



Curriculum Vitae



Informatii personale

Nume /Prenume **Blaga Alexandra Cristina**
 Addressa Universitatea Tehnica Gheorghe Asachi Iasi, Romania
 Telefon +004/0232278683/2615 | |
 Fax +004/0232 271 311
 E-mail acblaga@ch.tuiasi.ro
 Data nasterii 04.06.1980

Experiența profesională

Conferențiar
 Perioada 2022-prezent

Activități și responsabilități principale - activități didactice de curs si laborator la disciplinele: Biotehnologii industriale, Enzimologie, Microbiologie industrială si alimentară, Microbiologie aplicată, Biotehnologii în protecția mediului

Numele și adresa angajatorului Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România

Tipul activității sau sectorul de activitate Educație și cercetare în domeniul inginerie biochimică și biotehnologie

Experiența profesională

Sef lucrari
 Perioada 2013-2022

Activități și responsabilități principale - activități didactice de curs si laborator la disciplinele: Enzimologie, Microbiologie industrială si alimentară, Enzime si microorganisme în procesarea alimentelor, Biotehnologii industriale, Biologie celulară si moleculară

Numele și adresa angajatorului Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România

Tipul activității sau sectorul de activitate Educație și cercetare în domeniul inginerie biochimică și biotehnologie

Experiența profesională

Asistent universitar
 Perioada 2008-2013

Activități și responsabilități principale - activități didactice de laborator la disciplinele: Inginerie biochimică, Biotehnologie industrială, Bioreactoare, Enzimologie, Ingineria Proceselor Alimentare si Utilaje Specifice la anul IV, specializarea IB si CATB, Biotehnologie generală anul III

- activități didactice tip proiect la disciplina Bioreactoare și Biotehnologie la anul IV, IB

- coordonarea practicii de specialitate pentru anul III, IB

Numele și adresa angajatorului Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România

Tipul activității sau sectorul de activitate	Educație și cercetare în domeniul inginerie biochimică și biotehnologie
Educație și formare	
Perioada	2011-2013
Calificarea / diploma obținută	Master specializarea Bioprocedee in domeniul agroalimentar master realizat in colaborare cu Universitatea Lille Franta
Disciplinele principale studiate / competențe profesionale dobândite	Conduite de Projets Enzymologie Biostatistica, Biomodelare, Tehnologies alimentaires
Numele și tipul instituției de învățământ / furnizorului de formare	Facultatea de Biologie, Universitatea "Alexandru Ioan Cuza" Iași, România
Perioada	2004-2010
Calificarea / diploma obținută	Doctor în Inginerie Chimică, Teza de doctorat: Separarea unor produse naturali prin pertractie
Disciplinele principale studiate / competențe profesionale dobândite	Strategia cercetării științifice Managementul proiectelor de cercetare Bioseparări, HPLC
Numele și tipul instituției de învățământ / furnizorului de formare	Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România
Perioada	1999-2004
Calificarea / diploma obținută	Inginer chimist
Departament	Inginerie Biochimica
Numele și adresa angajatorului	Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România

Publicatii principale

1. 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, 2023, <https://doi.org/10.1016/j.jiec.2023.11.057>
2. 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>
3. 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>
4. 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>
5. 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, Plants-Basel 2023, 12 (10), <https://doi.org/10.3390/plants12101933>
6. 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>
7. 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>
8. 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>
9. 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>
10. 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>
 11. 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>
 12. 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>
 13. Suteu, D.; Blaga, A.C.; Cimpoesu, R.; Puițel, 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
 14. Rusu, L.; Grigoraș, 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.
 15. Popescu, V.; Blaga, A.C.; Pruneanu, M.; Cristian, I.N.; Pîslaru, M.; Popescu, A.; Rotaru, V.; Crețescu, I.; Cașcaval, D. Green Chemistry in the Extraction of Natural Dyes from Colored Food Waste, for Dyeing Protein Textile Materials. Polymers 2021, 13, 3867.
 16. 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.
 17. 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
 18. Galaction, AI; 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
 19. 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, 2021
 20. 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
 21. 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.
 22. Estevinho, B. N.; Lazar, R.; 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
 23. 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
 24. 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
 25. Ciobanu, Corina Paraschiva; Blaga, A.C.; Froidevaux, Renato; et al. - Enhanced growth and beta-galactosidase production on *Escherichia coli* using oxygen vectors, 3 BIOTECH Volume: , 7,298, 10 2020
 26. Tucaliuc, A; Blaga, AC; Galaction, AI; Cascaval, D - Mupirocin: applications and production, Biotechnology Letters, 41, 4-5, 495-502, 2019
 27. 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
 28. 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
 29. 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
30. 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
 31. 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
 32. 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.
 33. 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.
 34. 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
 35. Belhacene, 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
 36. 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.
 37. 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.
 38. Anca-Irina Galaction, Alexandra Cristina Blaga, 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.
 39. Anca-Irina Galaction, Madalina Postaru, Lenuta Kloetzer, Alexandra Cristina Blaga, Dan Cașcaval, Separation of rosmarinic acid by facilitated pertraction, Food and Bioproducts Processing 2015, 94, 621-628.
 40. Ramona-Mihaela Matran, Alexandra Cristina Blaga, 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.
 41. Cascaval, Dan, Matran, Ramona Mihaela, Turnea, Marius, Alexandra Cristina Blaga, 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
 42. Galaction, Anca-Irina; Matran, Ramona Mihaela; Turnea, Marius, Alexandra Cristina Blaga, 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
 43. Carlescu, Alexandra; Alexandra Cristina Blaga 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
 44. Suteu, Daniela; Blaga, Alexandra Cristina; 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
 45. Matran, Ramona Mihaela; Galaction, Anca-Irina; Blaga, Alexandra Cristina, 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
 46. Kloetzer, Lenuta; Postaru, Madalina; Galaction, Anca-Irina; Blaga Alexandra Cristina, 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
 47. Folescu, Elena; Blaga, Alexandra Cristina - Utilization of olive oil as a potential oxygen-vector in stirred

- bioreactors, Environmental Engineering And Management Journal, 12 (3), 587-594, 2013
48. Cascaval, Dan; Postaru, Madalina; Galaction, Anca-Irina; Alexandra Cristina Blaga - 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
 49. Cașcaval D., Turnea M., Galaction A.I., Alexandra Cristina Blaga. - 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
 50. Postaru M., Turnea M., Galaction A.I., Kloetzer L., Alexandra Cristina Blaga, 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
 51. Blaga, AC, T. Malutan - Selective Separation of Vitamin C by Reactive Extraction, Journal Of Chemical Engineering Data, 57 (2), pp 431–435, 2012
 52. Anca-Irina Galaction, Alexandra Cristina Blaga, Dan Cașcaval - Study on facilitated pertraction of folic acid in pseudosteady-state regime, Separation Science And Technology, 46 (6), 912-919, 2011.
 53. L. Kloetzer, Alexandra Cristina Blaga, 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
 54. Alexandra Cristina Blaga, Anca-Irina Galaction, Dan Cașcaval - Reactive extraction of 2-keto-gluconic acid. Mechanism and influencing factors, Romanian Biotechnological Letters, 15 (3), 5253-5259, 2010
 55. Sze Ki Carol Lin, Chenyu Du, Alexandra Cristina Blaga, 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
 56. Alexandra Cristina Blaga, Galaction AI, Cascaval D - Separation of Amino Acids from Their Mixture by Facilitated Pertraction with D2EHPA, Chemical And Biochemical Engineering Quarterly, 22(4), 439-446, 2008
 57. Galaction AI, Nicuta N, Alexandra Cristina Blaga, Cascaval D - Selective separation of gentamicins by reactive extraction 1. Study on the extraction process, Romanian Biotechnological Letters, 12 (1) 3065-3071, 2007
 58. Cascaval D, Galaction AI, Alexandra Cristina Blaga – Photobioreactors, Romanian Biotechnological Letters, 12(5), 3377-3388, 2007
 59. Alexandra Cristina Blaga, Galaction AI, Cascaval D - Extraction and transport of basic amino acids through liquid membranes, Revista De Chimie, 58, (11), 1080-1084, 2007
 60. Cascaval D, Galaction AI, Nicuta N, Alexandra Cristina Blaga - Selective separation of gentamicins from the biosynthetic mixture by reactive extraction, Separation And Purification Technology, 57(2), 264-269, 2007
 61. Cascaval D, Alexandra Cristina Blaga, Camarut M, Galaction AI - Comparative study on reactive extraction of nicotinic acid with Amberlite LA-2 and D2EHPA, Separation Science And Technology, 42(2), 389-401, 2007

Participari la manifestari stiintifice

1. PRM-P02 Green approach for 2-ketogluconic acid separation, Blaga Alexandra Cristina, Gheorghe Asachi Technical University of Iasi, Romania, 3rd International Conference On Applied Science & Engineering, Theme: “Technological Developments & Modern Trends in Applied Science and Advanced Engineering”, September 25-26 2023, Paris, France
2. RO.41.Green reactive extraction process for vitamin B9 separation, Alexandra Cristina Blaga, Lenuta Kloetzer, Dan Cascaval, Anca Irina Galaction, EUROINVENT 2023, Iasi, Romania
3. RO.42. 2-Ketogluconic acid separation process using a phosphonium ionic liquid, Alexandra Cristina Blaga, Alexandra Tucaliuc, Anca Irina Galaction, Dan Cascaval, EUROINVENT 2023, Iasi, Romania
4. PO.5.1. Eco-process for lipids extraction from microalgae using ionic liquids - Alexandra Cristina Blaga, Lenuta Kloetzer, Alexandra Tucaliuc, International Conference on Environmental Engineering and Management (ICEEM), Iasi, Romania
5. PO.5.11 Eco-friendly process for vitamins separation from aqueous solutions - Alexandra Cristina

- Blaga*, Alexandra Tucaliuc, Lenuta Kloetzer, Anca Irina Galaction, Dan Cascaval, International Conference on Environmental Engineering and Management (ICEEM), Iasi, Romania
6. B.2. Modelling And Optimization Of Folic Acid Separation Using Ionic Liquids - Elena Niculina Dragoi, Alexandra Cristina Blaga, Lenuta Kloetzer, Alexandra Tucaliuc, Diana Georgiana Gal, The 18th International Conference of Constructive Design and Technological Optimization in Machine Building Field – OPROTEH, Bacau, Romania
 7. F.1. Ionic Liquid Mediated Petraction For Vitamin C - Alexandra Cristina Blaga, Lenuta Kloetzer, Alexandra Tucaliuc, Dan Cascaval, Anca Irina Galaction, The 18th International Conference of Constructive Design and Technological Optimization in Machine Building Field – OPROTEH, Bacau, Romania
 8. Daniela Suteu, Alexandra Cristina Blaga, Carmen Zaharia, Ramona Elena Tataru Farmus - Use of residual biomass of *Saccharomyces pastorianus* immobilized in alginate for reactive dye recovery from aqueous media, 8th Edition of the International Conference BIOTECHNOLOGIES, PRESENT AND PERSPECTIVES Stefan cel Mare University of Suceava, Romania, Suceava, November 5, 2021
 9. Alexandra TANASA, Alexandra Cristina BLAGA, Daniela SUTEU - Microbial Residual Biomass As Biosorbent For Chemical Pollutant Retention From Aqueous Media, USAMVB Timisoara, "YOUNG PEOPLE AND MULTIDISCIPLINARY RESEARCH IN APPLIED LIFE SCIENCES", 25 November 2021
 10. R.G. Lazar, A.C. Blaga, A.I. Galaction, D. Cascaval - S2-P03. Separation of 2-ketogluconic acid by synergic reactive extraction, 5th International Conference on Chemical Engineering, Iasi, Romania, 28-30 octombrie 2020
 11. C. Ciobanu, A.C. Blaga, R. Froidevaux, F. Krier, A.I. Galaction, D. Cascaval - S2-P17. Improved *E. coli* biomass and enzyme production using oxygen vectors, 5th International Conference on Chemical Engineering, Iasi, Romania, 28-30 octombrie 2020
 12. Blaga A.C., Kloetzer L., Tucaliuc A., Cascaval D., Galaction A.I. - Algae growth optimization for biodiesel production, International Conference on Environmental Engineering and Management, Iasi, Romania, 2020
 13. Alexandra C. Blaga, Alexandra Tucaliuc, Dan Cascaval - Separation of Mupirocin by Reactive Extraction, Advanced chemical engineering and industrial green chemistry, Paris, France, 2019
 14. M. Postaru, A. Tucaliuc, A.C. Blaga, D. Cascaval, A.I. Galaction, Separation of 7-aminocephalosporanic acid by synergic extraction, 10th International Conference on Environmental Engineering and Management, Iasi, 18-21 september 2019.
 15. A. Tucaliuc, A.C. Blaga, A.I. Galaction, L. Kloetzer, D. Cașcaval, Hybrid fermentation system for improvement ergosterol biosynthesis, International Conference on Biotechnology, Lisbon, 16-17 April 2018
 16. Tucaliuc, A.C. Blaga, C. Ciobanu, D. Cașcaval, A.I. Galaction, Improvement of aerobic yeasts fermentation by n-dodecane addition versus hybrid process of yeasts fermentation-alcohol fermentation, 4th International Conference on Chemical Engineering, Iasi, 31 October-2 November 2018
 17. A.C. Blaga, L. Kloetzer, A. Tucaliuc, D. Cașcaval, A.I. Galaction, Bioethanol production in hybrid system, 4th International Conference on Chemical Engineering, Iasi, 31 October-2 November 2018
 18. A. Bucureșcu; Alexandra Cristina Blaga; Berta Nogueiro Estevinho; Fernando Nogueira da Rocha. "Preparation of curcumin microparticles by a spray drying technique and controlled release studies". 31st EFFoST International Conference, Sitges, Spain, 2017.
 19. A. Tucaliuc, M. Poștaru, A.C. Blaga, D. Cașcaval, A.I. Galaction, Synergic pertraction of pantothenic acid, 20th Romanian International Conference on Chemistry and Chemical Engineering, Brasov, 6-9 September 2017
 20. L. Kloetzer, A.C. Blaga, A.I. Galaction, A.R. Ilică, D. Cașcaval, Separation of rosmarinic acid with a mixture of D2EHPA and Amberlite LA-2, 20th Romanian International Conference on Chemistry and Chemical Engineering, Brasov, 6-9 September 2017
 21. Berta Nogueiro Estevinho; Luiza Horciu; Alexandra Cristina Blaga; Fernando Nogueira da Rocha. "Extraction and microencapsulation of polyphenols obtained from different herbal extracts". 30th EFFoST International Conference, Vienna, Austria, 2016.
 22. L. Horciu; Berta Nogueiro Estevinho; L. Kloetzer; A.C. Blaga. "Ultrasound-Assisted extraction of polyphenols from clove (*Syzygium aromaticum*)". ICCE 2016 - 3rd International Conference on Chemical Engineering, Iasi, Romania, 2016.

23. Lenuta Kloetzer, Alexandra Cristina Blaga, Anca Irina Galaction, Marius Turnea, Alexandra Carlescu, Dan Cașcaval - Comparative analysis of lipids biodegradation with immobilized *Bacillus spp.* cells in a bioreactor with mobile bed vs. Basket bioreactor”, Paper ID: ABBE-14-114, International Conference on Advances in Bio-Informatics, Bio-Technology and Environmental Engineering - ABBE 2014, Londra, UK
24. A. I. Galaction, Alexandra Cristina Blaga, D. Cașcaval, M. Turnea, R. Matran - Succinic acid production in a bioreactor with mobile bed of immobilized *A. succininogenes*, ICCFE 2014 : XI International Conference on Chemical and Food Engineering, Paris, Franta
25. Alexandra Cristina Blaga, A. Cârlescu, M. Turnea, A.I.Galaction, D.Cașcaval - Evaluation of Mixing and Oxygen Transfer Performances for a Stirred Bioreactor Containing *P. chrysogenum* Broths, ICCPE 2014 : XI International Conference on Chemical and Pharmaceutical Engineering, Copenhagen, Danemarca
26. Alexandra Cristina Blaga, D. Cascaval, L. Kloetzer, A.I. Galaction - Separation of gentamicin C1 from biosynthetic gentamicins by facilitated pertraction for increasing antibiotic activity, FILTECH 2013, Wiesbaden, Germania Carlescu A., Alexandra Cristina Blaga, Cascaval D., Kloetzer L., Galaction A. - Free and facilitated pertraction of erythromycin from *Streptomyces erythreus* broths, PERMEA 2013, Varsovia, Polonia
27. Alexandra Cristina Blaga, Madalina Postaru, Anca Irina Galaction, Dan Cașcaval - Selective separation of vitamin C by reactive extraction, 15th European Congress on Biotechnology, Istanbul, 2012
28. L. Kloetzer, A. I. Galaction, D. Cascaval, Alexandra Cristina Blaga - Separation of folic acid by synergic extraction with aminic and organophosphorus extractants mixture, CHISA, Praga, Republica Cehă, 2012.
29. Folescu E., Carlescu A., Alexandra Cristina Blaga. - Utilization of olive oil as oxygen-vector for oxygen mass transfer enhancement in mechanically stirred bioreactors, International Conference of Applied Sciences. Chemistry And Chemical Engineering, Bacau, 2012
30. Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cașcaval – Selective separation of cinnamic and p-metoxycinnamic acids by extraction and transport through liquid membranes, 37th International Conference of Slovak Society of Chemical Engineering, Tatranske Matliare, Slovakia, 2010
31. Cascaval D., GalactionAi, Alexandra Cristina Blaga., Kloetzer L. - Could be used pertraction for increasing the antibiotics activity? Case study: gentamicins separation, PERMEA 2010, Tatranske Matliare, Slovakia, 2010.
32. Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cașcaval - Separation of amino acids from their mixture by liquid membrane, Proceedings of PERMEA, 2010
33. Lenuța Kloetzer, Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cascaval - Separation of p-aminobenzoic acid using liquid membrane in presence of phase modifier, 14th International Biotechnology Symposium and Exhibition, Rimini, Italy, 2010
34. N. Nicuță, Alexandra Cristina Blaga, A.I. Galaction, D. Cascaval – Selective separation of gentamicins by reactive extraction, Proceedings of European BioPerspectives 2007, Cologne, Germania, 30 mai-1 iunie 2007

Brevete

1. Cascaval D., Galaction A.I., Kloetzer L., Blaga A.C. *Procedeu de separare a benzilmetilaminei* (130964/2020)
2. Cascaval D., Galaction A.I., Postaru M., Blaga A.C. *Procedeu de separare a acetofenonei* (00130975/2020)
3. Cascaval D., Galaction A.I., Blaga A.C. *Procedeu de separare a acidului pantotenic* (00131311/2020)
4. Cascaval D., Galaction A.I., Blaga A.C. *Procedeu de separare a acidului cinamic* (00127015/2010)

Participări în programe de cercetare-dezvoltare naționale

1. 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
- Dezvoltarea unor biocatalizatori noi pentru obținerea economică a unor sintoni chirali (SYNBIOCAT), PN-II-PT-PCCA-2011-3.1-1268, 2012-2016, contract nr. 124/2012, 2012- (responsabil partener TUIași Prof. dr. ing. Dan Cașcaval), membru în colectiv
 - Advanced separation of biosynthetic compounds by facilitated and synergetic pertraction, 2011-2014, PN-II-ID-PCE-2011-3-0088, contract nr. 207/2011 (director de proiect Prof.dr.ing. Dan Cașcaval), membru în colectiv
 - Photocatalysis for hydrogen production and fuel from biomass and waste water (FOTOCOMB), PN II-21048/2007, 2007-2010, (responsabil partener TUIași Prof. dr. ing. Dan Cașcaval), membru în colectiv
 - Advanced separation by pertraction (liquid membrane extraction) of natural compounds with medical, food and cosmetics uses - a priority in the current context of white biotechnology (PERBIO), PN II IDEI 57/2007, 2007-2010, (director de proiect Prof.dr.ing. Dan Cașcaval), membru în colectiv
 - COST: CM0903 - Utilisation of Biomass for Sustainable Fuels & Chemicals (UBIOCHEM)
 - Separation of some vegetal and microbial compounds by non-conventional techniques - reactive extraction and facilitated pertraction, 2007-2008 (CNCSIS-TD) – Director de proiect (valoare 50.000 RON)

Stagii de cercetare |

Lille, France, Institut Charles Viollette INRAE, Université de Lille, Sciences et Technologies (16-27 March 2015)

LEPABE – Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering of the University of Porto – Chemical Engineering Department (3-10 June 2016)

Vienna University of Technology, Institute of Chemical Engineering, Research Area Biochemical Engineering (March 4th to 11th 2012)

University of Manchester, Faculty of Chemical Engineering and Analytical Science, Satake Centre for Grain Process Engineering (May 1st 2008 to July 31, 2008)

Denmark Technical University, Center for Bioprocess Engineering, Department of Chemical and Biochemical Engineering (August 3 to 22, 2009)

Summer School - "Biotechnologies for the Third Millenium Health " (July 15 to 29, 2007), for foreign students from European Union countries

Premii |

- Premiul pentru tânărul cercetător cu cele mai bune performante în cercetarea științifică - Premiul de excelență în cercetare TUIASI, 2014*
- Medalie de argint, INFOINVENT, Chisinau, 2017*
- Diploma de excelenta si medalie de aur ProInvent, editia XIV, Iasi, 2016*
- Medalie de aur, Inventica, Iasi, 2016*
- Medalie de aur, International Salon of Inventions and New Technologies, Savastopol, 2016*
- Medalie de argint, EuroInvent, Iasi, 2015*
- Medalie de aur, Inventica, Iasi, 2013*
- Medalie de aur, EuroInvent, Iasi, 2011*

Aptitudini și competențe personale

Limba maternă

Română

Limbi străine cunoscute

Autoevaluare

Nivel european (*)

Înțelegere		Vorbire		Scriere
Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă

Engleză	C2	Utilizator experimentat	C2	Utilizator experimentat	C1	Utilizator experimentat	C2	Utilizator experimentat	C1	Utilizator experimentat
Franceză	A2	Utilizator elementar	A2	Utilizator elementar	A1	Utilizator elementar	A1	Utilizator elementar	A1	Utilizator elementar
(*) <u>Nivelul Cadrului European Comun de Referință Pentru Limbi Străine</u>										

17.01.2024

Conf.dr.ing. Alexandra Cristina Blaga

Anexa II.9.b-Lista de lucrări

Lista de lucrări

Numele și prenumele: Conf.dr.ing. BLAGA ALEXANDRA CRISTINA

A. Teza de doctorat.

Titlul tezei: Separarea unor produse naturale prin pertractie

C. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS.

C1. Blaga A.C., Tucaliuc A., Kloetzer L. – Microorganisme: caracteristici si aplicatii, Editura Performantica, Iasi, 2020

C2. Blaga A.C., Kloetzer L., Tucaliuc A. – Aplicatii ale enzimelor si microorganismelor in industria alimentara si biochimica, Ed. Performantica, 2015, ISBN 978-606-685-315-6

C3. D. Suteu, A.C. Blaga, Biotehnologii in protectia mediului, Editura Performantica, Iasi, 2013, ISBN 9786066 850711

C4. Suteu D., Blaga AC.- Biotehnologii in protectia mediului – elemente de teorie si aplicatii, Ed. Performantica, Iasi, 2011, ISBN 978-973-730-867-2

Capitol in volum de editori:

1. D. Suteu, C. Zaharia, **A.C. Blaga**, Cap. 10 – *Biosorption- current bioprocess for wastewater treatment*, in - Current topics, concepts and research priorities in environmental chemistry/vol.1, Zaharia C. (Editor), Editura Universitatii "A.I. Cuza" Iasi, 2012, ISBN general: 978-973-703-797-8; vol. 1, ISBN capitol: 978-973-703-797-5

2. D. Suteu, **A.C. Blaga**, C. Zaharia, Cap. 12 - *The action of microorganisms from organic pollutants in water, air, soil* in - Current topics, concepts and research priorities in environmental chemistry/vol.2, Zaharia C. (Editor), Editura Universitatii "A.I. Cuza" Iasi, 2013

3. Kalim Belhacene, Ionela Ungureanu, Elena Grosu, **A.C. Blaga**, Pascal Dhulster, Renato Froidevaux - From a Sequential to a Continuous Approach for LVVh7 Preparation during Enzymatic Proteolysis in a Microfluidic-Based Extraction Process, Chapter 5, Kinetics of Enzymatic Synthesis, 2019, pp 95-111

4. S. Curteanu, E.-N. Dragoi, **A.C. Blaga**, A.I. Galaction, D. Cascaval - Neuroevolutive Algorithms Applied for Modeling Some Biochemical Separation Processes, Methods in Molecular Biology (Clifton, N.J.) pp 115-138, 2021

F. Lucrări științifice publicate în reviste cotate ISI sau indexate în baze de date internaționale.

1. 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, 2023, <https://doi.org/10.1016/j.jiec.2023.11.057>

2. 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>

3. 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>

4. 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>

5. 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, *Plants*-Basel 2023, 12 (10), <https://doi.org/10.3390/plants12101933>

6. 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>

7. 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>

8. Suteu 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>

9. 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>

10. 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>

11. 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>

12. 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>

13. Suteu, D.; Blaga, A.C.; Cimpoesu, R.; Puițel, 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

14. Rusu, L.; Grigoraș, 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.

15. Popescu, V.; Blaga, A.C.; Pruneanu, M.; Cristian, I.N.; Pîslaru, M.; Popescu, A.; Rotaru, V.; Crețescu, I.; Cașcaval, D. Green Chemistry in the Extraction of Natural Dyes from Colored Food Waste, for Dyeing Protein Textile Materials. *Polymers* 2021, 13, 3867.

16. 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.; Crețescu, I.; Chelariu, P.; Marin, M. Sustainable Functionalization of PAN to Improve Tinctorial Capacity. *Polymers* 2021, 13, 3665.

17. 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>

18. Lazar, RG; Blaga, AC (autor corespondent); 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,

19. Galaction, AI; 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

20.Lazar, RG; Blaga, AC (autor corespondent); 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, 2021,

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

22.Popescu, V.; Blaga, A.C.; Pruneanu, M.; Cristian, I.N.; Pîslaru, M.; Popescu, A.; Rotaru, V.; Crețescu, I.; Cașcaval, D. Green Chemistry in the Extraction of Natural Dyes from Colored Food Waste, for Dyeing Protein Textile Materials. Polymers 2021, 13, 3867.

23.Galaction, AI; 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

24.Estevinho, Berta Nogueiro; Lazar, Roxana; Blaga, Alexandra; et al. - 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

25.Horciu, Ioana Luiza; Blaga, Alexandra Cristina; 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

26.Ciobanu, Corina Paraschiva; Blaga, Alexandra Cristina; Froidevaux, Renato; et al. - Enhanced growth and beta-galactosidase production on *Escherichia coli* using oxygen vectors, 3 BIOTECH Volume: 2020, 7,298, 10

27.Tucaliuc, A; Blaga, AC; Galaction, AI; Cascaval, D - Mupirocin: applications and production, Biotechnology Letters, 41, 4-5, 495-502, 2019

28.Bucurescu, A; Blaga, AC Blaga; 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

29.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

30.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

31.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

32.Kloetzer, L; Bompa, AS; Blaga, AC; Galaction, AI; Cascaval, D - Study on rosmarinic acid separation by synergic extraction, Separation Science And Technology, 53 (4), 2018, 645-654

33.Ramona-Mihaela Matran, Anca-Irina Galaction, Alexandra Cristina Blaga, Marius Turnea, Dan Cașcaval, 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.

34.Madalina Poștaru, Amalia-Stela Bompa, Anca-Irina Galaction, Alexandra Cristina Blaga, 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.

35.Estevinho, BN; Carlan, I ; Blaga, A; 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

36. Belhacene, 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

37. Dan Cașcaval, Ramona Mihaela Matran, Marius Turnea, Alexandra Cristina Blaga, 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.

38. Anca-Irina Galaction, Alexandra Cristina Blaga, 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.

39. Anca-Irina Galaction, Alexandra Cristina Blaga, 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.

40. Anca-Irina Galaction, Madalina Postaru, Lenuta Kloetzer, Alexandra Cristina Blaga, Dan Cașcaval, Separation of rosmarinic acid by facilitated pertraction, Food and Bioproducts Processing 2015, 94, 621-628.

41. Ramona-Mihaela Matran, Alexandra Cristina Blaga, 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.

42. Cascaval, Dan, Matran, Ramona Mihaela, Turnea, Marius, Alexandra Cristina Blaga, 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

43. Galaction, Anca-Irina; Matran, Ramona Mihaela; Turnea, Marius, Alexandra Cristina Blaga, 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

44. Carlescu, Alexandra; Alexandra Cristina Blaga 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

45. Suteu, Daniela; Blaga, Alexandra Cristina; 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

46.24. Matran, Ramona Mihaela; Galaction, Anca-Irina; Blaga, Alexandra Cristina, 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

47. Kloetzer, Lenuta; Postaru, Madalina; Galaction, Anca-Irina; Blaga Alexandra Cristina, 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

48. Folescu, Elena; Blaga, Alexandra Cristina - Utilization of olive oil as a potential oxygen-vector in stirred bioreactors, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, 12 (3), 587-594, 2013

49. Cascaval, Dan; Postaru, Madalina; Galaction, Anca-Irina; Alexandra Cristina Blaga - 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

50. Cașcaval D., Turnea M., Galaction A.I., Alexandra Cristina Blaga. - 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

51. Postaru M., Turnea M., Galaction A.I., Kloetzer L., Alexandra Cristina Blaga, 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

52. Blaga, AC, T. Malutan - Selective Separation of Vitamin C by Reactive Extraction, *JOURNAL OF CHEMICAL ENGINEERING DATA*, 57 (2), pp 431–435, 2012

53. Anca-Irina Galaction, Alexandra Cristina Blaga, Dan Cașcaval - Study on facilitated pertraction of folic acid in pseudosteady-state regime, *SEPARATION SCIENCE AND TECHNOLOGY*, 46 (6), 912-919, 2011.

54. L. Kloetzer, Alexandra Cristina Blaga, 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

55. Alexandra Cristina Blaga, Anca-Irina Galaction, Dan Cașcaval - Reactive extraction of 2-keto-gluconic acid. Mechanism and influencing factors, *ROMANIAN BIOTECHNOLOGICAL LETTERS*, 15 (3), 5253-5259, 2010

56. Sze Ki Carol Lin, Chenyu Du, Alexandra Cristina Blaga, 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

57. Alexandra Cristina Blaga, Galaction AI, Cascaval D - Separation of Amino Acids from Their Mixture by Facilitated Pertraction with D2EHPA, *CHEMICAL AND BIOCHEMICAL ENGINEERING QUARTERLY*, 22(4), 439-446, 2008

58.36. Galaction AI, Nicuta N, Alexandra Cristina Blaga, Cascaval D - Selective separation of gentamicins by reactive extraction 1. Study on the extraction process, *ROMANIAN BIOTECHNOLOGICAL LETTERS*, 12 (1) 3065-3071, 2007

59. Cascaval D, Galaction AI, Alexandra Cristina Blaga – Photobioreactors, *ROMANIAN BIOTECHNOLOGICAL LETTERS*, 12(5), 3377-3388, 2007

60. Alexandra Cristina Blaga, Galaction AI, Cascaval D - Extraction and transport of basic amino acids through liquid membranes, *REVISTA DE CHIMIE*, 58, (11), 1080-1084, 2007

61. Cascaval D, Galaction AI, Nicuta N, Alexandra Cristina Blaga - Selective separation of gentamicins from the biosynthetic mixture by reactive extraction, *SEPARATION AND PURIFICATION TECHNOLOGY*, 57(2), 264-269, 2007

62. Cascaval D, Alexandra Cristina Blaga, Camarut M, Galaction AI - Comparative study on reactive extraction of nicotinic acid with Amberlite LA-2 and D2EHPA, *SEPARATION SCIENCE AND TECHNOLOGY*, 42(2), 389-401, 2007

H. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS

1. Alexandra Cristina Blaga, Lenuța Kloetzer, Alexandra Tucaliuc, Dan Cașcaval, Anca Irina Galaction - Third Generation Bioethanol Production, *THE BULLETIN OF THE POLYTECHNIC INSTITUTE FROM IAȘI, CHEMISTRY and CHEMICAL ENGINEERING* Section, 62(66), Fasc. 2, 2016, 39 – 52

2. Ioana Luiza Horciu, Alexandra Cristina Blaga, Carmen Zaharia, Sonia Dascălu, Daniela Șuteu - Valorization of residual biomass as biosorbent: study of biosorption brilliant red dye from aqueous media, *BULETINUL INSTITUTULUI POLITEHNIC DIN IAȘI*, Volumul 65 (69), Numărul 1, 2019, 57-68

3. Petrila Larisa-Maria, Blaga Alexandra Cristina, Francois Krier - A review on the Optimization of lipopeptides production, THE BULLETIN OF THE POLYTECHNIC INSTITUTE FROM IAȘI; CHEMISTRY and CHEMICAL ENGINEERING Section, 66 (70), 2020, 31-49.
4. A.C.Blaga, I.L. Horciu, C. Zaharia, L. Rusu, C. Grigoraș, D.Suteu, Biosorbents based on microorganisms, Bull. IPI, Sectiunea: Chimie si Inginerie chimica,2020, 66 (70) (4),39-53.

I. Lucrări științifice publicate în volumele conferințelor.

1. R.G. Lazar , A.C. Blaga , A.I. Galaction , D. Cascaval - S2-P03. Separation of 2-ketogluconic acid by synergic reactive extraction, 5th International Conference on Chemical Engineering, Iasi, Romania, 28-30 octombrie 2020
2. C. Ciobanu , A.C. Blaga , R. Froidevaux , F. Krier , A.I. Galaction , D. Cascaval - S2-P17. Improved E. coli biomass and enzyme production using oxygen vectors, 5th International Conference on Chemical Engineering, Iasi, Romania, 28-30 octombrie 2020
3. A.C. Blaga , A. Tucaliuc , A.I. Galaction , D. Cascaval - S2-P23. Growth optimization of algae for biodiesel production, 5th International Conference on Chemical Engineering, Iasi, Romania, 28-30 octombrie 2020
4. Alexandra Cristina Blaga, Madalina Postaru, Anca Irina Galaction, Dan Cascaval - Separation of 2-ketogluconic acid by synergic extraction, Membrane Science and Technology Conference of Visegrád Countries, Budapest, 26-29 August 2019
5. Alexandra C. Blaga, Alexandra Tucaliuc, Dan Cascaval - Separation of Mupirocin by Reactive Extraction, Advanced-chemical-engineering-and-industrial-green-chemistry,
6. Blaga A.C., Kloetzer L., Tucaliuc A., Cascaval D., Galaction A.I. - Algae growth optimization for biodiesel production, International Conference on Environmental Engineering and Management
7. Lenuta Kloetzer, Alexandra Cristina Blaga, Anca Irina Galaction, Marius Turnea, Alexandra Carlescu, Dan Cașcaval - Comparative analysis of lipids biodegradation with immobilized Bacillus spp. cells in a bioreactor with mobile bed vs. Basket bioreactor”, Paper ID: ABBE-14-114, International Conference on Advances in Bio-Informatics, Bio-Technology and Environmental Engineering - ABBE 2014, Londra, UK
8. A. I. Galaction, Alexandra Cristina Blaga, D. Cașcaval, M. Turnea, R. Matran - Succinic acid production in a bioreactor with mobile bed of immobilized A. succinogenes, ICCFE 2014 : XI International Conference on Chemical and Food Engineering, Paris, Franta
9. Alexandra Cristina Blaga, A. Cârlescu, M. Turnea, A.I.Galaction, D.Cașcaval - Evaluation of Mixing and Oxygen Transfer Performances for a Stirred Bioreactor Containing P. chrysogenum Broths, ICCPE 2014 : XI International Conference on Chemical and Pharmaceutical Engineering, Copenhaga, Danemarca
10. Alexandra Cristina Blaga, D. Cascaval, L. Kloetzer, A.I. Galaction - Separation of gentamicin C1 from biosynthetic gentamicins by facilitated pertraction for increasing antibiotic activity, FILTECH 2013, Wiesbaden, Germania
11. Carlescu A., Alexandra Cristina Blaga, Cascaval D., Kloetzer L., Galaction A. - Free and facilitated pertraction of erythromycin from Streptomyces erythreus broths, PERMEA 2013, Varsovia, Polonia
12. Alexandra Cristina Blaga, Madalina Postaru, Anca Irina Galaction, Dan Cașcaval - Selective separation of vitamin C by reactive extraction, 15th European Congress on Biotechnology, Istanbul, 2012
13. L. Kloetzer, A. I. Galaction, D. Cascaval, Alexandra Cristina Blaga - Separation of folic acid by synergic extraction with aminic and organophosphorus extractants mixture, CHISA, Praga, Republica Cehă, 2012.

14. Folescu E., Carlescu A., Alexandra Cristina Blaga. - Utilization of olive oil as oxygen-vector for oxygen mass transfer enhancement in mechanically stirred bioreactors, International Conference of Applied Sciences. Chemistry And Chemical Engineering, Bacau, 2012
15. Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cașcaval – Selective separation of cinnamic and p-metoxycinnamic acids by extraction and transport through liquid membranes, 37th International Conference of Slovak Society of Chemical Engineering, Tatranske Matliare, Slovakia, 2010
16. Cascaval D., Galaction Ai, Alexandra Cristina Blaga., Kloetzer L. - Could be used pertraction for increasing the antibiotics activity? Case study: gentamicins separation, PERMEA 2010, Tatranske Matliare, Slovakia, 2010.
17. Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cașcaval - Separation of amino acids from their mixture by liquid membrane, Proceedings of PERMEA, 2010
18. Lenuța Kloetzer, Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cascaval - Separation of p-aminobenzoic acid using liquid membrane in presence of phase modifier, 14th International Biotechnology Symposium and Exhibition, Rimini, Italy, 2010
19. N. Nicuță, Alexandra Cristina Blaga, A.I. Galaction, D. Cascaval – Selective separation of gentamicins by reactive extraction, Proceedings of European BioPerspectives 2007, Cologne, Germania, 30 mai-1 iunie 2007

J. Invenții.

1. Cascaval D., Galaction A.I., Kloetzer L., Blaga A.C. Procedeu de separare a benzilmetilaminei (130964/2020)
2. Cascaval D., Galaction A.I., Postaru M., Blaga A.C. Procedeu de separare a acetofenonei (00130975/2020)
3. Cascaval D., Galaction A.I., Blaga A.C. Procedeu de separare a acidului pantotenic (00131311/2020)
4. Cascaval D; Galaction A I; Blaga A C., Process for separating cinnamic acid from an aqueous solution obtained by chemical synthesis or biosynthesis (00127015/2010)

K. Contracte de cercetare.

1. Valorificarea superioara a biomasei prin recuperarea unor compusi valorosi, [BIOEXTR], PN-III-P1-1.1-TE-2021-0153, nr. TE 16/2022, 10/05/2022 - 09.05.2024, Director de proiect (valoare 450.000 RON)
2. COST: Green Chemical Engineering Network towards upscaling sustainable processes (CA18224) – GREENERING, MC Substitute, 2019-2023
3. 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
4. Sisteme Hibrade Fermentație/Reacție Enzimatică-Pertracție Sinergică pentru Producția de Compuși Chimici cu Aplicații Farmaceutice, Cosmetice și Alimentare - PN-III-P4-ID-PCE-2016-0100, 2017-2019, (director de proiect Prof.dr.ing. Dan Cașcaval), membru în colectiv
5. 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
6. 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
7. Advanced separation of biosynthetic compounds by facilitated and synergetic pertraction, 2011-2014

8. Photocatalysis for hydrogen production and fuel from biomass and waste water (FOTOCOMB), 2007-2010
9. Advanced separation by pertraction (liquid membrane extraction) of natural compounds with medical, food and cosmetics uses - a priority in the current context of white biotechnology (PERBIO), 2007-2010
10. COST: CM0903 - Utilisation of Biomass for Sustainable Fuels & Chemicals (UBIOCHEM)
11. Separation of some vegetal and microbial compounds by non-conventional techniques - reactive extraction and facilitated pertraction, 2007-2008 (CNCSIS-TD)

Data,

17.01.2024