

## L I S T A D E L U C R Ă R I

Candidat: BLAGA, C Alexandra Cristina - Dr. Ing.

### 1<sup>o</sup> Teza de doctorat

T1. STUDIUL SEPARĂRII UNOR COMPUȘI NATURALI PRIN PERTRACTIE

Ordin nr. 4387/20.06.2011, Universitatea Tehnica Gheorghe Asachi din Iasi, domeniul Stiinte ingineresti/ Inginerie chimica, conducator de doctorat: prof.univ.dr.ing. Dan Cașcaval

2<sup>o</sup> Cărți/ cursuri/ manuale publicate în edituri recunoscute din țară sau din străinătate (Ca1, Ca2 etc.), îndrumare publicate/culegeri de probleme (I1, I2 etc.), sisteme de laborator funcționale etc. (D1, D2 etc.) cursuri proprii pe Web, sisteme e-learning etc. (W1, W2 etc.), după caz, precum și alte lucrări (M1, M2 etc.) prin care se aduc contribuții la dezvoltarea activităților didactice/ profesionale.

### Capitol carte/ curs/ manual publicat în străinătate

1. Curteanu S., Dragoi E.N., Blaga A.C., Galaction A.I., Cascaval D.- Neuroevolutive algorithms applied for modelling some biochemical separation processes, Artificial Neural Networks, 2021, pp.115-138, volume 2190, Humana Press, Springer, ISBN: 978-1—0716-0825-8

2. Belhocene K., Ungureanu I., Grosu E., Blaga A.C., Dhuister P., Froidevaux R. - From a Sequential to a Continuous Approach for LVV-h7 Preparation during Enzymatic Proteolysis Proteolysis in a Microfluidic-Based Extraction Process, Kinetics of Enzymatic Synthesis, 2019, pp 95-111, IntechOpen, London, UK, ISBN: 978-1-78985-030-7

### Carte/ curs/ manual publicată în editură recunoscută CNCS (unic/ prim autor sau co-autor)

1. Blaga A.C., Tucaliuc A., Kloetzer L. – Microorganisme: caracteristici si aplicatii, Ed. Performantica, ISBN 978-606-685845-8, 2021

2. Suteu D., Blaga A.C., Biotehnologii in protectia mediului, Editura Performantica, Iasi, 2013, ISBN 9786066 850711

### Capitol curs/ manual publicat în editură recunoscută CNCS

1. D. Suteu, C. Zaharia, A.C. Blaga, Chap. 12, "The action of microorganisms from organic pollutants in water, air, soil", in "Current topics, concepts and research priorities in environmental chemistry", Vol.II, . Zaharia (Ed.), 2013, Editura Univ. A.I.Cuza, Iasi, Romania, ISBN 978-973-703-797-8 / 978-973-703-798-5 (259-274)- 15 pg

2.D. Suteu, C. Zaharia, A.C. Blaga, Chap. 10 "Biosorption – current bioprocess for wastewater treatment", in "Current topics, concepts and research priorities in environmental chemistry", Vol.I, Zaharia (Ed.), 2012, Editura Univ. A.I.Cuza, Iasi, Romania, ISBN 978-973-703-797-8 / 978-973-703-798-5 (221-244)- 23pg

3. Blaga AC, Cașcaval D. – Separarea directă a produselor de biosinteză, Biotehnologia, între știință și artă, Ed. Venus, 31 pp: 95-126, 2007, ISBN 978-973-756-052-0

### Îndrumar/ culegere de probleme (publicat sau disponibil pe Web)

1. Blaga A.C., Kloetzer L., Tucaliuc A. – Aplicatii ale enzimelor si microorganismelor in industria alimentara si biochimica, Ed. Performantica, 2015, 196 pag, ISBN 978-606-685-315-6

2. Suteu D., Blaga AC.- Biotehnologii in protectia mediului – elemente de teorie si aplicatii, Ed. Performantica, Iasi, 2011, 98 pag, ISBN 978-973-730-867-2

3<sup>o</sup> Cărți/ capituloare cărți de specialitate publicate în edituri recunoscute din țară sau din străinătate (Cb1, Cb2 etc.), articole/ studii publicate în reviste din țară/ străinătate, cu factor de impact/ indexate în BDI/ neindexate în BDI (R1, R2 etc.), brevete de invenție (B1, B2 etc.), creații artistice prezentate la manifestări recunoscute din țară/ străinătate (A1, A2 etc.), articole/ studii publicate în volumele manifestărilor științifice naționale/ internaționale indexate BDI/ neindexate BDI (V1, V2 etc.), după caz, precum și alte lucrări (N1, N2 etc.) prin care se aduc contribuții științifice la dezvoltarea domeniului.

### Articole publicate în reviste cotate ISI, cu factor de impact

1. Dragoi, E.N., **Blaga, A.C.** (corresponding author), Cascaval, D., Galaction, A.I. - Experimental, modeling and optimisation of adipic acid reactive extraction using ionic liquids, Journal of Molecular Liquids, 2024, 410, 125564, <https://doi.org/10.1016/j.molliq.2024.125564>

2. **Blaga, A.C.**, Dragoi, E.N., Tucaliuc, A., Kloetzer L., Puitel A.C., Cascaval, D., Galaction, A.I. - Reactive extraction of muconic acid by hydrophobic phosphonium ionic liquids - Experimental, modelling and optimisation with Artificial Neural Networks, *Heliyon*, 2024, 10(16), e36113, <https://doi.org/10.1016/j.heliyon.2024.e36113>
3. **Blaga, A.C.**; Kloetzer, L.; Cascaval, D.; Galaction, A.-I.; Tucaliuc, A. Studies on Reactive Extraction of Itaconic Acid from Fermentation Broths. *Processes* 2024, 12, 725. <https://doi.org/10.3390/pr12040725>
4. Maxim, C.; **Blaga, A.C.**; Tataru-Farmus, R.-E.; Suteu, D. *Acmeella oleracea* Metabolite Extraction Using Natural Deep Eutectic Solvents. *Processes* 2024, 12, 1686. <https://doi.org/10.3390/pr12081686>
5. **Blaga, A.C.**; Dragoi, E.N.; Gal, D.G.; Puitel, A.C.; Tucaliuc, A.; Kloetzer, L.; Cascaval, D.; Galaction, A.I. - Selective separation of vitamin C by reactive extraction using ionic liquid: Experimental and modelling, *Journal of Industrial and Engineering Chemistry*, 2024, <https://doi.org/10.1016/j.jiec.2023.11.057>
6. **Blaga, A.C.**; Gal, D.G.; Tucaliuc, A. Recent Advances in Muconic Acid Extraction Process. *Appl. Sci.* 2023, 13, 11691. <https://doi.org/10.3390/app132111691>
7. **Blaga, A.C.**; Dragoi, E.N.; Tucaliuc, A.; Kloetzer, L.; Cascaval, D. Folic Acid Ionic-Liquids-Based Separation: Extraction and Modelling. *Molecules* 2023, 28, 3339. <https://doi.org/10.3390/molecules28083339>
8. Rusu, L; Suceveanu, E.M.; **Blaga, A.C.**; Nedeff, FM; Suteu, D - Insights into Recent Advances of Biomaterials Based on Microbial Biomass and Natural Polymers for Sustainable Removal of Pharmaceuticals Residues, *Polymers* 2023, 15 (13), <https://doi.org/10.3390/polym15132923>
9. Popescu, V; **Blaga, AC**; Cascaval, D; Popescu, A - Beta vulgaris L.-A Source with a Great Potential in the Extraction of Natural Dyes Intended for the Sustainable Dyeing of Wool, *Plats-Basel* 2023, 12 (10), <https://doi.org/10.3390/plants12101933>
10. Kloetzer, L; **Blaga, A.C.**; Cascaval, D; Galaction, AI - Selective pertraction of dicarboxylic acids from simulated Rhizopus oryzae fermentation broths, *Scientific Reports* 2023, 13 (1), <https://doi.org/10.1038/s41598-023-34100-3>
11. **Blaga, A.C.**; Dragoi, E.N.; Tucaliuc, A.; Kloetzer, L.; Cascaval, D. Folic Acid Ionic-Liquids-Based Separation: Extraction and Modelling. *Molecules* 2023, 28, 3339. <https://doi.org/10.3390/molecules28083339>
12. **Blaga, A.C.**; Dragoi, E.N.; Munteanu, R.E.; Cascaval, D.; Galaction, A.I. Gallic Acid Reactive Extraction with and without 1-Octanol as Phase Modifier: Experimental and Modeling. *Fermentation* 2022, 8, 633. <https://doi.org/10.3390/fermentation8110633>
13. Suditu G.D., **Blaga A.C. (autor corespondent)**, Tataru-Farmus R.E., Zaharia C., Suteu D. - Statistical Analysis and Optimization of the Brilliant Red HE-3B Dye Biosorption onto a Biosorbent Based on Residual Biomass, *Materials* 2022, 15(20), 7180; <https://doi.org/10.3390/ma15207180>
14. **Blaga, AC** ; Tucaliuc, A; Kloetzer, L - Applications of Ionic Liquids in Carboxylic Acids Separation, *Membranes*, 2022, 12 (8), 771, <https://doi.org/10.3390/membranes12080771>
15. Tucaliuc, A; Cislaru, A ; Kloetzer, L ; **Blaga, AC (autor corespondent)** - Strain Development, Substrate Utilization, and Downstream Purification of Vitamin C, *Processes*, 2022, 10 (8), 1595, <https://doi.org/10.3390/pr10081595>
16. **Blaga, AC**; Tanasa, AM; Cimpoesu, R; Tataru-Farmus, RE; Suteu, D - Biosorbents Based on Biopolymers from Natural Sources and Food Waste to Retain the Methylene Blue Dye from the Aqueous Medium, *Polymers*, 2022, 14 (13), 2728, <https://doi.org/10.3390/polym14132728>
17. **Blaga, AC**; Cascaval, D; Galaction, AI - Improved Production of alpha-Amylase by *Aspergillus terreus* in Presence of Oxygen-Vector, *Fermentation*, 2022, 8 (6), 271, <https://doi.org/10.3390/fermentation8060271>
18. Suteu, D.; **Blaga, A.C.**; Cimpoesu, R.; Puitel, A.C.; Tataru-Farmus, R.-E.- Composites Based on Natural Polymers and Microbial Biomass for Biosorption of Brilliant Red HE-3B Reactive Dye from Aqueous Solutions. *Polymers* 2021, 13, 4314, <https://doi.org/10.3390/polym13244314>
19. Rusu, L.; Grigoraş, C.-G.; Simion, A.-I.; Suceveanu, E.-M.; Blaga, A.-C.; Harja, M. Encapsulation of *Saccharomyces pastorianus* Residual Biomass in Calcium Alginate Matrix with Insights in Ethacridine Lactate Biosorption. *Polymers* 2022, 14, 170, <https://doi.org/10.3390/polym14010170>
20. Popescu, V.; **Blaga, A.C.**; Pruneanu, M.; Cristian, I.N.; Pîslaru, M.; Popescu, A.; Rotaru, V.; Crețescu, I.; Cascaval, D. Green Chemistry in the Extraction of Natural Dyes from Colored Food Waste, for Dyeing Protein Textile Materials. *Polymers* 2021, 13, 3867, <https://doi.org/10.3390/polym13223867>
21. Popescu, V.; Buciscanu, I.I.; Pruneanu, M.; Maier, S.S.; Danila, A.; Maier, V.; Pîslaru, M.; Rotaru, V.; Cristian, I.N.; Popescu, A.; Istrate, B.; **Blaga, A.C.**; Ciolacu, F.; Cretescu, I.; Chelariu, P.; Marin, M. Sustainable Functionalization of PAN to Improve Tinctorial Capacity. *Polymers* 2021, 13, 3665, <https://doi.org/10.3390/polym13213665>
22. **Blaga, AC**; Zaharia C.; Suteu D. - Polysaccharides as support for microbial biomass-based adsorbents with applications in removal of heavy metals and dyes, *Polymers* 2021, 13, 2893, <https://doi.org/10.3390/polym13172893>
23. Galaction, Al; **Blaga, AC**; Tucaliuc, A; Kloetzer, L; Cascaval, D - Modelling of ergosterol production by *S. cerevisiae* in presence of n-dodecane as oxygen-vector, *ROMANIAN BIOTECHNOLOGICAL LETTERS*, 26 (2), 2464-2470, 2021, <https://doi.org/10.25083/rbl/26.2/2464.2470>

24. Lazar, RG; **Blaga, AC**; Dragoi, EN; Galaction, AI; Cascaval, D - Application of reactive extraction for the separation of pseudomonic acids: Influencing factors, interfacial mechanism, and process modelling, Canadian Journal Of Chemical Engineering, 2022; 100, S246–S257, <https://doi.org/10.1002/cjce.24124>
25. Lazar, RG; **Blaga, AC**; Dragoi, EN; Galaction, AI; Cascaval, D - Mechanism, influencing factors exploration and modelling on the reactive extraction of 2-ketogluconic acid in presence of a phase modifier, Separation and Purification Technology, 255, 2021, 117740, <https://doi.org/10.1016/j.seppur.2020.117740>
26. L.I.Horciu, C. Zaharia, **A.C. Blaga**, L. Rusu, D. Suteu - Brilliant Red HE-3B Dye Biosorption by Immobilized Residual Consortium Bacillus sp. Biomass: Fixed-Bed Column Studies, Appl. Sci. 2021, 11, 4498, <https://doi.org/10.3390/app11104498>
27. Estevinho, B. N.; Horciu L.; **Blaga, A. C.**, Rocha F. - Development of Controlled Delivery Functional Systems by Microencapsulation of Different Extracts of Plants: Hypericum perforatum L., Salvia officinalis L. and Syzygium aromaticum, Food and Bioprocess Technology, 14 (8), 2021, 1503-1517. <https://doi.org/10.1007/s11947-021-02652-9>
28. Estevinho, B.N.; Lazar, R.; **Blaga, A.C.**; Rocha F. - Preliminary evaluation and studies on the preparation, characterization and in vitro release studies of different biopolymer microparticles for controlled release of folic acid, Powder Technology, 369, 279-288, 2020. <https://doi.org/10.1016/j.powtec.2020.05.048>
29. Horciu, I. L.; **Blaga, A. C.**; Rusu, Lacramioara; et al. - Biosorption of reactive dyes from aqueous media using the Bacillus sp. residual biomass, Desalination And Water Treatment, 195, 2020, 353-360 <https://doi.org/10.5004/dwt.2020.25901>
30. Ciobanu, Corina Paraschiva; **Blaga, A.C.**; Froidevaux, Renato; et al. - Enhanced growth and beta-galactosidase production on Escherichia coliusing oxygen vectors, 3 BIOTECH 2020, 298 7, 10 <https://doi.org/10.1007/s13205-020-02284-4>
31. Tucaliuc, A; **Blaga, AC**; Galaction, AI; Cascaval, D - Mupirocin: applications and production, Biotechnology Letters, 41, 4-5, 495-502, 2019. <https://doi.org/10.1007/s10529-019-02670-w>
32. Bucurescu, A; **Blaga, AC**; Estevinho, BN; Rocha, F. -Microencapsulation of Curcumin by a Spray-Drying Technique Using Gum Arabic as Encapsulating Agent and Release Studies, Food And Bioprocess Technology, 11 (10), 2018, 1795-1806, <https://doi.org/10.1007/s11947-018-2140-3>
33. **Blaga, AC**; Cascaval, D Cascaval; Kloetzer, L; Tucaliuc, A; Galaction, AI - Valorization Of Microalgal Biomass, Environmental Engineering And Management Journal, 17 (4), 2018,841-854
34. **Blaga, AC**; Ciobanu, C; Cascaval, D; Galaction, AI - Enhancement of ergosterol production by Saccharomyces cerevisiae in batch and fed-batch fermentation processes using n-dodecane as oxygen-vector, Biochemical Engineering Journal, 131, 2018, 70-76, <https://doi.org/10.1016/j.bej.2017.12.010>
35. Cascaval, D; **Blaga, AC**; Galaction, AI - Diffusional effects on anaerobic biodegradation of pyridine in a stationary basket bioreactor with immobilized Bacillus spp. cells, Environmental Technology, 39 (2), 2018, 240-252
36. Kloetzer, L; Bompa, AS; **Blaga, A.C.**; Galaction, AI; Cascaval, D - Study on rosmarinic acid separation by synergic extraction, Separation Science And Technology, 53 (4), 2018, 645-654
37. Matran, R.-M., Galaction, A.I., **Blaga A.C.**, Turnea, M., Cașcaval D. - Distribution of Mixing Efficiency in a Split-Cylinder Gas-Lift Bioreactor with Immobilized *Yarrowia lipolytica* Cells Used for Olive Oil Mill Wastewater Treatment, Chemical Engineering Communications 2016, 203(5), 666-675.
38. Madalina Poștaru, Amalia-Stela Bompa, Anca-Irina Galaction, **Blaga A.C.**, Dan Cașcaval, Comparative study on pantothenic acid separation by reactive extraction with tri-n-octylamine and di-(2-ethylhexyl) phosphoric acid, Chem. Biochem. Eng. Quart. 2016, 31(1), 81-92.
39. Estevinho, BN; Carlan, I ; **Blaga, A.C.**; Rocha, F - Soluble vitamins (vitamin B12 and vitamin C) microencapsulated with different biopolymers by a spray drying process, Powder Technology, 289, 71-78, DOI: 10.1016/j.powtec.2015.11.019
40. Belhocine, K; Grosu, EF; **Blaga, AC**; Dhulster, P ; Pinteala, M; Froidevaux, - Simple Eco-Friendly Beta-Galactosidase Immobilization on Functionalized Magnetic Particles for Lactose Hydrolysis; Environmental Engineering And Management Journal, 14, 3, 631-638, 2015
41. Dan Cașcaval, Ramona Mihaela Matran, Marius Turnea, **Blaga A.C.**, Anca-Irina Galaction, Distribution of mixing efficiency in a split-cylinder gas-lift bioreactor for *Yarrowia lipolytica* suspensions, Canadian J. Chemical Engineering 2015, 93(1), 18-28.
42. Anca-Irina Galaction, **Blaga A.C.**, Ramona Mihaela Matran, Dan Cașcaval, Effect of bed configuration of immobilized biocatalysts on Penicillin G hydrolysis efficiency, Korean J. of Chemical Engineering 2015, 32(2), 216-221.
43. Anca-Irina Galaction, **Blaga A.C.**, Corina Ciobanu, Marius Turnea, Dan Cașcaval, Distribution of oxygen transfer rates in stirred bioreactor for different fermentation broths-oxygen-vectors dispersions, Environmental Engineering and Management Journal 2015, 14(2), 433-447.
44. Anca-Irina Galaction, Madalina Postaru, Lenuta Kloetzer, **Blaga A.C.**, Dan Cașcaval, Separation of rosmarinic acid by facilitated pertraction, Food and Bioproducts Processing 2015, 94, 621-628.
45. Ramona-Mihaela Matran, **Blaga A.C.**, Dan Cașcaval, Alexandra Tucaliuc, Anca-Irina Galaction, Comparative studies on kinetics of anaerobic and aerobic biodegradation of lipids from olive oil mill

wastewaters with mixture of *Bacillus* spp. cells, Environmental Engineering and Management Journal 2015, 14(3), 575-579.

46. Cascaval, Dan, Matran, Ramona Mihaela, Turnea, Marius, **Blaga A.C**, Galaction, Anca-Irina; Distribution of Mixing Efficiency in A Split-Cylinder Gas-Lift Bioreactor for *Yarrowia Lipolytica* Suspensions, Canadian Journal Of Chemical Engineering, 93 (1), 18-28, 2015

47. Galaction, Anca-Irina; Matran, Ramona Mihaela; Turnea, Marius, **Blaga A.C**, Cascaval, Dan - Engineering Aspects of Penicillin G Transfer and Conversion to 6-Aminopenicillanic Acid in a Bioreactor with a Mobile Bed of Immobilized Penicillin Amidase, Chemical Engineering Communications, 201 (12), 1568-1581, 2014

48. Carlescu, Alexandra; **Blaga A.C**, Galaction, Anca- Irina – Interfacial Mass Transfer in the Reactive Extraction Process of Succinic Acid from Viscous Aqueous Solutions, Separation Science And Technology, 49 (7), 974-980, 2014

49. Suteu, Daniela; **Blaga A.C**; Diaconu, Mariana, Teodor Malutan - Biosorption of reactive dye from aqueous media using *Saccharomyces cerevisiae* biomass. Equilibrium and kinetic study, Central European Journal of Chemistry, 11 (12), 2048-2057, 2013

50. Matran, Ramona Mihaela; Galaction, Anca-Irina; **Blaga A.C**, Dan Cascaval - Green technology for 6-aminopenicillanic acid production - study of penicillin g hydrolysis in a bioreactor with mobile bed of immobilized penicillin amidase under substrate inhibition, Environmental Engineering And Management Journal, 12 (11), 2261-2266, 2013

51. Kloetzer, Lenuta; Postaru, Madalina; Galaction, Anca-Irina; **Blaga A.C**, Dan Cascaval - Comparative study on rosmarinic acid separation by reactive extraction with Amberlite LA-2 and D2EHPA. 1. Interfacial Reaction Mechanism and Influencing Factors, Industrial & Engineering Chemistry Research, 52 (38), 13785-13794, 2013

52. Folescu, Elena; **Blaga A.C** - Utilization of olive oil as a potential oxygen-vector in stirred bioreactors, Environmental Engineering And Management Journal, 12 (3), 587-594, 2013

53. Cascaval, Dan; Postaru, Madalina; Galaction, Anca-Irina; **Blaga A.C** - Fractionation of Carboxylic Acids Mixture Obtained by *P. acidipropionici* Fermentation Using Pertraction with tri-n- Octylamine and 1-Octanol - Industrial & Engineering Chemistry Research 52 (7), 2685-2692, 2013

54. Cașcaval D., Turnea M., Galaction A.I., **Blaga A.C**. - 6-Aminopenicillanic acid production in stationary basket bioreactor with packed bed of immobilized penicillin amidase—Penicillin G mass transfer and consumption rate under internal diffusion limitation, Biochemical Engineering Journal, 69, pp. 113-122, 2012

55. Postaru M., Turnea M., Galaction A.I., Kloetzer L., **Blaga A.C**, Vlysidis A., Webb C., Carlescu A., Cascaval D. - Modeling of selective pertraction of carboxylic acids produced by *Actinobacillus succinogenes* fermentation, Environmental Engineering And Management Journal 11 (11), pp 1901-1906, 2012

56. **Blaga A.C**, T. Malutan - Selective Separation of Vitamin C by Reactive Extraction, Journal Of Chemical Engineering Data, 57 (2), pp 431–435, 2012

57. Anca-Irina Galaction, **Blaga A.C**, Dan Cașcaval - Study on facilitated pertraction of folic acid in pseudosteady-state regime, Separation Science And Technology, 46 (6), 912-919, 2011.

58. L. Kloetzer, **Blaga A.C**, A.I. Galaction, D. Cascaval - Separation of p-aminobenzoic acid using liquid membrane in presence of phase modifier. Journal Of Biotechnology, 150, p. S398, 2010

59. **Blaga A.C**, Anca-Irina Galaction, Dan Cașcaval - Reactive extraction of 2-keto-gluconic acid. Mechanism and influencing factors, Romanian Biotechnological Letters, 15 ( 3), 5253-5259, 2010

60. Sze Ki Carol Lin, Chenyu Du, **Blaga A.C**, Maria Camarut, Colin Webb, Christian V. Stevens, Wim Soetaert - Novel resin-based vacuum distillation-crystallisation method for recovery of succinic acid crystals from fermentation broths, Green Chemistry, 12, 666-671, 2010

61. **Blaga A.C**, Galaction Al, Cascaval D - Separation of Amino Acids from Their Mixture by Facilitated Pertraction with D2EHPA, Chemical And Biochemical Engineering Quarterly, 22(4), 439-446, 2008

62. Galaction Al, Nicuta N, **Blaga A.C**, Cascaval D - Selective separation of gentamicins by reactive extraction 1. Study on the extraction process, Romanian Biotechnological Letters, 12 (1) 3065-3071, 2007

63. Cascaval D, Galaction Al, **Blaga A.C** – Photobioreactors, Romanian Biotechnological Letters, 12(5), 3377-3388, 2007

64. **Blaga A.C**, Galaction Al, Cascaval D - Extraction and transport of basic amino acids through liquid membranes, Revista De Chimie, 58, (11), 1080-1084, 2007

65. Cascaval D, Galaction Al, Nicuta N, **Blaga A.C** - Selective separation of gentamicins from the biosynthetic mixture by reactive extraction, Separation And Purification Technology, 57(2), 264-269, 2007

66. Cascaval D, **Blaga A.C**, Camarut M, Galaction Al - Comparative study on reactive extraction of nicotinic acid with Amberlite LA-2 and D2EHPA, Separation Science And Technology, 42(2), 389-401, 2007

## Articole indexate BDI

1. Vînagă Mihail, Corina Cernatescu, Alexandra Cristina Blaga Natural Extracts Used To Prevent Microbial Contamination Of Cosmetic Products, Buletinul Institutului Politehnic Din Iași, 68 (72), 4, 2022

2. Daniela Șuteu, Alexandra Cristina Blaga, Carmen Zaharia, Ioana Luiza Horciu Residual biomass of Lactobacillus immobilized in alginate for orange 16 dye retention from aqueous medium, Buletinul Institutului Politehnic Din Iași, 67 (71), 2021
3. Tatiana Ichim, Alexandra Cristina Blaga Extraction methods of capsaicin, Buletinul Institutului Politehnic Din Iași, 67 (71), 2021
4. Petrița Larisa-Maria, Blaga Alexandra Cristina, Francois Krier A Review On The Optimization Of Lipopeptides Production, Buletinul Institutului Politehnic Din Iași, 66 (70), 2020
5. Alexandra Cristina Blaga, Ioana Luiza Horciu, Carmen Zaharia, Lăcrămioara Rusu, Cristina Grigoraș, Daniela Șuteu, Biosorbents based on microorganisms, Buletinul Institutului Politehnic Din Iași, 66 (70), 4, 2020
6. Horciu, I.L. Blaga, A.C., Zaharia, C., Dascălu, S., Șuteu D. Valorization Of Residual Biomass As Biosorbent: Study Of Biosorption Brilliant Red Dye From Aqueos Media, Buletinul Institutului Politehnic Din Iași, 65 (69), 1, 2019

#### **Brevet de invenție acordat în țară**

**B1.** Cascaval D; Galaction A I; **Blaga A C.** - *Process for separating cinnamic acid from an aqueous solution obtained by chemical synthesis or biosynthesis (RO127015-A2)*

**B2.** Cascaval D., Galaction A.I., Kloetzer L., **Blaga A.C.** - *Procedeu de separare a benzilmelilaminei (130964/2020)*

**B3.** Cascaval D., Galaction A.I., Postaru M., **Blaga A.C.** - *Procedeu de separare a acetofenonei (00130975/2020)*

**B4.** Cascaval D., Galaction A.I., **Blaga A.C.** - *Procedeu de separare a acidului pantotenic (00131311/2020)*

**4. Proiecte de cercetare-dezvoltare (P1, P2 etc.) pe bază de contract/ grant, precum și alte lucrări de cercetare-dezvoltare (F1, F2 etc.), după caz, prin care se aduc contribuții la dezvoltarea mediului educațional/ cultural/ economic/ social etc.**

#### **Proiecte/ Contracte/ Granturi de cercetare-dezvoltare câștigate prin competiție internațională**

P1 Valorificarea Superioara a Biomasei Prin Recuperarea Unor Compusi Valorosi (BIOEXTR), PN-III-P1-1.1-TE-2021-0153, Director de proiect, valoare 450000 lei
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P2. Separation of some vegetal and microbial compounds by non-conventional techniques - reactive extraction and facilitated pertraction, 2007-2008 (CNCSIS-TD) – Director de proiect, valoare 50000 lei
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P3. Obținerea de materiale cu valoare adăugată prin valorificarea subproduselor industriale (AddValueMat), PN-III-P2-2.1-PED-2019-1063, Contract: 490/2020, 2020-2022, (director de proiect Prof. dr. habil. ing. Daniela Șuteu), membru în colectiv
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P4. Sisteme hibride fermentatie / reactie enzimatica – pertractie sinergica pentru productia de compusi chimici cu aplicatii farmaceutice, cosmetice si alimentarePN-III-P4-ID-PCE-2016-0100 (director de proiect Prof.dr.ing. Dan Cașcaval), membru în colectiv
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P5. Microscale downstream processing toolbox for screening and process development (MICROTOOLS) Contract ERA-IB nr. 6-002/2013 (2013 – 2015), (director de proiect Prof.dr.ing. Dan Cașcaval), membru în colectiv
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P6. Advanced separation of biosynthetic compounds by facilitated and synergetic pertraction, PCE - IDEI PN-II-ID-PCE-2011-3-0088, contract nr. 207/5.10.2011, (director de proiect Prof.dr.ing. Dan Cașcaval), membru în colectiv
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P7. Dezvoltarea unor biocatalizatori noi pentru obținerea economică a unor sintoni chirali (SYNBIOCAT), PN-II-PT-PCCA-2011-3.1-1268, contract nr. 124/2012 (responsabil partener Tulași Prof. dr. ing. Dan Cașcaval), membru în colectiv
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P8. Separarea avansata prin pertractie (extractie prin membrane lichide) a compusilor de biosinteza cu utilizari medicale, alimentare si cosmetice - prioritate in contextul actual al biotehnologiei albe, PN II IDEI 57/2007, cod 317 (director de proiect Prof.dr.ing. Dan Cașcaval)
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