

Nume și prenume cadru didactic: BUTAN SIMONA

ANEXA

LISTA DE LUCRĂRI

A. TEZA DE DOCTORAT: *"Modelarea mecano-chimică a transportului intracelular cu aplicații în proiectarea dispozitivelor cu rigiditate variabilă"* (Ordinul Ministrului Educației, Cercetării, Tineretului și Sportului, nr. 3250 din 20.03.2013).

B. CĂRȚI ȘI CAPITOLE ÎN CĂRȚI PUBLICATE

[1] Tăbăcaru, A., **Butan, S.**, *Chimie generală – Note de seminar și exerciții*, Ed. Galați University Press, Galați, 2021.

[2] Cârâc, G., **Butan, S.**, *Chimie experimentală. Teste grilă și scheme de lucru*. Ed. Galați University Press, Galați, 2019.

C. ARTICOLE PUBLICATE ÎN REVISTE DE SPECIALITATE (COTATE ISI SAU RECUNOSCUTE CNCSIS)

[C1] Articole publicate în reviste de specialitate cotate ISI

[1] Tăbăcaru, A., **Butan, S.**, Crețu, R., *Colloidal matter separation of industrial wastewaters from Galați City area by semipermeable membranes*, Ovidius University Annals of Chemistry, 33(1), 56-63, 2022 (Factor de impact: 0; Scor relativ de influență: 0).

[2] Kuohi, M., **Butan, S.**, Li, Y., Shakour, E., Banu, M., *Role of Chemically Functionalization of Bamboo Fibers on Polyethylene-Based Composite Performance: A Solution for Recycling*, Polymers, 13(15), 2564, 2021 (Factor de impact: 4.329).

[3] **Patriche, S.**, Ghinea, I.O., Adam, G., Gurău, G., Furdui, B., Dinică, R.M., Rebegea, L.F., Lupoe, M., *Characterization of Bioactive Compounds from Romanian Cetraria islandica (L) Ach.*, Rev. Chim., 70(6), 2186-2191, 2019 (Factor de impact: 1.232; Scor relativ de influență: 0).

[4] Cârâc, A., Boescencu R., **Patriche, S.**, Dinică, R.M., Cârâc, G., *Antioxidant and Antimicrobial Potential of Extracts from Aloe vera Leaves*, Rev. Chim., 67(4), 654-658, 2016 (Factor de impact: 1.232; Scor relativ de influență: 0).

[5] **Patriche, S.**, Lupu, E.G., Cârâc, A., Dinică, R.M., Cârâc, G., *The interactions between lipase and pyridinium ligands investigated by electrochemical and spectrophotometric methods*, J. Electrochem. Sci. Eng., 1, 91-104, 2016 (Factor de impact: 0; Scor relativ de influență: 0).

[6] **Patriche, S.**, Boboc, M., Leah, V., Dinică, R.M., *Extraction and evaluation of bioactive compounds with antioxidant potential from green arabica coffee extract*, The Annals of the University Dunarea de Jos of Galati, Fascicle VI – Food Technology, 3(2), 88-95, 2015 (Factor de impact: 0; Scor relativ de influență: 0).

[7] **Patriche, S.**, Grigoraș, C., Barbu, V., Dinică, R.M., Cârâc, G., *Antioxidative activity and stability of the extracts of liquorice root (Glycyrrhiza Glabra)*, The Annals of the University Dunarea de Jos of Galati, Fascicle VI – Food Technology, 39(2), 77-87, 2015 (Factor de impact: 0; Scor relativ de influență: 0).

[8] Han, S.W., Morita, K., **Patriche, S.**, Kihara, T., Miyake, J., Banu, M., Adachi, T., *Probing actin filament and binding protein interaction using an atomic force microscopy*, Journal of Nanoscience and Nanotechnology, 14(8), 5654-5657(4), 2014 (Factor de impact: 1.351; Scor relativ de influență: 1.09971).

- [9] Han, S. W., **Patriche, S.**, Banu, M., Adachi, T., *Real-time Monitoring of Changes in Microtubule Mechanical Properties in Response to Microtubule-Destabilizing Drug Treatment*, Journal of Nanoscience and Nanotechnology, Special Section on Nanotechnology in Green Science and Engineering, 13, 2087-2090, 2013. (Factor de impact: 1.351; Scor relativ de influență: 1.09971).
- [10] Banu, M., **Patriche, S.**, Coman, M., Matsushita, S., Tofan, A., Epureanu, A., *Investigation of ubiquitin deformation mechanism under induced stretch-compression loads*, ROMANIAN JOURNAL OF MORPHOLOGY AND EMBRYOLOGY, Suppl. 1, 52, 449-454, 2011 (Factor de impact: 0.381; Scor relativ de influență: 0).
- [11] **Patriche, S.**, Matsushita, S., Banu, M., Epureanu, B.I., Adachi, T., *Atomistic Mechano-Chemical Modeling of Kinesins*, PROC. OF SPIE, 7975, 97519-(1-6), 2011 (Factor de impact: 0; Scor relativ de influență: 0).

[C2] Articole publicate in reviste indexate in baze de date internationale*

- [1] Filimon, V., Bounegru, A.V., **Butan, S.**, *Boron compounds: Challenges and Applications in food industry*, Journal of Agroalimentary Processes and Technologies 29(2), 97-102, 2023.
- [2] **Butan, S.**, Filimon, V., *A challenging biostimulant used in agriculture: Papain – study on its mechano-chemical properties*, Journal of Agroalimentary Processes and Technologies, 27(1), 35-39, 2021.
- [3] Filimon, V., Obreja, C., **Butan, S.**, *Study of drinking water quality in Cahul district*, Journal of Agroalimentary Processes and Technologies, 26(4), 276-280, 2020.
- [4] **Patriche, S.**, Banu, M., Matsushita, S., Han, S.W., *Experimental and atomistic computational studies of mechano-chemical transport processes involved in neurodegenerative diseases*, THE ANNALS OF „DUNAREA DE JOS” UNIVERSITY OF GALATI, Fascicle V, Technologies in Machine Building, Special edition: Towards Mechanical Engineering Applications to Medicine and Biology, 9-14, 2012.
- [5] **Patriche, S.**, Banu, M., Onișor, C., Mușat, C.L., *Harmful effect of chemical compounds used in agriculture on the human health*, THE ANNALS OF „DUNAREA DE JOS” UNIVERSITY OF GALATI, Fascicle V, Technologies in Machine Building, 2, 129-134, 2011.
- [6] **Patriche, S.**, Dinică, R.M., *Phenol Conversion from Mittal Steel Industrial Waste Waters by Enzymatic Reactions*, The Annals of the "Dunarea de Jos" University of Galati - Fascicle II, 200-202, 2009.

[D] ARTICOLE PUBLICATE ÎN VOLUMELE UNOR MANIFESTĂRI ȘTIINȚIFICE INTERNAȚIONALE RECUNOSCUTE DIN ȚARĂ ȘI STRĂINĂTATE (cu ISSN sau ISBN)

- [1] Filimon, V., Borda, D., Gurău, G., **Butan, S.**, Alexe, P., Stoica, M., *Study on the changes induced by the Pressure-Assisted Thermal Processing (PATP) in polymer films used as packaging by the meat industry*, IOP Conference Series: Materials Science and Engineering, **485**, 012007, 108, 2019.
- [2] **Patriche, S.**, Costea, R., Dediu (Botezatu), A.V., Dinica, R.M., *The investigation of the prebiotic activity of inulin-type fructans from Cichorium intybus and Taraxacum officinale*, Scientific Articles of the International Conference “AGRICULTURE AND FOOD FOR THE XXI CENTURY” May 11-13, 2017, Sibiu, Romania, pp 81-83, ISSN 1843-0694.
- [3] **Patriche, S.**, Costea, R., Ghinea, I.O., Dinică, R.M., *Extraction, isolation and characterization of inulin-type fructans from Cichorium intybus and Taraxacum officinale*, ACTA CHEMICA IASI, 24_2, 158-200 (2016).

[E] ALTE LUCRĂRI ȘI CONTRIBUȚII ȘTIINȚIFICE

[1] Novac, R.M., Vasilescu, E., **Patriche, S.**, Cârâc, G., *Micro-particles of TiO₂ and ZrO₂ on the electrocodeposited nickel composite layers*, Int. J. Nano. Corr. Sci. and Engg., Volume 4, Number 1, 81-93, 2017.

[F] PROIECTE DE CERCETARE-DEZVOLTARE-INOVAR PE BAZA DE CONTRACT/GRANT

[F1] Director proiect

[1] Proiect Erasmus+ KA220-HED - Cooperation partnerships in higher education, contract 2022-1-PL01-KA220-HED-000086828, „Green Roofs Technician Training Program”, Perioada: 01.09.2022 – 31.08.2025.

[F2] Membru în echipa de cercetare

[1] Proiect complex realizat în consorții CDI – ”Implementarea și exploatarea rezultatelor cercetării științifice în practica restaurării și conservării bunurilor culturale (IMPLEMENT)”, între Universitatea Națională de Arte București, Universitatea de Arte și Design din Cluj Napoca, Institutul Național de Cercetare-Dezvoltare pentru Textile și Pielărie, Institutul Național al Patrimoniului EndFragment și Universitatea Dunărea de Jos din Galați, Perioada: 16.04.2018 – 31.08.2020.

[2] Proiect bilateral România-Franța, MolHybAl, Concepția, sinteza și evaluarea biologică a unor molecule hibride pentru tratamentul multițintit al maladiei Alzheimer, între Universitatea Dunărea de Jos din Galați și Departamentul de Farmacochimie Moleculară al Universității Grenoble Alpes, Grenoble, Franța, 2017.

[3] Proiect POSDRU cod 88/1.5/S/61445 - Eficientizarea activității studenților din cadrul ciclului de studii doctorale-EFICIENT – Perioada: 2009 – 2012.

[4] Proiect V-CAD System Research, Bilateral Contract IPA, RIKEN, Japonia – Perioada: iunie 2010 – martie 2011; Activități desfășurate în cadrul proiectului: Studiul Biomoleculelor - studii numerice și experimentale privind biomecanica celulei.

[G]. CONFERINȚE

i) Prezentări orale

1. **Patriche, S.**, Costea, R., Dediu (Botezatu), A.V., Dinica, R.M., *The investigation of the prebiotic activity of inulin-type fructans from Cichorium intybus and Taraxacum officinale*, AGRI-FOOD 2017, Agriculture and Food for XXI, International Conference Sibiu, 11-13 May 2017.
2. **Patriche, S.**, Costea, R., Ghinea, I.O., Dinica, R.M., *Extraction, isolation and characterization of inulin-type fructans from Cichorium intybus and Taraxacum officinale*, ”Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference, Iași, 27 – 29 October 2016.
3. **Patriche, S.**, Ghinea, I.O., Adam, G., Dinica, L.T., Gurau, G., Dinica, R. M. , *Characterization of bioactive compounds from Romanian Cetraria Islandica Spp.*, **CHIMIA 2016**, May 26 – 28, 2016, Constanta, Romania.
4. **Patriche, S.**, Parfene, G., Nechita, P., Dinica, R. M., Carac, G., *Absorption Capacity of Chitosan for Zn(II) ions in Aqueous Solution and Antibacterial Activity*, The 8th International Symposium on Advanced Technologies for the Pulp, Paper and Corrugated Board Industry, Braila, Romania, 15th -18th September, **2015**, Sectiunea 1.

5. **Patriche, S.**, Dinica, R., Epureanu, B., Banu, M., *Insight into mechano-chemical properties of the interface between cellulose and thermoplastic polymers*, EUCASS 2013 – 5th European Conference for Aeronautics and Space Sciences, Munich, Germany, 1-5 July, 2013.
6. **Patriche, S.**, Banu, M., Dogterom, M., Epureanu, B.I., *Harmful effect of chemical compounds used in agriculture on the human health*, International Conference "Environmental Capacity Building", Bucharest, Romania, November 11-13, 2011.

ii) Prezentări postere

1. Filimon, V., Bounegru, A.V., **Butan, S.**, Boron compounds: Challenges and Applications in food industry, Multidisciplinary Conference on Sustainable Development, 25-26 May 2023, Section: Food Chemistry, Engineering & Technology, Timisoara, Romania, <https://www.usab-tm.ro/ro/cercetare-48/manifestari-stiintifice-10852>
2. Filimon, V., Perepelytsia, I., **Butan, S.**, *Food pH - new selection criterion in the diet of consumers*, Multidisciplinary Conference on Sustainable Development - Food Chemistry, Engineering & Technology, 26-27 May 2022, USAMVB Timisoara, Romania, https://www.usabtm.ro/utilizatori/tpa/file/conferinta/2022/Multidisciplinary%20Conference%20on%20Sustainable%20Development/Programm_26%20mai%202022_Multidisciplinary%20Conference%20on%20Sustainable%20Development_FIA_03_site.pdf.
3. **Butan, S.**, Filimon, V., *A challenging biostimulant used in agriculture: Papain – study on its mechano-chemical properties*, Multidisciplinary Conference on Sustainable Development, 20-21 May 2021, USAMVB Timisoara, Romania, https://www.usab-tm.ro/utilizatori/tpa/file/conferinta/2021/Book%20of%20Abstract_Multidisciplinary%20%20Conference%20on%20Sustainable%20Development_FIA_v02.pdf
4. Filimon, V., Obreja, C., **Butan, S.**, *Study of drinking water quality in Cahul district*, “The 11th International Conference on Water in Food”, 6-8 May 2020, Timisoara, Romania.
5. Filimon, V., Avgust, T., **Butan, S.**, *Benefits of the traditional liqueur*, The 8th International Conference on Food Chemistry, Engineering & Technology, 23-24 May 2019, https://www.usabtm.ro/utilizatori/tpa/files/3_The%208th%20International%20Conference%20%20%20on%20Food%20Chemistry%2C%20Engineering%20%20Technology_2019_FIA.pdf
6. **Butan, S.**, Filimon, V., Dinică, R.M., *Mechano-chemical changes of immunoglobulin molecule under tensile loads*, IasiChem 2018, 25-26 octombrie 2018, Iasi, Romania, <http://www.chem.uaic.ro/ro/manifestari/zu-2018.html>
7. Filimon, V., Borda, D., Gurău, G., **Butan, S.**, Alexe, P., Stoica, M., *Study on the changes induced by the Pressure-Assisted Thermal Processing (PATP) in polymer films used as packaging by the meat industry*, The 8th CONFERENCE ON MATERIAL SCIENCE & ENGINEERING, OCTOBER 11-13, 2018, Galati, Romania, <http://www.ugalmat.ugal.ro/>
8. Filimon, V., Borda, D., Gurău, G., **Butan, S.**, Alexe, P., Stoica, M., *Influence of Pressure-Assisted Thermal Processing (PATP) on the thermal behavior of polymer films used as packaging material in the food industry*, The 8th CONFERENCE ON MATERIAL SCIENCE & ENGINEERING, OCTOBER 11-13, 2018, Galati, Romania, <http://www.ugalmat.ugal.ro/>
9. Filimon, V., **Patriche, S.**, Gurău, G., Borda, D., Alexe, P., Stoica, M., *Mechano-chemical properties changes in polymeric meat packaging materials exposed to pressure-assisted thermal processing (PATP)*, ESTAC12, 27-30 August 2018, Brasov, Romania, <http://estac12.org/estac12/topics.htm>
10. **Patriche, S.**, Ghinea, I.O., Dinică, R.M., *Comparative study of bioactive compounds from pumpkin pulp and seeds with inhibitory properties of oxidative enzymes*, Scientific Conference of the Doctoral Schools from “Dunărea de Jos” University of Galati, Sixth Edition-Galați, 7-8 June 2018, Section: Chemistry – Electrochemistry in life sciences.

11. **Patriche, S.**, Thomas, A., Furdui, B., Ghinea, I.O., Baussanne, I., Demeunynck, M., Dinică, R.M., *Searching for a N-heterocyclic lead compound- Docking on biomolecules*, 4^{ème} Colloque Franco-Roumain de Chimie Médicinale, Iași, 05-07 Octobre 2017.
12. **Patriche, S.**, Preda, C.N., Grigore (Moraru), N.C., Dediu (Botezatu), A.V., Dinică, R.M., *The Prevention of Hemp Oil Oxidation by Using Natural Antioxidants*, 8th International EuroAliment Symposium, Galati, 7-8 September 2017.
13. **Patriche, S.**, Costea, R., Dediu (Botezatu), A.V., Dinica, R.M., *The investigation of the prebiotic activity of inulin-type fructans from Cichorium intybus and Taraxacum officinale*, AGRI-FOOD 2017, Agriculture and Food for XXI, International Conference Sibiu, 11-13 May 2017.
14. Dinica L.T., Ghinea I.O., **Patriche S.**, Furdui B., Dinica R.M., *Investigarea compusilor de aroma din citrice folosind metode cromatografice si spectrometrice*, Prima Conferinta de Aromatologie din Romania – PRIMAVARA GALATEANA, Galati, Romania, 4-6 Martie, 2016.
15. **Patriche, S.**, Grigoras, C., Barbu V., Dinica R.M., Carac G., *Antioxidative activity and stability of the extracts of liquorice root (Glycyrrhiza glabra)*, 7th International EuroAliment Symposium, Galati, Romania 24 – 26 September, 2015, Section: Nutrition and Health.
16. **Patriche S.**, Boboc M., Leah, V., Dinica, R.M., *Extraction and Evaluation of Bioactive Compounds with Antioxidant Potential from Green Arabica Coffee Extract*, 7th International EuroAliment Symposium, Galati, Romania 24 – 26 September, 2015, Section: Nutrition and Health.
17. Leah, V., Ioan, A., **Patriche, S.**, Dinică, R.M., *Extraction et dosage d'inuline a partir de diverses sources vegetales (Extraction and Determination of Inulin from Various Vegetable Sources)*, 7th International EuroAliment Symposium, Galati, Romania 24 – 26 September, 2015, Francophone Section.
18. **Patriche, S.**, Lupu, E.G., Carac, A., Dinica, R.M., Carac, G., *Electrochemical Investigations Of Lipase Enzyme Activity On New Pyridinium Ligands*, 5th Regional Symposium on Electrochemistry South – East Europe, June 7-11, 2015, Pravets, Bulgaria.
19. **Patriche, S.**, Rusu, D.E., Ispas, A., Bund, A., Carac, G., *Corrosion resistance and microhardness of electrodeposited nickel from Watts baths*, Scientific Conference of Doctoral Schools from “Dunărea de Jos” University of Galati, Third Edition - Galați, 4-5 June 2015, Section: FUNCTIONAL MATERIALS & NANOTECHNOLOGIES.
20. **Patriche, S.**, Rusu, D.E., Carac, G., *Corrosion tests of the composite coatings of zinc with different dispersed phases*, Scientific Conference of Doctoral Schools from “Dunărea de Jos” University of Galati, Third Edition - Galați, 4-5 June 2015, Section: FUNCTIONAL MATERIALS & NANOTECHNOLOGIES.
21. **Patriche, S.**, Banu, M., Dogterom, M., Epureanu, B., *Insight into the single-molecule behavior of kinesin Tea2 using optical tweezers technique*, International Conference on Nanoscience and Technology, Paris, France, July 23-27, 2012.
22. **Patriche, S.**, Banu, M., Dogterom, M., Epureanu, B.I., *Experimental and atomistic computational studies of mechano-chemical transport processes involved in neurodegenerative diseases*, „The PhD Student Symposium”, Location: Galati, Romania, December 7, 2011.
23. **Patriche, S.**, Banu, M., Dogterom, M., Epureanu, B.I., *Atomistic Computational Models of Mechano-ChemicalTransport Process Involved in Alzheimer's Disease*, Global Alzheimer's Research Summit - Present and Future of Alzheimer's Research, Madrid, Spain, S eptember 22-23, 2011.
24. **Patriche, S.**, Banu, M., Afteni, M., *Biomimetics of MT-kinesin system used for bio-sensors applications*, International Workshop "Research quality in doctoral school, increased industrial and international visibility", Galati, Romania, July 13-14, 2011.
25. **Patriche, S.**, Matsushita, S., Banu, M., Epureanu, B.I., Adachi, T., *Atomistic Mechano-Chemical Modeling of Kinesins*, SPIE Smart Structure/NDE – Conference 7975:

Bioinspiration, Biomimetics, and Bioreplication, San Diego, California, USA, March 6-10, 2011.

26. **Patriche, S.,** Dinica, R.M., Lupoai, M., *Polysaccharides degradation from lignocellulosic wastes and potato peels*, BENA - International Conference on Fishery and Aquaculture - A view point upon the sustainable management of the water resources in the balkan area, Galati, Romania, May 26-28, 2010.
27. **Patriche S.,** Dinica R.M., *Phenol Conversion from Mittal Steel Industrial Waste Waters by Enzymatic Reactions*, ISAP1- Proceedings of the 1st International Symposium on Applied Physics – Materials Science, Environment and Health, Location: Galati, ROMANIA, NOV 28-29, 2009.

iii) Prezentări orale în cadrul unor workshop-uri

1. **Patriche S.,** „*Investigations of the dynamics and force generation of the single kinesin – like motor protein Tea2 using optical tweezers set-up with force-feedback system*”, 8 May 2012, room D, FOM Institute AMOLF, Amsterdam, The Netherlands.
2. **Patriche S.,** „*Single-molecule studies of motor protein Tea2 using optical tweezers set-up*”, 20 October 2011, room B, FOM Institute AMOLF, Amsterdam, The Netherlands.
3. **Patriche S.,** „*Mechano-chemical modeling of the kinesin functioning under different loading conditions*”, 12 October, 2010, V-CAD Monthly Meeting, RIKEN, Wako, Saitama, Japan.
4. **Patriche, S.,** „*Kinesin – Based Engineered NanoBioTransporters*”, 14 July 2010, University of Kyoto, Department of Biomechanics, Kyoto, Japan.