



Curriculum Vitae



Informatii personale

Nume /Prenume

Addressa

Telefon

Fax

E-mail

Data nasterii

Blaga Alexandra Cristina

Universitatea Tehnica Gheorghe Asachi Iasi, Romania

+004/0232278683/2615

+004/0232 271 311

acblaga@ch.tuiasi.ro

04.06.1980

Experiența profesională

Perioada

Activități și responsabilități principale

Sef lucrari

2012-prezent

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

Numele și adresa angajatorului

Tipul activității sau sectorul de activitate

Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România

Educație și cercetare în domeniul inginerie biochimică și biotehnologie

Experiența profesională

Perioada

Activități și responsabilități principale

Asistent universitar

2008-2012

- 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

Tipul activității sau sectorul de activitate

Universitatea Tehnică "Gheorghe Asachi" din Iași, Iași, România

Educație și cercetare în domeniul inginerie biochimică și biotehnologie

Educație și formare

Perioada

Calificarea / diploma obținută

Disciplinele principale studiate / competențe profesionale dobândite

Numele și tipul instituției de învățământ / furnizorului de formare

2013-2014

Master specializarea Bioprocedee in domeniul agroalimentar master realizat in colaborare cu Universitatea Lille Franta

Conduite de Projets
Enzymologie
Biostatistica, Biomodelare, Tehnologies alimentaires

Facultatea de Biologie, Universitatea "Alexandru Ioan Cuza" Iași, România

Perioada	2004-2010
Calificarea / diploma obținută	Doctor în Inginerie Chimică, Teza de doctorat: Separarea unor produși 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

- 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
- 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
- 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
- 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.
- 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, 2021
- 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
- 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, 353-360, 2020
- 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: 10, 7,298, 2020
- Tucaliuc, A; Blaga, AC; Galaction, AI; Cascaval, D - Mupirocin: applications and production, Biotechnology Letters, 41, 4-5, 495-502, 2019
- 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
- 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

12. 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
13. 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
14. 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
15. 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.
16. 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.
17. 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
18. 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
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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
25. 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
26. 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
27. 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
28. 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
29. 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
30. 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

33. 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
34. Blaga, AC, T. Malutan - Selective Separation of Vitamin C by Reactive Extraction, JOURNAL OF CHEMICAL ENGINEERING DATA, 57 (2), pp 431–435, 2012
35. 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.
36. 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
37. 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
38. 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
39. 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
40. 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
41. Cascaval D, Galaction AI, Alexandra Cristina Blaga – Photobioreactors, ROMANIAN BIOTECHNOLOGICAL LETTERS, 12(5), 3377-3388, 2007
42. 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
43. 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
44. 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. 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. succininogenes*, 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, Copenhagen, 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 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
11. 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
12. 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.
13. 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
14. 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, Slovacia, 2010
15. Cascaval D., Galaction A.I., Alexandra Cristina Blaga., Kloetzer L. - Could be used pertraction for increasing the antibiotics activity? Case study: gentamicins separation, PERMEA 2010, Tatranske Matliare, Slovacia, 2010.
16. Alexandra Cristina Blaga, Anca Irina Galaction, Dan Cașcaval - Separation of amino acids from their mixture by liquid membrane, Proceedings of PERMEA, 2010
17. 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
18. 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

**Participări în programe de
cercetare-dezvoltare
naționale**

1. Obținerea de materiale cu valoare adăugată prin valorificarea subproduselor industriale (AddValueMat), Contract: 490/2020, Cod proiect: PN-III-P2-2.1-PED-2019-1063 (director de proiect Prof.dr.ing. Daniela Suteu) membru în colectiv
2. Sisteme hibride fermentatie/reactie enzimatica – pertractie sinergica pentru productia de compusi chimici cu aplicatii farmaceutice, cosmetice si alimentare (HYPER), 2017-2019, Cod proiect: PN-III-P4-ID-PCE-2016-0100, (director de proiect Prof.dr.ing. Dan Cașcaval) membru în colectiv
3. 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
4. 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 TUIași Prof. dr. ing. Dan Cașcaval), membru în colectiv
5. Advanced separation of biosynthetic compounds by facilitated and synergetic pertraction, 2011-2014 membru în colectiv
6. Photocatalysis for hydrogen production and fuel from biomass and waste water (FOTOCOMB), 2007-2010 membru în colectiv
7. 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 - membru în colectiv
8. COST: CM0903 - Utilisation of Biomass for Sustainable Fuels & Chemicals (UBIOCHEM)- membru în colectiv
9. Separation of some vegetal and microbial compounds by non-conventional techniques - reactive extraction and facilitated pertraction, 2007-2008 (CNCSIS-TD) – Director de proiect

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

Aptitudini și competențe personale

Limba maternă

Limbi străine cunoscute

Română

Autoevaluare

Nivel european (*)

Engleză

Franceză

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
C2	Utilizator experimentat	C2	Utilizator experimentat	C1	Utilizator experimentat	C2	Utilizator experimentat	C1	Utilizator experimentat
A2	Utilizator elementar	A2	Utilizator elementar	A1	Utilizator elementar	A1	Utilizator elementar	A1	Utilizator elementar

(*) [Nivelul Cadrului European Comun de Referință Pentru Limbi Străine](#)

14.06.2021

S.I.dr.ing. Alexandra Cristina Blaga