



Nume ISOPENCU GABRIELA OLIMPIA

Funcție Sef Lucrari universitar

Departmentul: Inginerie Chimica și Biochimica

Grupul de cercetare (daca este cazul):

Contact

FOTOGRAFIE

Local "Polizu"

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Date biografice

Perioada	Pozitie ocupata
2008- prezent	Sef lucrari universitar
2002-2008	Asistent universitar
1999-2002	Doctorand cu frecventa

Cercetare

Domenii de cercetare

- **Inginerie chimica** : fenomene de transfer, uscarea biomaterialelor, dinamica sistemelor multifazice, strat fluidizat, strat strapuns
- **Biotehnologii**: procese fermentative in industria alimentara, reactoare biochimice, activitate antimicrobiana si antioxidanta a principiilor active naturale

Proiecte cercetare (selectie)

- *Materiale biopolimerice superabsorbante cu aplicatii in agricultura – SABIOM, nr. 114/2012, nr. UPB: CH 45-12-01 – membru in echipa*
- *Dynamics of Escherichia coli population transformed to express archeal heterologous protein S-layer, nr. 30/2013, nr. UPB: CH 45-13-01- membru in echipa*



Activitate academică

Activitate didactică (in prezent)

Programe Studii	Specializare/Facultate	Cod	Titlu disciplina	Tip activitate
Licenta	Ingineria si Informatica Proceselor Chimice si Biochimice/CASM	UPB.11.S.06.O.516	Operatii Hidrodinamice	curs
	Ingineria si Informatica Proceselor Chimice si Biochimice/CASM	UPB.11.S.06.O.516	Operatii Hidrodinamice	seminar
	Ingineria si Informatica Proceselor Chimice si Biochimice/CASM	UPB.11.S.06.O.516	Operatii Hidrodinamice	proiect
	Ingineria si Informatica Proceselor Chimice si Biochimice/CASM	UPB.11.S.05.O.504	Procese Hidrodinamice	lp
	Ingineria si Informatica Proceselor Chimice si Biochimice/CASM	UPB.11.S.06.O.515	Microbiologie generala	curs
	Ingineria si Informatica Proceselor Chimice si Biochimice/CASM	UPB.11.S.06.O.515	Microbiologie generala	lp
	Chimie Alimentara si Tehnologii Biochimice/CASM	UPB.11S.06.O.414	Microbiologie generala	curs
	Chimie Alimentara si Tehnologii Biochimice/CASM	UPB.11S.06.O.414	Microbiologie generala	lp
	Ingineria Produselor Alimentare/CASM	PB.11.T.03.O.204	Operatii unitare in industria alimentara	lp
	Ingineria Produselor Alimentare/CASM	UPB.11.S.05.O.201	Biotehnologii alimentare	lp
	Ingineria Sistemelor Biotehnice si Ecologice/ISB	UPB.07.S.07.O.005	Biotehnologii	curs
	Ingineria Sistemelor Biotehnice si Ecologice/ISB	UPB.07.S.07.O.005	Biotehnologii	seminar
	Master			

Alte activitati didactice (in trecut)

Licenta CASM/ specializarea Ingineria si Informatica Proceselor Chimice si Biochimice

- Analiza statistica si programarea experimentelor (curs si seminar)
- Informatica (seminar)
- Proiectarea si montajul instalatiilor chimice (proiect)
- Operatii unitare (lp, seminar, proiect)

Licenta CASM/ specializarea Ingineria Produselor Alimentare

- Biotehnologii alimentare (curs si lp)

Studii Aprofundate CASM/ specializarea Separari si Purificari avansate

- Curgeri reale in sisteme multifazice (curs, lp)



Universitatea POLITEHNICA din București
Facultatea de Chimie Aplicată și Știința Materialelor



- Procedee avansate de separare a sistemelor gaz-lichid (curs, proiect)



Titluri și premii

Premii

Nu este cazul

Membru in Organizatii Profesionale

- **Societatea de Inginerie Chimica din Romania**
- **Societatea de Chimie din Romania**

Alte activități semnificative

2011

Postdoctorat in biotehnologii industriale

Bioetica, Bioprocese, Informatica, Managementul cercetării, Brevetare, Cultura antreprenorială. Subiectul Raportului final Post Doctoral: Analiza activității antioxidante și antimicrobiene a principiilor active din plante autohtone. Metode de amplificare a activității antimicrobiene. Capacitatea de sinteză a ideilor fundamentale în domeniul interdisciplinar, de a organiza și fructifica activitatea de cercetare, utilizând tehnici moderne de calcul.

USAMV Cluj Napoca, Calea Mănăștur 3-5, 400372, Cluj-Napoca

2011

Manager de proiect, code COR: 241919

- Identificarea proiectelor fezabile
- Realizarea unui management integrat prin stabilirea planului de activități, punctelor cheie, costurilor resurselor și realizării proiectului. Management de risc, management colectiv, indici de calitate managerială
- Consolidarea notiunilor teoretice, practice și organizatorice în domeniul managementului.
- Nota de absolvire:9

Min.Muncii, CNFPA, Min. Educației, Schultz Consulting

1999- 2008

Doctorat in Inginerie Chimica

Procedee Intensive, Metode matematice, Optimizarea Proceselor

Subiectul tezei: "Uscarea biomaterialelor pulverulente prin procedee intensive".

Analiza literaturii de specialitate.

Proiectarea activității de cercetare după criteriile de optimizare matematică.

Proiectarea, conceperea și realizarea de instalații de uscare la scară de laborator.

Universitatea Politehnica din București



Publicații

Nr. total articole, conferinte

47

Articole publicate în reviste de specialitate (selectie)

1. Jinescu Gheorghita, Mihailescu D., **Isopencu Gabriela**, Mares Monica, "Contributions to Spray Drying Kinetics Modeling of the Wild Rose Fruits Extract", Revista de Chimie, **60**, nr.6, p. 616-620, **2009**, ISSN 0034-7752.
2. Arus Vasilica Alisa, Jinescu Gheorghita, Nistor I.Denisa, Miron N.D., Ursu Alina Violeta, **Isopencu Gabriela**, Mares Alina Monica, "The preparation and characteriyation of anionic clays used like kinetic modifies in lactic fermentation", Revista de Chimie, **61**, nr.11, p. 1100-1104, **2010**
3. Ursu Alina, Nistor Ileana, Gros Fabrice, Arus Alisa, **Isopencu Gabriela**, Mares Alina, "Hydrodynamic aspects of fluidized bed stabilized in magnetic field", U.P.B. Sci. Bull., Series B, 72, nr. 3, p. 85-98, **2010** (B+)
4. Ursu A-V, Jinescu C, Nistor D I, Arus V. A., **Isopencu Gabriela.**, Mares A. M. „Estimation of the dynamic parameters of mono and bicomponent granular particles beds fluidization”, Revista de Chimie, **61**, nr.12, p. 1226-1230, **2010**, ISSN 0034-7752.
5. Vladan S.I., **Isopencu Gabriela**, Jinescu C., Mares Monica, „Aspects regarding the use of sorgum by gaseification”, Revista de Chimie, **62**, nr.1, p. 116-117, **2011**
6. Platon, N., Siminiceanu, I., Miron, N.D., Muntianu, G., Zavada, R.M.,**Isopencu Gabriela**, Nistor, I.D., *Preparation and characterization of new products obtained by pillaring process*, Revista de Chimie, 62, nr 8, p 799-805, **2011**
7. Vlădan, S.I., **Isopencu Gabriela**, Jinescu, C., Mareș, M.A., *Process simulation to obtain a synthesis gas with high concentration of hydrogen*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 73, nr 1, p. 29-36, **2011**
8. Mardaru, A., Djelveh, G. **Isopencu Gabriela**, Jinescu, C., Mareș, A.M., Ghimiciu, G., *Characterizing foams flow obtained by continuous foaming operation*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 73, nr 3, p. 117-132, **2011**
9. Aruș, V.A., Nistor, I.D., Ursu, A.V., **Isopencu Gabriela**, Jinescu, C., Mareș, M., *Modeling and optimization of lactic fermentation process in the presence of anionic clays using experiments design*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 73, nr 1, p. 15-28, **2011**
10. **Isopencu Gabriela**, Ferdes, M., *Aspects regarding the influence of concentration of components with antifungal activity from some essential oils*, Revista de Chimie, 63, nr 2, p 205-211, **2012**
11. Mardaru, A., Jinescu, C., Prisecaru, T., **Isopencu Gabriela**, Mares, M., *Evaluation of flow field in a column with stirring using CFD analysis*, Revista de Chimie, 63, nr 8, p 825-830, **2012**
12. **Isopencu Gabriela**, Ferdeș, M., *The effect of anethum graveolens upon the growth of E. Coli*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 74, nr 3, p. 85-92, **2012**
13. Jinga, S.I., **Isopencu Gabriela**, Stoica-Guzun, A., Stroescu, M., Ferdes, M., Ohreac, B., *Silver green synthesis on bacterial cellulose membranes using tannic acid*, Digest Journal of Nanomaterials and Biostructures, 8, nr. 4, p. 1711-1717, 2013



14. Arus, V.A., Jinescu, C., Nistor, I.D., **Isopencu Gabriela**, *Ultrasound Intensification of Lactic Fermentation Process in the Presence of Anionic Clays*, Revista De Chimie, 65 nr. 8, p. 942-947, 2014
15. Muntianu, G., Ursu, A.V., Djelveh, G., **Isopencu, Gabriela**, Mares, A.M., Nistor, I.D., Jinescu, C.V., *Dynamic Parameters for Mixtures of Pillared Clay-Magnetic Particles in Fluidized Bed in Coaxial Magnetic Field*, Revista de Chimie, 65, nr. 9, p. 1077-1085, 2014
16. **ISOPENCU Gabriela**, Tanase, A., Josceanu, A., Lavric, V., *Influence of the operating parameters on the E. COLI BL21 (DE3) growth in fedbatch bioreactor*, Revista De Chimie, 65 nr. 12, p. 1511-1516, 2014

Cărți (selectie)

Nu

Capitole in cărți (selectie)

Nu

Conferințe științifice (selectie)

1. Jinescu Gheorghita, **Isopencu Gabriela**, Jinescu Cosmin, Mares Monica, Vasilescu P., Cașen Panaitescu, *"The study of elutriation of the solid particle phenomena in fluidized bed processes"*, Proceedings of the 16th Romanian International Conference on Chemistry and Chemical Engineering, Ed. Printech 2009, ISBN 978-606-521-349-4, p.S.IV.81-91, 2009.
2. Jinescu Gheorghita, **Isopencu Gabriela**, Mihailescu Daniela Mihaela, Mares Monica, Tebrencu Carmen, *"Thermo - and xerostability of vitamin C during the drying process of the wild-rose fruit extract"*, Proceedings of the International Symposium "The environment and industry", SIMI 2009, vol. I, ISSN 1843-5831, p.147-153, 2009.
3. Jinescu Gheorghita, **Isopencu Gabriela**, Mares Monica, Mihailescu Daniela, Jinescu C., *"Wild rose vitamin C degradation kinetic under flavones influence during drying process"*, Proceeding of the International Conference of Applied Sciences Chemistry and Chemical Engineering, CISA 2009, Bacau, Ed. Alma Mater, ISSN 2066-7817, p. 223-230, 2009.
4. Mares Monica, **Isopencu Gabriela**, Jinescu C. Jinescu Gheorghita, *"Intensive techniques of granular biomaterials thermo-processing"*, Proceeding of the International Conference of Applied Sciences Chemistry and Chemical Engineering, CISA 2010, Bacau, Ed. Alma Mater, ISSN 2066-7817, 2010.
5. Ursu Alina-Violeta, Jinescu Gheorghita, Nistor Denisa Ileana, Arus Vasilica Alisa, **Isopencu Gabriela**, Mares Alina Monica, *Estimation of the dynamic parameters of mono and bi-component granular particles beds fluidization*, Proceedings of 2nd International Conference on Chemistry and Chemical Engineering, Timisoara, p.58, CD, 27-29 mai 2010.
6. Jinescu Gheorghita, Arus Alisa Vasilica, Nistor Denisa Ileana, Ursu Alina Violeta, Mares Alina Monica, **Isopencu Gabriela**, *"The characterization of the clays used like kinetic modifiers in*



lactic fermentation process”, Proceedings of 7th International Conference of Chemical Societies from South-East European Countries on “*Chemistry – Beauty and Application*”, Bucharest Romania, 15-17 septembrie, 2010, CD.

7. Vladan S.I., **Isopencu Gabriela**, Mares Alina Monica, Jinescu Gheorghita, “*Process simulation to obtain a synthesis gas with high concentration of hydrogen*”, Proceedings of 7th International Conference of Chemical Societies from South-East European Countries on “*Chemistry – Beauty and Application*”, Bucharest Romania, 15-17 septembrie, 2010, CD.
8. Jinescu Gheorghita, **Isopencu Gabriela**, Mares Monica, Jinescu C., “*Granular biomaterials drying in modified fluidized bed – inert add*”, Proceedings of the 17th International Drying Symposium, IDS 2010, Magdeburg, Germania, 3 – 6 octombrie 2010, CD
9. **Isopencu Gabriela**, Mares Alina Monica, Jinescu Gheorghita, Arus Alisa Vasilica, Ursu Alina Violeta, “*Seed spinach drying in spouted bed*”, Proceedings of 18th Roumanian Conference on Chemistry and Chemical Engineering, RICCE17, Sinaia, CD, 2011
10. **Isopencu Gabriela**, Mares Monica, Jinescu Gheorghita, “*The slope angle determination as measure of interparticular forces for powdery biomaterials*” Proceedings of 18th Roumanian Conference on Chemistry and Chemical Engineering, RICCE18, Sinaia, p. S4-64, 2013.
11. Muntianu G., Djelveh G., Nistor D.I., Ursu A.V., Platon N., **Isopencu Gabriela**, Mares Monica, Jinescu Gheorghita, “*Study of dynamic paramethers in a multi-layer fluidized bed stabilised in a coaxial magnetic field*” Proceedings of 18th Roumanian Conference on Chemistry and Chemical Engineering, RICCE18, Sinaia, p. S4-57, 2013.
12. Tănase Alina, Gogulancea Valentina, **Isopencu Gabriela**^{*}, Lavric Vasile, “*Flow cytometry - a new technique used for live/dead bacterial cells discrimination in batch growth*”, 2nd International Conference on Chemical Engineering, ICCE 2014, Iasi, S2 –PO2, 2014