

Activitate științifică

Dr. M.Sc. Ing. APOSTOL Laura Carmen

Teza de doctorat

2011 PROCESSE FIZICO-CHIMICE ȘI BIOLOGICE APLICATE PENTRU DECONTAMINAREA UNOR MEDII POLUATE CU COMPUȘI ORGANICI, Fasolă (căs. Apostol) Laura Carmen, 2011.

Carte / Capitol de carte

2017 ENVIRONMENTAL BIOREMEDIATION BY BIOSORPTION AND BIOACCUMULATION: PRINCIPLES AND APPLICATIONS. Raluca-Maria Hlihor, **Laura Carmen Apostol**, Maria Gavrilescu, pags. 289-315. În: *Enhancing Cleanup of Environmental Pollutants. Volume 1: Biological Approaches* Eds.: A. Anjum, S. S. Gill, N. Tuteja; Springer Science+Business Media (New York), 2017

Lucrări în reviste indexate/cotate ISI

- 2017 STUDY REGARDING THE OPTIMAL CONDITIONS FOR REDUCING SUGARS PRODUCTION FROM WHEAT STRAWS BY ENZYMATIC HYDROLYSIS
Eufrozina Albu, **Laura-Carmen Apostol**
Environmental Engineering and Management Journal, 16, 2347-2352 (2017)
- 2016 REMOVAL OF ERYTHROSINE B DYE FROM WATER EFFLUENTS USING CROP WASTE PUMPKIN SEED HULLS AS ADSORBENT
L. C. Apostol, C. Ghinea, M. Alves, M. Gavrilescu
Desalination and Water Treatment, 57(47), 22585-22608, (2016)
- 2015 PRELIMINARY ECOTOXICOLOGICAL EVALUATION OF ERYTHROSIN B AND ITS PHOTOCATALYTIC DEGRADATION PRODUCTS
L.C. Apostol, C. Smaranda, M. Diaconu, M. Gavrilescu
Environmental Engineering and Management Journal, 14(2), 465-471, (2015)
- 2013 UV/TIO₂ PHOTOCATALYTIC DEGRADATION OF XANTHENE DYES
L. Pereira, R. Pereira, C.S. Oliveira, **L. Apostol**, M. Gavrilescu, M.-N. Pons, O. Zahraa, M.M. Alves
Photochemistry and Photobiology, 89(1), 33-39 (2013)
- 2012 BIOLOGICAL DECOLORIZATION OF XANTHENE DYES BY ANAEROBIC GRANULAR BIOMASS
Laura Carmen Apostol, Luciana Pereira, Raquel Pereira, Maria Gavrilescu, Maria Madalena Alves
Biodegradation, 23, 725-737, (2012)
- ANALYSIS AND MANAGEMENT OF SPECIFIC PROCESSES FROM ENVIRONMENTAL ENGINEERING AND PROTECTION BASED ON SUSTAINABILITY INDICATORS
M.E. Fortuna, I.M. Simion, C. Ghinea, M. Petraru, P. Cozma, **L.C. Apostol**, R.M. Hlihor, D.T. Fertu, M. Gavrilescu
Environmental Engineering and Management Journal, 11, 333-350 (2012)
- AEROBIC BIODEGRADATION OF PHENOL BY ACTIVATED SLUDGE IN A BATCH REACTOR
P. Cozma, R.-M. Hlihor, **L.C. Apostol**, M. Diaconu, M.O. Pogăcean, M. Gavrilescu,
Environmental Engineering and Management Journal, 11, 2053-2058 (2012)
- 2009 BIOAVAILABILITY PROCESSES FOR CONTAMINANTS IN SOILS AND THEIR USE IN RISK ASSESSMENT,

- R. M. Hlihor, **L. C. Apostol**, C. Smaranda, V. P. Lucian, F. A. Căliman, B. M. Robu, M. Gavrilescu
Environmental Engineering and Management Journal, 8(5), 1199-1206 (2009)
 SORPTION OF ACID YELLOW 23 FROM AQUEOUS SOLUTIONS ONTO SOIL
 Anca Florentina Caliman, **Laura Carmen Apostol**, Dumitru Bulgariu, Laura Bulgariu, Maria Gavrilescu
AFINIDAD, 66 (544), 465-473 (2009)
 INFLUENCE OF SOIL PARTICLE SIZE ONTO SORPTION OF TARTRAZINE FROM AQUEOUS
 SOLUTIONS,
 Anca Florentina Căliman, Laura Carmen Apostol, **Maria Gavrilescu**,
Environmental Engineering and Management Journal, 8(5), 1081-1087 (2009)
 STUDY REGARDING THE SORPTION OF ERYTHROSIN FROM AQUEOUS SOLUTION ONTO SOIL,
 Anca Florentina Căliman, **Laura Carmen Apostol**, Maria Gavrilescu
Environmental Engineering and Management Journal, 8(6), 1339-1346 (2009)
 APPLICATION OF NATURAL MATERIALS AS SORBENTS FOR PERSISTENT ORGANIC POLLUTANTS
 Laura Carmen Apostol; Maria Gavrilescu,
Environmental Engineering and Management Journal, 8(2), 243-252 (2009)

ISI Proceedings

- 2017 OVERVIEW OF HUMAN HEALTH HAZARDS POSED BY PESTICIDES IN PLANT PRODUCTS
 P Cozma, **LC Apostol**, RM Hlihor, IM Simion, M Gavrilescu
E-Health and Bioengineering Conference (EHB), 293-296, (2017).
- 2010 AGRO WASTE USED AS NATURAL SORBENTS FOR ACID RED 51 UPTAKES
Laura Carmen Apostol, Luciana Pereira, Madalena Alves, Maria Gavrilescu
The 3rd International Conference on Advanced Materials and Systems ICAMS 2010, Bucuresti – Romania, 16-18
 Septembrie, 2010

Lucrări în reviste incluse în baze de date recunoscute CNCSIS

- 2017 THE INTERACTION OF BEANS HULLS WITH FOOD DYE
Laura Carmen Apostol
Food and Environment Safety Journal, 16(4), 202-208, (2017).
 ESTIMATION OF HEAVY METAL LEVELS IN GREEN LEAFY VEGETABLES PURCHASED FROM SUCEAVA
 Ancuța Elena PRISACARU, **Laura Carmen APOSTOL**, Sorina ROPCIUC
Food and Environment Safety Journal, 16(4), 234-238, (2017).
- 2016 STUDIES REGARDING DESORPTION OF FOOD DYE BY DIFFERENT SOLVENTS
Laura Carmen APOSTOL, Maria GAVRILESCU,
Agronomy Series of Scientific Research, 59 (2), 5-58, (2016).
 IDENTIFICATION OF BIOGENIC AMINE IN SALAD DRESSINGS.
LC APOSTOL, AE PRISACARU, S ROPCIUC, C DAMIAN
Agronomy Series of Scientific Research, 59(2), 369-372, (2016).
 STUDY ON EFFECTS OF ARTICHOKE FLOUR ADDITION IN BREAD
 S. Ropciuc, A. Leahu, C. Damian, **L.C. Apostol**
Food and Environment Safety Journal, 15 (2), 187 – 195, (2016).
- 2015 SEASONAL VARIATIONS' INFLUENCE ON CHEMICAL COMPOSITION OF COW MILK AND VIDRARU SEMI
 HARD CHEESE
 PRISACARU Ancuta Elena, **APOSTOL Laura**
Food & Environment Safety, 14(2), 144-147, (2015).
 STUDIES REGARDING THE PHOTOCATALYTIC TRANSFORMATION OF ERYTHROSINE B

- Laura Carmen APOSTOL, Anca Florentina CALIMAN, Maria GAVRILESCU**
***Food & Environment Safety*, XIV(4), 375 – 380, (2015).**
- 2014 ASSESSMENT OF *Phaseolus vulgaris* L. BIOMASS AS LOW-COST ADSORBENT, FOR THE REMOVAL OF CONGO RED DYE FROM AQUEOUS SOLUTIONS,
 Camelia Smaranda, Elena-Diana Comăniță, **Laura Carmen Apostol**, Maria Gavrilescu,
LUCRĂRI ȘTIINȚIFICE, 139-144 (2014).
- 2013 ERYTHROSINE B IN THE ENVIRONMENT. REMOVAL PROCESSES
Laura Carmen Apostol, Maria Gavrilescu
Food & Environment Safety, XII(3), 253 –264, (2013).
- 2011 STUDY ON THE EFFECT OF FERROMAGNETIC NANOPARTICLES ON DYES BIODEGRADATION
Laura Carmen Apostol, Luciana Pereira, Raquel Pereira, Madalena Alves, Maria Gavrilescu
Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, Tome 57(2), 21 – 28, 2011
 EVALUATION OF THE SORPTION PROCESS FOR ACID ORANGE 7 AND ERYTHROSINE B IN SOIL USING VARIOUS KINETIC MODELS
 Camelia Smaranda, **Laura Carmen Apostol**, Maria Gavrilescu
Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, Tome 57(1), 65 – 78, 2011
 INFLUENCE OF SOME PARAMETERS ON SORPTION OF ERYTHROSINE B ONTO SOIL
Apostol Laura Carmen, Căliman Florentina Anca, Gavrilescu Maria
Bulletin of the Polytechnic Institute of Iași, Chemistry and Chemical Engineering, LVI(LX), 47-56, (2011)
 COMPARATIVE STUDIES CONCERNING THE BEHAVIOUR OF ORGANIC POLLUTANTS IN IASI AREA SOIL
 Smaranda Camelia, **Apostol Laura Carmen**, Petraru Madalina, Caliman F. Anca, Gavrilescu Maria
Lucrări științifice. Seria Agronomie, Universitatea de Științe Agricole și Medicină Veterinară "Ion Ionescu de la Brad" din Iași, 53 (2), <http://www.revagrois.ro/data/manuals/BJB09x9wdh.pdf>
- 2009 OVERVIEW ON CHROMIUM OCCURRENCE IN THE ENVIRONMENT AND ITS REMEDIATION,
 Raluca Maria Hlihor, **Laura Carmen Apostol**, Vasile Lucian Pavel, Camelia Smaranda, Brîndușa Mihaela Robu,
 Florentina Anca Căliman, Maria Gavrilescu
Bulletin of the Polytechnic Institute of Iași, Chemistry and Chemical Engineering, (2009)
 ROLE OF MICROORGANISMS IN ORGANIC COMPOUNDS DEGRADATION
 Laura Carmen Apostol, **Maria Gavrilescu**
Bulletin of the Polytechnic Institute of Iași, 55(1), 49 – 64, (2009).
 CHLOROPHENOLS DEGRADATION – AN OVERVIEW
Laura Carmen Apostol, Florentina Anca Căliman, Camelia Smaranda, Maria Gavrilescu
Bulletin of the Polytechnic Institute of Iași, Section Chemistry and Chemical Engineering, LIV (LVIII), 2, 37-48.
- Lucrări publicate in volumul Manifestarilor Științifice Naționale și Internaționale (peer reviewed)**
- 2016 Assessment of human health risk of twelve pesticides applied in double dose in an apple orchard
 R.M. Hlihor, M.O. POGĂCEAN, I.M. SIMION, P. COZMA, L.C. APOSTOL, M. GAVRILESCU
Annals of the Academy of Romanian Scientists, Series on Physics and Chemistry, 25-35, (2016)
- 2010 Bean husk used for Erythrosine B removal
Laura Carmen Apostol, Maria Gavrilescu
The 14th International Symposium on Cellulose Chemistry and Technology,
 Iași, 8-10 Septembrie 2010, ISBN 978-973-621-306-9
- 2009 Behaviour of persistent pollutants and risks associated with their presence in the environment, Gavrilescu M.,

Căliman F.A., Robu B.M., Smaranda Camelia, Pavel V.L., Hlihor R.M., **Apostol L.C.**, *Expoziția realizărilor cercetării românești – SALONUL CERCETĂRII – 2009*, 28 – 31 October 2009, Târgul Tehnic Internațional București, Complexul Expozițional ROMEXPO

- 2008 *Study of Pentachlorophenol Sorption on a Natural Clay as Sorbent*
Laura Carmen Apostol, Camelia Smaranda, Florentina Anca Căliman, Igor Crețescu, Maria Gavrilăscu, *Innovative Materials and Processes*, Proceedings of the National Conference Days of the Faculty of Chemical Engineering and Environmental Protection, 19-21 November, 255-260, (2008).
- Study concerning the sorption of textile azo dye Orange II on soil particles*
Camelia Smaranda, **Laura Carmen Apostol**, Lucian Vasile Pavel, Florentina Anca Căliman, Maria Gavrilăscu, *Innovative Materials and Processes*, Proceedings of the National Conference Days of the Faculty of Chemical Engineering and Environmental Protection, 19-21 November, 461-466, (2008).
- Factors influencing the sorption of anionic azo dye tartrazine from aqueous solutions onto natural clay*, Florentina Anca Caliman, **Laura Carmen Apostol**, Raluca Maria Hlihor, Maria Gavrilăscu, *Innovative Materials and Processes*, Proceedings of the National Conference Days of the Faculty of Chemical Engineering and Environmental Protection, 19-21 November, 261-265, (2008).

Lucrări prezentate la conferințe naționale și internaționale

- 2017 *Ecotoxicological evaluation of persistent organic pollutants on plant-associated microorganisms for environmental bioremediation*
Laura Carmen Apostol, Maria Gavrilăscu
The 9th International Conference on Environmental Engineering and Management (ICEEM09), 6th - 9th September, 2017, Bologna, Italy,
DEVELOPMENT OF A COMPOSTING RECIPE FOR FOOD WASTE
Cristina Ghinea, **Laura Carmen Apostol**
"AGRICULTURE AND FOOD FOR THE XXI CENTURY", 11-13 mai 2017, Sibiu, Romania
- 2016 COMPARISON OF PHYSICO-CHEMICAL AND BIOLOGICAL PROCESSES APPLIED FOR THE REMOVAL OF DYES FROM WASTEWATERS
Laura Carmen Apostol, Maria Gavrilăscu
10th ISEB Conference International Society for Environmental Biotechnology, 1-3 June, 2016, Barcelona, Spain
Studies regarding desorption of food dye by different solvents
Laura Carmen APOSTOL, Maria Gavrilăscu
Simpozionul de Agricultură și Inginerie Alimentară, 20– 22 October 2016, Iași, ROMANIA
Identification of biogenic amine in salad dressings
Laura Carmen APOSTOL, Ancuța Elena PRISACARU, Sorina ROPCIUC, Cristina DAMIAN
Simpozionul de Agricultură și Inginerie Alimentară, 20– 22 October 2016, Iași, ROMANIA
Improvement of solid waste management through sustainable use of resources, Isabela Maria Simion, Raluca Maria Hlihor, Petronela Cozma, **Laura Carmen, Apostol**, Brândușa Mihaela Robu (Sluser), Maria Gavrilăscu,
Sesiunea Științifică de Toamnă, Știință - Cunoaștere - Creativitate – Spiritualitate, 22-24 September 2016, Durău – Neamț, Romania. Oral communication
- 2015 *Comparative photodegradation study of Erythrosin B using two reactors type*
L.C. Apostol, M. Gavrilăscu
"Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference, 29 – 31 October 2015, Iași, ROMANIA
EQUILIBRIUM STUDY OF SYNTHETIC FOOD DYE RETENTION ON AGRO-WASTE

- Laura Carmen Apostol**, Camelia Smaranda, Maria Gavrilescu
 2nd COMMSCIE INTERNATIONAL CONFERENCE: "CHALLENGES FOR SCIENCES AND SOCIETY IN DIGITAL ERA" Iași, Romania, 4- 5 December, 2015
 Agricultural waste used as an effective low-cost biosorbent for removing organic pollutants from aqueous solutions
 C. Smaranda, **L.C. Apostol**, E.D. Comanita, M. Gavrilescu International Scientific Congress - Soil And Food, Resources For A Healthy Life, 22 - 24 October 2015, Iasi, Romania
- 2014
 Ecotoxicological evaluation of Erythrosine B and its degradation products
Laura Carmen Apostol, Camelia Smaranda, Mariana Diaconu, Maria Gavrilescu
 2nd International Conference on Chemical Engineering Innovative Materials and Processes
 România, Iași, 5-8 November 2014
 Environmental Risks of Erythrosin B
Laura Carmen Apostol, Raluca Maria Hlihor, Maria Gavrilescu
 2nd International Conference on NATURAL AND ANTHROPIC RISKS – ICNAR 2014 04-07 June, 2014, Bacau, ROMANIA
 A comparative life cycle assessment of three types of agricultural waste applied for Cd(II) biosorption,
 R.M. Hlihor, I.M. Simion, C. Ghinea, E.D. Comanita, **L.C. Apostol**, P. Cozma, M. Gavrilescu,
 2nd International Conference on Chemical Engineering, Innovative Materials and Processes,
 România, Iași, 5-8 November 2014.
 Evaluation of untreated biomass of *Phaseolus vulgaris* L. as potential biosorbent for organic dyes,
 C. Smaranda, **L.C. Apostol**, E.D. Comanita, M. Gavrilescu,
 "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference, Iasi, 31 October - 1
 November, 2014.
 Assessment of *Phaseolus vulgaris* L. biomass as low-cost adsorbent for the removal of Congo red
 dye from aqueous solutions,
 C. Smaranda, E.D. Comaniță, **L.C. Apostol**, M. Gavrilescu,
 International Scientific Congress - "Life Sciences, a Challenge for the Future", Iași, România, 23 - 25
 October 2014.
- 2013
 Evaluation of Environmental Impacts for Cd(II) Biosorption on Pumpkin Seed Hulls using Life Cycle
 Assessment
 Raluca Maria Hlihor, Cristina Ghinea, Dana Sobariu, Isabela Teslaru, **Laura Carmen Apostol**,
 Petronela Cozma, Laura Bulgariu, Maria Gavrilescu
 The 7th International Conference Environmental Engineering and Management, Integration
 Challenges for Sustainability, 18 – 21 September 2013, Vienna, Austria
- 2012
 Decolorization of aqueous effluents using agro waste
Apostol LC, Pereira L, Alves M, Gavrilescu M
**Environmental Microbiology & Biotechnology in the frame of the knowledge-
 Based Bio & Green Economy - EMB2012**
 April 10-12, 2012, Bologna (Italy)
 Photocatalytic Degradation of a Hazardous Food Dye
Laura Carmen Apostol, Anca Florentina Căliman, Maria Gavrilescu
**100th Anniversary of Faculty of Chemical Engineering and Environmental Protection
 International Conference Centenary of Education in Chemical Engineering,**
 November 28-30, 2012, Iasi - Romania

- 2011 *Bio(sorbent) based remediation in environmental pollution control,*
Laura Carmen Apostol, Raluca Maria Hlihor, Maria Gavrilescu
The 5th European Bioremediation Conference, July 4-7, 2011, Chania, Crete, Greece.

Participări la Workshop-uri

- 2012 *Submitting to Wiley-Blackwell microbiology journals*
On-line workshop organized by Wiley-Blackwell, 23rd of October, 2012.
Progress in Environmental Engineering, Biotechnology and Management in the Frame of Knowledge-Based Sustainable Economy, Exploratory Worskshop, Organized with the support of UEFISCDI and Gheorghe Asachi Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management, Academy of Romanian Scientist, September 19-21, 2012, Iasi Romania.
- 2009 *„CONCEPTS IN ENVIRONMENTAL SCIENCE AND ENGINEERING”*
International Training Workshop on Environmental and Occupational Health, Organized by Institute of International Health, Michigan State University, Gheorghe Asachi Technical University of Iasi, University Politehnica of Bucharest, Institute of Public Health Bucharest Instructors: D.T Long, Ph.D., T.C. Voice, Ph.D., C. Teodosiu, Ph.D., R.G. Stanescu, Ph.D., I.G. Breaban, Ph.D., 1-4 June 2009, Iasi, Romania.



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LISTA LUCRĂRI

Lucrări în reviste indexate/cotate ISI

1. BIOAVAILABILITY PROCESSES FOR CONTAMINANTS IN SOILS AND THEIR USE IN RISK ASSESSMENT,
R. M. Hlihor, **L. C. Apostol**, C. Smaranda, V. P. Lucian, F. A. Căliman, B. M. Robu, M. Gavrilăscu
Environmental Engineering and Management Journal, 8(5), 1199-1206, (2009)
2. PRELIMINARY ECOTOXICOLOGICAL EVALUATION OF ERYTHROSIN B AND ITS PHOTOCATALYTIC
DEGRADATION PRODUCTS
L. C. Apostol, C. Smaranda, M. Diaconu, M. Gavrilăscu
Environmental Engineering and Management Journal, 14(2), 465-471, (2015)
3. BIOLOGICAL DECOLORIZATION OF XANTHENE DYES BY ANAEROBIC GRANULAR BIOMASS
Laura Carmen Apostol, Luciana Pereira, Raquel Pereira, Maria Gavrilăscu, Maria Madalena Alves
Biodegradation, 23, 725-737, (2012)
4. REMOVAL OF ERYTHROSINE B DYE FROM WATER EFFLUENTS USING CROP WASTE PUMPKIN SEED
HULLS AS ADSORBENT
L. C. Apostol, C. Ghinea, M. Alves, M. Gavrilăscu
Desalination and Water Treatment, 57(47), 22585-22608, (2016)
5. UV/TiO₂ PHOTOCATALYTIC DEGRADATION OF XANTHENE DYES
L. Pereira, R. Pereira, C.S. Oliveira, **L. Apostol**, M. Gavrilăscu, M.-N. Pons, O. Zahraa, M.M. Alves
Photochemistry and Photobiology, 89(1), 33-39 (2013)
6. AEROBIC BIODEGRADATION OF PHENOL BY ACTIVATED SLUDGE IN A BATCH REACTOR
P. Cozma, R.-M. Hlihor, **L.C. Apostol**, M. Diaconu, M.O. Pogăcean, M. Gavrilăscu,
Environmental Engineering and Management Journal, 11, 2053-2058 (2012)

Lucrări în reviste incluse în baze de date recunoscute CNCSIS

7. THE INTERACTION OF BEANS HULLS WITH FOOD DYE
Laura Carmen Apostol
Food and Environment Safety Journal, 16(4), 202-208, (2017).
8. LIFE CYCLE IMPACT ASSESSMENT OF PESTICIDES: CURRENT ISSUES AND PERSPECTIVES
L.C. Apostol, R.M. Hlihor, C. Smaranda, V.L. Pavel, B.M. Robu, F.A. Căliman, M. Gavrilăscu
Bulletin of the Polytechnic Institute of Iasi, Chemistry and Chemical Engineering, 55(2), 67-83, (2009).
9. IDENTIFICATION OF BIOGENIC AMINE IN SALAD DRESSINGS.
LC Apostol, AE Prisăcaru, S Ropciuc, C Damian
Agronomy Series of Scientific Research, 59(2), 369-372, (2016).
10. STUDY ON EFFECTS OF ARTICHOKE FLOUR ADDITION IN BREAD
S. Ropciuc, A. Leahu, C. Damian, **L.C. Apostol**
Food and Environment Safety Journal, 15 (2), 187 - 195, (2016).

