

INFORMATII PERSONALE



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EDUCAȚIE ȘI FORMARE

2019-prezent

Studii doctorale

Școala Doctorală de Științe Chimice

Școala de Studii Avansate a Academiei Române, SCOSAAR, Academia Română

2017-2019

Master Biotehnologii Medicale și Biomateriale Avansate

Universitatea de Medicină și Farmacie "Grigore T. Popa", Iași
Facultatea de Bioinginerie Medicală

2017-2020

Școala Sanitară Postliceală de Stat "Grigore Ghica Vodă", Iași

2013-2017

Licență Facultatea de Bioinginerie Medicală

Universitatea de Medicină și Farmacie "Grigore T. Popa", Iași

2016-2017

Erasmus+ Mobility

Universiteit Ghent, Belgium

Faculteit Ingenieurswetenschappen en Architectuur

Biomedical Engineering Master's Programme

2009-2013

Bacalaureat

Colegiul Național "Roman-Vodă", Roman

Științe ale naturii

Limba(i) maternă(e)

Română

Alte limbi străine cunoscute

Engleză

| | INTELEGERE | | VORBIRE | | SCRIERE |
|--|------------|--------|----------------------------|--------------|---------|
| | Ascultare | Citire | Participare la conversație | Discurs oral | |
| | B2 | B2 | B2 | B2 | B2 |
| EDI Level 1 Certificate in ESOL International JETSET Level 5 (CEF B2) | | | | | |
| Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat | | | | | |
| <u>Cadrul european comun de referință pentru limbi străine</u> | | | | | |

ACTIVITATE
ȘTIINȚIFICĂ*Articole ISI*

1. **B.-I. Ciubotaru**, M.-F. Zaltariov, M. Dascalu, A. Bele, A. Bargan, M. Cazacu. Amino functionalized silicones processed as porous dual covalent/supramolecular networks for pressure sensing. *Reactive and Functional Polymers* (2024) 105792.
2. M.-F. Zaltariov, **B.-I. Ciubotaru**, A. Ghilan, D. Peptanariu, M. Ignat, M. Iacob, N. Vornicu, M. Cazacu. Mucoadhesive Mesoporous Silica Particles as Versatile Carriers for Doxorubicin Delivery in Cancer Therapy. *International Journal of Molecular Sciences* (2023) 24(19), p.14687. (FI = 5.6), (Q2).
3. M.-F. Zaltariov, M. Turtoi, D. Peptanariu, A.-M. Macsim, L. Clima, C. Cojocaru, N. Vornicu, **B.-I. Ciubotaru**, A. Bargan, M. Calin, M. Cazacu, Chemical Attachment of 5-Nitrosalicylaldimine Motif to Silatrane Resulting in an Organic–Inorganic Structure with High Medicinal Significance, *Pharmaceutics* (2022) 14, 2838 <https://doi.org/10.3390/pharmaceutics14122838> (FI = 5.4), (Q2).
4. **B.-I. Ciubotaru**, M. Dascalu, M.-F. Zaltariov, A.-M. Macsim, M. Damoc, A. Bele, C. Tugui, C.D. Varganici, M. Cazacu, Catalyst-free crosslinked sustainable functional silicones by supramolecular interactions, *Reactive and Functional Polymers* (2022) 181, 105419 <https://doi.org/10.1016/j.reactfunctpolym.2022.105419> (FI = 5.1), (Q1).
5. **B.-I. Ciubotaru**, M.-F. Zaltariov, C. Tugui, E. Stoleru, D. Peptanariu, G. Stiubianu, N. Vornicu, M. Cazacu, Silicones with different crosslinking patterns: Assessment from the perspective of their suitability for biomaterials, *Surfaces and Interfaces* (2022) 32, 102168, <https://doi.org/10.1016/j.surfin.2022.102168>. F.I. =6.2, (Q1).
6. Gradinaru, I., **Ciubotaru, B.-I.**, Butnaru, M., Cojocaru, F.D., Covașă, C.T., Bibire, T., Dascalu, M., Bargan, A., Cazacu, M. and Zaltariov, M.F., 2023. The Impact of the Addition of Vitamins on a Silicone Lining Material to the Oral Mucosa Tissue—Evaluation of the Biocompatibility, Hydrolytic Stability and Histopathological Effect. *Medicina*, 59(11), p.1936.
7. Gradinaru, I., Vasiliu, A.L., Bargan, A., Checherita, L.E., **Ciubotaru, B.I.**, Armencia, A.O., Istrate, B., Dascalu, C.G. and Antohe, M.E., 2023. The Influence of Beverages on Resin Composites: An In Vitro Study. *Biomedicines*, 11(9), p.2571.
8. I. Gradinaru, A. L. Vasiliu, A. Bargan, **B.-I. Ciubotaru**, A. O. Armencia, L. L. Hurjui, L. E. Checheriță, C. G. Dascalu, M.-E. Antohe, Evaluation of the behaviour of dental composites related to different types of drinks by the dynamic vapor sorption method, *Romanian Journal of Oral Rehabilitation*, Vol. 15, no. 2, pp. 328 – 335, 2601-4661.
9. I. Grădinaru, **B-I Ciubotaru**, M. Dascălu, Preliminary study concerning the adaptation of a periodontal dressing material to the inclusion of therapeutic agents, *Archives of Metallurgy*

and Materials, accepted for publication

10. D. Filip, D. Macocinschi, M.-F Zaltariov, **B.-I. Ciubotaru**, A. Bargan, C.-D. Varganici, A.-L. Vasiliu, D. Peptanariu, M. Balan-Porcarasu, M.-M. Timofte-Zorila, Hydroxypropyl Cellulose/Pluronic-Based Composite Hydrogels as Biodegradable Mucoadhesive Scaffolds for Tissue Engineering, *Gels.*, 8, 519 (2022), <https://doi.org/10.3390/gels8080519>
11. G.-T. Stiubianu, A. Bele, M. Grigoras, C. Tugui, **B.-I. Ciubotaru**, M.-F. Zaltariov, F. Borza, L.-G. Bujoreanu, M. Cazacu , Scalable Silicone Composites for Thermal Management in Flexible Stretchable Electronics , *Batteries.*, 8(8), 95 (2022), <https://doi.org/10.3390/batteries8080095>
12. **B.-I. Ciubotaru**, M.-F. Zaltariov, C. Tugui, E. Stoleru, D. Peptanariu, G. Stiubianu, N. Vornicu, M. Cazacu, Silicones with different crosslinking patterns: Assessment from the perspective of their suitability for biomaterials , *Surf. Interfaces.*, 32, 102168 (2022), <https://doi.org/10.1016/j.surfin.2022.102168>
13. D. Filip, D. Macocinschi, M.-F. Zaltariov, C.A. Gafitanu, C.G. Tuchilus, A. Bele, **B.-I. Ciubotaru**, E. Stoleru, A. Bargan, Mucoadhesive and Antimicrobial Allantoin/β Cyclodextrins-Loaded Carbopol Gels as Scaffolds for Regenerative Medicine, *Gels*, 8(7), 416 (2022), <https://doi.org/10.3390/gels8070416>
14. C. Racles, M. Asandulesa, V. Tiron, C. Tugui, N. Vornicu, **B.-I. Ciubotaru**, M. Mičušík, M. Omastov'a, A. L. Vasiliu, C. Ciomaga, Elastic Composites with PDMS matrix and Polysulfone-Supported Silver Nanoparticles as Filler, *Polymer* 217 (2021) 123480, <https://doi.org/10.1016/j.polymer.2021.123480>
15. Spiridon, I.; Andrei, I.-M.; Anghel, N.; Dinu, M.V.; **Ciubotaru, B.-I.** Development and Characterization of Novel Cellulose Composites Obtained in 1-Ethyl-3-methylimidazolium Chloride Used as Drug Delivery Systems. *Polymers* 2021, 13, 2176. <https://doi.org/10.3390/polym13132176>
16. Spiridon, I.; Anghel, N.; Dinu, M.V.; Vlad, S.; Bele, A.; **Ciubotaru, B.I.**; Verestiuc, L.; Pamfil, D. Development and Performance of Bioactive Compounds-Loaded Cellulose/Collagen/Polyurethane Materials, *Polymers* 2020, 12, 1191. <https://doi.org/10.3390/polym12051191>
17. D. Macocinschi, D. Filip, **B.-I. Ciubotaru**, R.P. Dumitriu, C.-D. Varganici, M.-F. Zaltariov, Blends of sodium deoxycholate-based poly(ester ether)urethane ionomer and hydroxypropylcellulose with mucosal adhesiveness, *International Journal of Biological Macromolecules* 162 (2020) 1262–1275, <https://doi.org/10.1016/j.ijbiomac.2020.06.191>
18. I. Grădinaru, **B.-I. Ciubotaru**, M.F. Zaltariov, An Attenuated Total Reflectance study of different alginate impression materials used in dental medicine, *The Medical-Surgical Journal*, 2020, 4 (124).

- 19.** M.-F. Zaltariov, **B.-I. Ciubotaru**, L. Vereștiuc, D. Peptanariu, D. Macocinschi, D. Filip, Ruthenium (II) complexes with cytotoxic activity embedded in hydroxypropyl methylcellulose/sodium alginate mucoadhesive hydrogels, Cellulose Chemistry and Technology, Volume 53, Issue 9-10 September-December, p. 869-878
- 20.** N. Anghel, S. Lazăr, **B.-I. Ciubotaru**, L. Vereștiuc, I. Spiridon, New cellulose-based materials as transdermal transfer systems for bioactive substances, Cellulose Chemistry and Technology, Volume 53, Issue 9-10 September-December, p.879-884

Lucrări în volume ale conferințelor (ISI web of Knowledge)

I. Gradinaru, **B.-I. Ciubotaru**, M.-F. Zaltariov and M. Cazacu, Comparative Study on the Characteristics of Silicone Elastomers used in Dental Impression Techniques, IOP Conference Series Materials Science and Engineering, July 2020, DOI: 10.1088/1757-899X/877/1/012036

Capitole de carte

M.-F. Zaltariov, **B.-I. Ciubotaru**, M. Savin, D. Filip, D. Macocinschi, Bio-Based Polymers For Liposomal Drug Formulations In book: Applications of Biodegradable and Bio-Based Polymers for Human Health and a Cleaner Environment, Nov 2021, Apple Academic Press, partnered with CRC Press, a member of the Taylor & Francis Group, ISBN: 9781771889766, DOI: 10.1201/9781003146360-5

Comunicări la conferințe naționale sau internaționale

- 1.** **B.-I. Ciubotaru**, A. Bargan, G. Știubianu, M. Dascălu, A.-M. Macsim, A. Bele, A. Soroceanu, The development and characterization of new membranes based on polysulfone and silsesquioxanes with perspectives in environmental applications, 112th International Conference on Environmental Engineering and Management (ICEEM), 13-16 September 2023, Iași, Romania
- 2.** **B.-I. Ciubotaru**, M. Dascălu, A. Bele, M.-F. Zaltariov, Functional silicone elastomers efficiently crosslinked through supramolecular interactions without catalyst, 10th European Silicon Days, Montpellier, France, 10-12 July 2023
- 3.** G. Stiubianu, **B.-I. Ciubotaru**, M. Dascalu, A. Bele, V. Tiron, Solvent-free silicone-based elastomers with self-healing capabilities by supramolecular interactions, Annual Polymer Day, Lyngby, Denmark, 30 Septembrie 2022
- 4.** A. Bele, M. Dascalu, G. Stiubianu, **B.-I. Ciubotaru**, V. Carlescu, V. Tiron, I. Burducea, A. Pandele, Silicone-based modular artificial sensing skin for MMOD impact damage detection and evaluation system in spacecraft, International Exhibition of Inventions INVENTICA, Iași, România, 22 – 24.06.2022

5. B.-I. Ciubotaru, M.-F. Zaltariov, C. Racles, M. Cazacu, Preparation and application of mesoporous silica for pH-controlled delivery of doxorubicin, Zilele Universității „Alexandru Ioan Cuza” din Iași Conferința FACULTĂȚII DE CHIMIE IasiChem 2019, 31 Octombrie – 01 Noiembrie, 2019

Cursuri suplimentare în domenii conexe:

B.-I. Ciubotaru, e-SPACE Heart Failure 2023, EBAC Cert-ID: 2023-EPN-9741000-000, 10 CME credits, Course Director Prof. Stefan D. Anker, October 20-21, 2023

B.-I. Ciubotaru, Proiectarea activităților de cercetare în studii europene: documentare, metode și diseminare (C5), organizat de Centrul de Studii Europene, Facultatea de Drept – Universitatea “Al. I. Cuza” din Iași, în cadrul proiectului Jean Monnet Module on EU Interdisciplinary Studies: Widening Knowledge for a more Resilient Union EURES-621262-EPP-1-2020-1-RO-EPPJMO, Coordonator proiect- Cercet. (II) dr. Ramona Țigănașu, Iași, Iulie 2021

Stagi și mobilități:

Taras Shevchenko National University of Kyiv, Ucraina, 28.08.2021-27.10.2021, stagiu de cercetare în cadrul proiectului H2020-MSCA-RISE-2016, SPINSWITCH No 734322

Proiecte de cercetare:

1. Mimarea mecanismelor viului prin abordări ale chimiei supramoleculare, în cinci dimensiuni - 5D-nanoP, PN-III-P4-ID-PCCF-2016-0050, Contract nr. 4/2018, Proiect al Ministerului Cercetării și Inovației, CNCS – UEFISCDI, PNCDI III - Programul 4, Proiecte Complexe de Cercetare de Frontieră – 2016, Contractor: Institutul de Chimie Macromoleculară “Petru Poni”, Iași, România, Academia Română, membru în echipă în perioada 2019-2022
2. Materiale 2D emergente bazate pe retele metal-organice bidimensionale permetilate - 2D-PerMONSil, PN-III-P4-ID-PCE-2020-2000, PCE 207/2021, membru în echipă în perioada 2021-2023
3. Silicone-based modular artificial sensing skin for MMOD impact damage detection and evaluation system in spacecraft Force sensors with self-healing properties – SilArtSkin, PN-III-P1-1.1-TE-2021-0156, membru în echipă în perioada 2022-prezent

Semnătură,



Date,

21.03.2024