Sp.*, Bulletin of the Polytechnic Institute of Iasi, Section Chemistry and Chemical Engineering, 64(68), no.1, (2018), 51-60.

V. Papers published in the Conferences proceedings

1. Bulgariu D., **Dragomir (Bulgariu) Laura**. *Strategii didactice interdisciplinare. Aplicabilitate și perspective în predarea chimiei*. Volumul de lucrări al celei de a XXV-a Sesiuni Științifice de Fizică și Chimie „Mijloace de Învățământ de Concepție Proprie”, pp 260-268, 1996.
2. Bulgariu D., **Bulgariu (Dragomir)Laura**, Breabă I.. *Pedogeochemical Implications on the Silica Speciation Process (I). Preliminary Results*. A XVI-a Conferință Națională pentru Știința Solului, Suceava, 23-28 august, 2000, pp 195-206, 2001.
3. Bulgariu D., **Bulgariu Laura**. *Contributions to the study of mineral-organic supramolecular assemblies from soils (I)*. Volumul Conferinței Zilele Facultății de Inginerie Chimică și Protecția Mediului, Ediția a V-a, Iași, 19-21 noiembrie 2008, pp 503-508, 2008.
4. **Bulgariu Laura**, Bulgariu D., Tofan L. *The use of aqueous polyethylene glycol solution as organic media for the efficient extraction of toxic heavy metals*. Volumul Conferinței Zilele Facultății de Inginerie Chimică și Protecția Mediului, Ediția a V-a, Iași, 19-21 noiembrie 2008, pp 479-502, 2008.
5. Filipov F., Bulgariu D., Jitareanu G., **Bulgariu Laura**, Chițanu G.C. *The experimental modelling of interactions on some organic materials with mineral components of hortic antrosoil conditioned with polymeric materials (I). Preliminary results*. International Congress „Compost and digestate: sustainability, benefits and impacts for the environment and plant production, CODIS 2008”, 27th – 29th February 2008 CH-Solothurn, Elvetia, pp. 289-291, 2008.
6. T. Todorciuc, **Laura Bulgariu**, V.I. Popa, *Comparative study of the adsorption of copper (II) from aqueous solutions using different types of non-wood lignins*, Proceedings of the 14th International Symposium on Cellulose Chemistry and Technology, Iași, September 8 – 10, 2010, p. 36 – 41.
7. D. Asandei, **Laura Bulgariu**, E. Bobu, *Removal of Cu(II) ions from aqueous solutions by adsorption on chitosan*, Proceedings of the 14th International Symposium on Cellulose Chemistry and Technology, Iași, September 8 – 10, 2010, p. 183 – 190.
8. T. Todorciuc, **Laura Bulgariu**, V.I. Popa, *Kinetic studies of interaction between copper and lignin*, Proceedings of the 14th International Symposium on Cellulose Chemistry and Technology, Iași, September 8 – 10, 2010, p. 265 – 270.
9. M. Lupea, **Laura Bulgariu**, D. Bulgariu, M. Macoveanu, *Equilibrium and kinetics study of lead(II) adsorption on algae waste*, Proceedings of the 14th International Symposium on Cellulose Chemistry and Technology, Iași, September 8 – 10, 2010, p. 277 – 286.
10. **Laura Bulgariu**, M. Lupea, C. Balan, D. Bulgariu, M. Macoveanu, *Natural polymeric materials used for the removal of metal ions from aqueous solutions*, Proceedings of the 14th International Symposium on Cellulose Chemistry and Technology, Iași, September 8 – 10, 2010, p. 285 – 292.
11. G. Moroi, E. Avram, **Laura Bulgariu**, *Retention de metaux lourds par des copolymères styreniques fonctionnalisés avec des groupements N-methylimidazolium*, Proceedings of the X^{eme} Colloque Franco-Roumain sur les Polymeres, Polymeres et Materiaux Advanced: Development Durable et Performances, Douai, France, 6-8 Septembre 2011, p. 222 – 224.
12. **Laura Bulgariu**, D. Bulgariu, Utilization of aqueous PEG-based two phase systems for the selective extraction of Zn(II), Co(II) and Ni(II) from aqueous solution: A green Chemistry method, Proceedings of the 6th Edition of EUROINVENT – European Exhibition of Creativity and Innovation, 22-24 May 2014, Alexandru Ioan Cuza Publish House, Iași, 2014, p. 461-470.
13. D. Bulgariu, **Laura Bulgariu**, C. Rusu, Structura, proprietățile și aplicațiile potențiale ale complecșilor organo-minerali din soluri, Proceedings of the 6th Edition of EUROINVENT – European Exhibition of Creativity and Innovation, 22-24 May 2014, Alexandru Ioan Cuza Publish House, Iași, 2014, p. 471-484.
14. G. Nacu, L. Negrilă, M. Roșca, C. Smaranda, **Laura Bulgariu**, M. Gavrilescu, Efficient removal of Pb(II) ions from accidental polluted waters by adsorption onto thermal activated lignin, Proceeding of the **The 5th IEEE International Conference on E-Health and Bioengineering - EHB 2015** Grigore T. Popa University of Medicine and Pharmacy, Iași, Romania, November 19-21, 2015.
15. C. Smaranda, **Laura Bulgariu**, M. Roșca, R. Turculeț, C. Ghinea, M. Gavrilescu, Evaluation of Pentachlorophenol Leaching Potential in Natural Soils, Proceeding of the **The 5th IEEE International Conference on E-Health and Bioengineering - EHB 2015** Grigore T. Popa University of Medicine and Pharmacy, Iași, Romania, November 19-21, 2015.

16. B. Cojocariu, A.M. Mocanu, D. Bulgariu, G. Nacu, **Laura Bulgariu**, Equilibrium isotherm study of metal ions adsorption on PET recycled fibers, Proceeding of the **The 6th IEEE International Conference on E-Health and Bioengineering - EHB 2017** Grigore T. Popa University of Medicine and Pharmacy, Sinaia, Romania, June 22-24, 2017.
17. T. (Ionel) Arsenie, L. (Negrilă) Nemeş, G. Nacu, **Laura Bulgariu**, Quantitative removal of Hg(II) ions from aqueous media by biosorption on rape waste biomass, Proceeding of the **The 6th IEEE International Conference on E-Health and Bioengineering - EHB 2017** Grigore T. Popa University of Medicine and Pharmacy, Sinaia, Romania, June 22-24, 2017.
18. Bulgariu D., Rusu C., **Laura Bulgariu**, Aştefanei D., Ciobanu C.S. *Dezechilibre chimico-mineralogice în solurile modificate antropic – Studiu de caz: Regiunea de Nord-Est a României.* În: Proprietățile și managementul solurilor forestiere – Ghidul celei de a XXVII-a ediții a simpozionului „Factori și procese pedogenetice din zona temperată”, Brașov, septembrie 2017.
19. Bulgariu D., **Laura Bulgariu**, Rusu C., Vasiliniuc I., Ciobanu C.S. *Considerații analitice privind determinarea pH-lui solurilor.* În: Proprietățile și managementul solurilor forestiere – Ghidul celei de a XXVII-a ediții a simpozionului „Factori și procese pedogenetice din zona temperată”, Brașov, septembrie 2017.
20. Arsenie T.D., Nemeş L., Bulgariu D., Bădescu I.S., **Laura Bulgariu**, Alternative use of biomass waste from biofuels production as biosorbents for Pb(II) removal from aqueous effluents, Proceeding of the 7th International Symposium of Energy from Biomass and Waste, Venice, Italy, 15-18 October 2018, Proceedings VENICE2018. 2018 CISA Publisher. www.cisapublisher.com
21. Bădescu I.S., Bulgariu D., Lucaci A.R., **Laura Bulgariu**, Valorization of marine algae waste biomass loaded with essential metal ions in remediation of anthropically degraded soils, Proceedings of the 18th International Multidisciplinary Scientific Conference SGEM 2018, volume 18, issue 4.3, 141-148.
22. Nemeş L., Ghercă M., Ungureanu O.I., Bulgariu D., **Laura Bulgariu**, Efficient removal of Cu(II) ions from galvanizing industrial wastewater using functionalized mustard waste biomass, Proceedings of the 18th International Multidisciplinary Scientific Conference SGEM 2018, volume 18, issue 1.5, 275-282.

VI. Grants and Research contracts

a. Director of research contracts:

1. Research contract no. 498 / 2008, financed by „Al. I. Cuza” University of Iași; with theme: *Conducting of physical and chemical analysis of soil samples and theoretical modelling studies of mineral equilibriums in soils.*
2. Research contract no. 4041P / 2008-2009, financed by SC. ARCELOR MITTAL ROMAN TUBULAR PRODUCTS SA., with theme *Conducting of chemical analyzes for wastewater.*
3. Research contract no. 1260P / 2010, financed by SC. Salubris SA Iași, with theme: *Monthly chemical analysis for three samples: leaching, concentrate and permeate from Tuțora Deposit and biannual for a leaching sample from Tomești Deposit (CBO5, CCO, bicarbonates, Mg, Ca, Fe, Si and Ba).*
4. Research contract no. 2471 P/ 28.06.2011, financed by SC. Salubris SA Iasi, with theme: *Laboratory analysis for leaching and forage samples.*
5. Research contract no. 563P/07. 05.2012, financed by SC Salubris SA Iași, with theme: Chemical analysis for leaching, surface water (Vămășoaia), forage water and air samples from Tomești Deposit – biannual, and air samples from Tuțora Deposit – monthly.
6. Research contract no. 64P/18.01.2013, financed by SC PCB-Electra SRL Iasi, with theme: Copper analysis from tin alloy.
7. Research contract no. 109P (3851)/31.01.2013, financed by SC Salubris SA Iași, with theme: Chemical analysis for leaching, surface water (Vămășoaia), forage water and air samples from Tomești Deposit – biannual, and air samples from Tuțora Deposit – monthly.
8. Research contract no. 595P/23.05.2013, financed by SC TechnoSteel LBR Iași, with theme: Determination of urea in the sample of reducing gas agents used in diesel engines.
9. Research contract no. 831P/01.07.2013, financed by SC PCB-Electra SRL Iasi, with theme: Physico-chemical analysis for some components of gilding baths.
10. Research contract no. 1882P/08.12.2014, financed by SC STOM TRANS SRL Adjud, with theme: Determination of petroleum products from solid samples.
11. Research contract no. 5P / 05.01.2015, financed by SC PCB-ELECTRA SRL Iași, with theme: Physico-chemical water samples, air and alloys.
12. Research contract no. 151P/12.02.2015, financed by SC TechnoSteel LBR Iași, with theme: Physico-chemical analysis for some components from production.
13. Research contract no. 1891P / 02.12.2015, financed by SC ELECTRA SRL Iași, with theme: Physico-chemical samples from the location of the unit.
14. Research contract no. 1936P / 04.12.2015, financed by SC EMS-ELECTRA SRL Iași, with theme: Physico-chemical samples from the location of the unit.
15. Research contract no. 569P/01.04.2016, financed by SC PHASELIS EXIMP SRL Iași, with theme: Testing the potential pollutant of some solid wastes.

16. Grant PN-III-P4-ID-PCE-2016-0500, financed by Romanian Ministry of Education and Research, with theme: Valorisation of waste biomass from biofuels production in biosorption processes of heavy metals with applications in environment bioremediation.
17. Research contract no. 1359P/11.07.2017, financed by SC AGRI PE SRL, with theme: Physico-chemical analyses for soil samples from the location of the unit.
18. Grant PN-III-P4-ID-PCE-2016-0500, finantat de Ministerul Cercetarii, cu tema: Valorificarea deseurilor de biomasa din productia de biocombustibili in procesele de biosorpbtie a metalelor grele cu aplicatii in bioremedierea mediului.
19. Contract nr. 15239P/12.07.2018, finantat de SC AGRI PE SRL, cu tema: Analize fizico-chimice pentru probe de sol de pe amplasamentul unității.
20. Contract nr. 7491/09.04.2019, finanțat de SC PHASELIS EXIMP SRL, cu tema: Analize fizico-chimice pentru probe de emulsii.
21. Contract nr. 8616/23.04.2019, finanțat de SC Fertisol SRL, cu tema: Analize fizico-chimice pentru testarea calității unor probe de turba.
22. Contract nr. 13308/19.06.2019, finantat de SC AGRI PE SRL, cu tema: Analize fizico-chimice pentru probe de sol de pe amplasamentul unității.

b. Member in research teams (selection):

1. Research contract no. 6028 / 2004, financed by S.C. FERROLI ROMANIA SRL Bucharest, with theme: „*Study the origin of solid deposits from boilers with iron elements*”. Director: Lecturer Dr. Dumitru Bulgariu.
2. Research contract no. 2360P/2005, financed by S.C. MITTAL STEEL S.A Iași, “*Achieving environmental documentation for environmental authorization*”. Director: Prof. Dr. Matei Macoveanu.
3. Grant CEEX 5933/2006, financed by Romanian Ministry of Education and Research, with theme: “*Remediation of waters containing heavy metals by adsorption on natural and synthetic adsorbent materials*”. Director: Prof. Dr. Matei Macoveanu.
4. Grant PC PNCDI 51045 / 2007, financed by Romanian Ministry of Education and Research, with theme: “*Sustainable exploitation of soil resources in protected areas by implementing green technologies and development of monitoring and analysis methods compatible with European Union standards*”. Director: Assoc. Prof. Feodor Filipov.
5. Research contract no. 73111000-3/2009, financed by University of Agricultural Science and Veterinary Medicine “Ion Ionescu de la Brad” Iași, with theme: “*Services of biochemical and qualitative analysis*”. Director: lecturer PhD. Brîndușa Robu.
6. Grant PN-II-ID-PCE-2011-3-0559 contract 265/5.10.2011, financed by Romanian Ministry of Education and Research, with theme: “*Biosorption and bioaccumulation in the bioremediation of environmental compartments contaminated with persistent pollutants (BIOSACC)*”. Director: Prof. PhD. Maria Gavrilescu.
7. Grant PN-III-P4-ID-PCE-2016-0683, financed by Romanian Ministry of Education and Research, with theme: Exploration and exploitation of plants and microorganisms abilities and of the interactions between these for environment bioremediation. Director: Prof. PhD. Maria Gavrilescu

VII. Awards (selection)

- Award „**LUDOVIC MRAZEC**” of the **Romanian Academy** in 2005 (granted in 2007) Geonomics sciences to work “Zeolitization Process of volcanic tuffs from Romania. Volume II - Theoretical modeling and experimental zeolitizare process.”
- **Diploma of Excellence and Gold Medal**, awarded by the Inventors Society of Romania, at the Salon International Jubilee Research, Inventions and Technology Transfer from 14-24 May 2008, for: *Simple chemical treatments for the increasing of efficiency for peat moss shagnum sorption of Pb (II)*.
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation, Mai 2010, for the paper: *Separation procedure of metal ions with high toxic potential by extraction in aqueous two-phase systems* – authors: Laura Bulgariu, D. Bulgariu.
- **Second Prize and Silver Medal**, awarded at European Exhibition of Creativity and Innovation, Mai 2010, for the paper: *Procedure for sequential solid/liquid extraction in aqueous two-phase systems for the separation of organic-mineral complexes from soils* - authors: Laura Bulgariu, D. Bulgariu, F. Filipov.
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation, Mai 2011, for the paper: *Method for differential determination of speciation and distribution of heavy metals in soil* – authors: D. Bulgariu, Laura Bulgariu, C. Rusu.
- **Diploma of Excellence and Gold Medal**, awarded at European Exhibition of Creativity and Innovation EUROInvent, Mai 2012, for the paper: *Enhancing of biosorptive performances of algae biomass for heavy metals by alkaline treatment* – authors: Laura Bulgariu, M. Lupea, D. Bulgariu, M. Macoveanu.
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation EUROInvent, Mai 2012, for the paper: *Utilization of low-cost biosorbent mixture for integrated treatment of aqueous waste stream in continuous system* – authors: Laura Bulgariu, D. Bulgariu, M. Macoveanu, I. Sandu.

- **Second Prize and Silver Medal**, awarded at European Exhibition of Creativity and Innovation EUROInvent, Mai 2012, for the paper: Advanced recovery of precious metals from secondary sources – authors: D. Bulgariu, *Laura Bulgariu*, M. Brâncilă
- **Diploma of Excellence**, awarded at European Exhibition of Creativity and Innovation EUROInvent, Mai 2014, for the book: Analytical control of products quality – author: *Iaura Bulgariu*
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation EUROInvent, Mai 2014, for the paper: In situ" generation of biocompatible hetero-copolymers applications in environmental protection – authors: D. Bulgariu, *Laura Bulgariu*, C. Rusu, D. Juravle.
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation EUROInvent, Mai 2014, for the paper: Valorisation of biodiesel production waste in heavy metals biosorption processes – authors: *Laura Bulgariu*, D. Bulgariu
- **Second Prize and Silver Medal**, awarded at European Exhibition of Creativity and Innovation, Mai 2014, for the paper: Low-cost biomass mixture-bed for continuous treatment of aqueous effluents – authors: *Laura Bulgariu*, D. Bulgariu.
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation, Mai 2017 for the paper: Functionalization of PET recycled fibers with organic dyes as adsorbent for the removal of metal ions from aqueous media – authors: Anca Mihaela Mocanu, Bianca Cojocariu, Gabriela Lisa, Dumitru Bulgariu, Marcela Zamfir, *Laura Bulgariu*
- **First Prize and Gold Medal**, awarded at European Exhibition of Creativity and Innovation, Mai 2018 for the paper: A new ecological biosorbent based on waste biomass with applications in environmental remediation – **Laura Bulgariu**, Lăcrămioara Nemeş (Negrilă), Anca Mihaela Mocanu, Dumitru Bulgariu, Diana Felcia Loghin
- **Premiul I și Medalie de aur**, obținuta la European Exhibition of Creativity and Innovation EUROINVENT, 16-18 Mai 2019, pentru lucrarea: New PET-based ion exchangers for the retention of Cu(II) ions from aqueous media – Anca Mihaela Mocanu, Oana Ionela Ungureanu, Marcela Zamfir, *Laura Bulgariu*.
- **Premiul I și Medalie de aur**, obținuta la European Exhibition of Creativity and Innovation EUROINVENT, 16-18 Mai 2019, pentru lucrarea: Ecological recovery of gold ions from industrial wastewater – *Laura Bulgariu*, Mădălina Ghercă, Alina Roxana Lucaci, Anca Mihaela Mocanu, Dumitru Bulgariu.

2.12. 2019

Professor dr.habil.chem. *Laura Bulgariu*