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Gradul didactic: conferentiar

Instituția unde este titular: Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea: Inginerie chimică și Biotehnologii

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## L I S T A

### lucrărilor științifice în domeniul disciplinelor din postul didactic

#### A. Teza de doctorat

specialitatea "Tehnologie chimică organică", cu tema "Procese de hidroxilare", Universitatea Politehnica București, 1999

#### B. Cărți și capitole în cărți publicate în ultimii 10 ani

1.

#### C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

- 1) Bran, Ș.D., **Chipurici, P.**, Biomass – renewable resource and sustainable utilization, *Quality - Access to Success*, Volume 16, 1 January 2015, Pages 731-736, ISSN: 1582-2559, **BDI**: <https://www.scopus.com/record/display.uri?eid=2-s2.0-84939460783&origin=resultslist&sort=plf-f&src=s&st1=Chipurici&st2=P&nlo=1&nlf=20&nls=count-f&sid=B32038BBA2930D7E8F95D3FADD9CC156.wsnAw8kedt7IPYLO0V48gA%3a63&sot=anl&sdt=aut&sl=36&s=AU-ID%28%22Chipurici%2c+Petre%22+6507965046%29&relpos=0&citeCnt=0&searchTerm=#>
- 2) Ioan Tudor SIBIANU, Ioan CALINESCU, **Petre CHIPURICI**, Study of the olefin selectivity of a Fe-Ni catalyst for Fischer Tropsch Process, *Bulletin of Romanian Chemical Engineering Society*, 3(1), p. 47-56, 2016, ISSN 2360-4697, **BDI**: <https://journals.indexcopernicus.com/search/form?search=Bulletin%20of%20Romanian%20Chemical%20Engineering%20Society>
- 3) Gavrilă, AI; Asofiei, I; Trifan, A; **Chipurici, P**; Rusen, E, Microwave Assisted Synthesis of 5-hydroxymethylfurfural Using Mild Reaction Conditions, *Revista de Chimie*, 68 (3), 2017, p. 435-438, ISSN: 0034-7752, **WOS:000400731900003**
- 4) Gavrilă, AI; Asofiei, I; **Chipurici, P**, Factorial Design for Optimization of Microwave Assisted Synthesis of 5-Hydroxymethylfurfural, *Revista de Chimie*, 68 (4), 2017, p. 639-641, ISSN: 0034-7752, **WOS:000400732400002**
- 5) Calinescu, I., Vlaicu, A., **Chipurici, P.**, Ighigeanu, D., Lavric, V., Alcoholic fermentation in the presence of microwaves, *Chemical Engineering and Processing - Process Intensification*, 126, 2018, p. 16-22, ISSN: 0255-2701, <https://doi.org/10.1016/j.cep.2018.02.008>, **(Q2)**, **WOS:000430755200003**
- 6) STEFANIA DANIELA BRAN, **PETRE CHIPURICI**, MARIANA BRAN, ALEXANDRU VLAICU, Renewable Energy from Agricultural Waste, *Revista de Chimie*, 69 (6), p. 1363-1366, 2018, ISSN 0034-7752, **WOS:000438397400013**
- 7) **PETRE CHIPURICI**, ALEXANDRU VLAICU, CRISTIAN EUGEN RADUCANU, STEFANIA DANIELA BRAN, ADINA-IONUTA GAVRILA, Biodiesel Production from Waste Oil and Its Blends with Glycerol Ketals, *Revista de Chimie*, 69 (7), p.1881-1885, 2018, ISSN 0034-7752, **WOS:000444595700057**
- 8) CRISTIAN EUGEN RADUCANU, ADINA-IONUTA GAVRILA, TANASE DOBRE, **PETRE CHIPURICI**, Study on alumina supported heterogeneous catalysts for biodiesel production, *Revista de Chimie*, 69 (8), p. 2138-2143, 2018, ISSN 0034-7752, **WOS:000444602300042**
- 9) IOANA ASOFIEI, IOAN CALINESCU, **PETRE CHIPURICI**, ADINA IONUTA GAVRILA, Enzymatic Pretreatment of Vegetable Materials to Increase the Extraction Yield of Bioactive

Compounds, Revista de Chimie, 69 (11), p. 4171-4174, **2018**, ISSN 0034-7752, [WOS:000451931500067](#)

- 10) **Petre Chipurici**, Alexandru Vlaicu, Ioan Calinescu, Mircea Vinatoru, Marin Vasilescu, Nicoleta Daniela Ignat, T.J. Mason, Ultrasonic, hydrodynamic and microwave biodiesel synthesis – A comparative study for continuous process, *Ultrasonics - Sonochemistry*, 57, p.38-47, **2019**, ISSN 1350-4177, <https://doi.org/10.1016/j.ultsonch.2019.05.011> (Q1), [WOS:000473840600005](#)
- 11) Ioan Calinescu, Alin Vintila, Aurel Diacon, Mircea Vinatoru, **P. Chipurici**, Ana Maria Galan, Sanda Velea, Growth of Nannochloris algae in the presence of microwaves (continuous reactor), *AMPERE 2019 - 17th International Conference on Microwave and High Frequency Heating*, **2019**, pp. 203-209, <http://dx.doi.org/10.4995/AMPERE2019.2019.9820>, ISBN 9788490487198, **BDI:** <https://www.scopus.com/record/display.uri?eid=2-s2.0-85075485263&origin=resultslist&sort=plif&src=s&st1=Chipurici&st2=p&nlo=1&nlr=20&nls=count-f&sid=c5843c828df3669ab832102410916a1d&sot=anl&sdt=aut&sl=36&s=AU-ID%28%22Chipurici%2c+Petre%22+6507965046%29&relpos=1&citeCnt=0&searchTerm=>
- 12) Alexandru VLAICU , Ioan CALINESCU, Constantin POSEA, **Petre CHIPURICI**, A study on methyl and ethyl esters production - from seed preparation to product purification, *U.P.B. Sci. Bull., Series B*, Vol. 83, Iss. 2, p.105-116, **2021**, ISSN 1454-2331
- 13) Aurel Diacon, Ioan Călinescu, Mircea Vinatoru, **Petre Chipurici**, Alexandru Vlaicu, Aurelian Cristian Boscornea and Timothy J. Mason, Fatty Acid Ethyl Esters(FAEE): A New, Green and Renewable Solvent for the Extraction of Carotenoids from Tomato Waste Products, *Molecules*, **2021**, 26 (14), 4388. <https://doi.org/10.3390/molecules26144388> (Q2), eISSN: 1420-3049, [WOS:000676454700001](#)
- 14) **Petre Chipurici**, Alexandru Vlaicu, Ioan Călinescu, Mircea Vîțătoru, Cristina Busuioc, Adrian Dinescu, Adi Ghebaur, Edina Rusen, Georgeta Voicu, Maria Ignat, Aurel Diacon, Magnetic silica particles functionalized with guanidine derivatives for microwave-assisted transesterification of waste oil, *Scientific Reports*, 11, 17518, 2021, ISSN 2045-2322 (online), <https://doi.org/10.1038/s41598-021-97097-7>, [WOS:000692507200058](#), (Q1)
- 15) Gavrilă, AI; Zalaru, CM; Tatia, R; Seciu-Grama, AM; Negrea, CL; Calinescu, I; **Chipurici, P**; Trifan, A ; Popa, I, Green Extraction Techniques of Phytochemicals from Hedera helix L. and In Vitro Characterization of the Extracts, *Plants - Basel*, 2023, 12(22), 3908; <https://doi.org/10.3390/plants12223908>, eISSN 2223-7747, Q1, [WOS:001114597100001](#) (Q1)
- 16) Toma, E ; Simonescu, CM; **Chipurici, P** ; Calinescu, I ; Deleanu, C, CADMIUM AND LEAD IONS COMPETITIVE ADSORPTION ONTO CALCIUM ALGINATE PREPARED BY TRADITIONAL AND GREEN METHODS, *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE*, 85 (2) , pp.21-34, 2023, ISSN 1454-2331, [WOS:001015437100002](#)
- 17) Simonescu, Claudia-Maria; **Chipurici, Petre**; Călinescu, Ioan; Vîțătoru, Mircea; Toma, Elișoara Narcissa; Culiță, Daniela Cristina; Ene, Vladimir-Lucian; Mason, Timothy J., Effects of ultrasounds and microwaves on the morphology and adsorption capacity of calcium alginate, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Volume 682, Article number 132906, [10.1016/j.colsurfa.2023.132906](https://doi.org/10.1016/j.colsurfa.2023.132906), 2024, ISSN 09277757, eISSN 1873-4359, Q1, [WOS:001137513900001\(Q1\)](#)
- 18) Calinescu, Ioan; Psenovschi, Grigore; Cojocar, Mihaela; Chisega-Negrila, Ciprian Gabriel; Albulescu, Carmen; Brebu, Mihai; Trifan, Adrian; Ignat, Nicoleta Daniela; **Chipurici, Petre**, Catalytic Pyrolysis of Low-Density Polyethylene Waste, *Sustainability (Switzerland)*, Volume 16, 2024, Article number 6788, DOI 10.3390/su16166788, [WOS:001307534200001](#) (Q2)
- 19) Gavrilă, Adina I.; Vartolomei, Anamaria ; Calinescu, Ioan; Vinatoru, Mircea; Parvulescu, Oana C. ; Psenovschi, Grigore; **Chipurici, Petre**; Trifan, Adrian, Ultrasound-Assisted Alkaline Pretreatment of Biomass to Enhance the Extraction Yield of Valuable Chemicals, *AGRONOMY-BASEL*, 2024, Volume 14, Issue 5, Article number 903, DOI 10.3390/agronomy14050903, eISSN 2073-4395, Q1, [WOS:001233105800001](#)

- 20) Quaratesi, Ilaria ;Calinescu, Ioan ;Lavric, Vasile; Ferrara, Vittoria;Badea, Elena ; **Chipurici, Petre**; Dumbrava, Elisa-Gabriela; Constantinescu, Rodica-Roxana; Ignat, Nicoleta Daniela; Popa, Ioana, Loop-Ultrasound-Assisted Extraction: An Efficient Approach for the Recovery of Bioactive Compounds from Oak Bark, AGRONOMY-BASEL, 2024, Volume14, Issue7, Article Number 1452, DOI10.3390/agronomy14071452, eISSN 2073-4395, **Q1**, **WOS:001278167300001**
- 21) Quaratesi; Calinescu, I; **Chipurici, P**; Dumbrava, EG; Cucos, A; Zaki, MY ; La Manna, P; Bercea, A ; Stan, MS; Michalik, S; Pearce, C; Odlyha, M ; Burca, G; Badea, E, Ultrasound-assisted synthesis of (3-cyclodextrin/hydroxyapatite composites as a green and safe additive for enhancing leather properties, JOURNAL OF MOLECULAR STRUCTURE, 2025, Volume 1328, Article Number 141299, DOI 10.1016/j.molstruc.2024.141299, ISSN 0022-2860, eISSN 1872-8014, **WOS:001398279100001, Q2**

#### **D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)**

##### **- Reviste**

##### **- Selecție cu maximum 20 lucrări în volume de conferințe**

- 1) Z. González, G. Predeanu, S. Axinte, J.J. Fernández, I. Călinescu, **P. Chipurici**, V. Slăvescu, M.F. Drăgoescu, B. Acevedo, S. Melendi-Espina, G. Gryglewicz, Rosa Menéndez, “Carbon materials from conventional/unconventional technologies for electrochemical energy storage devices”, Carbon 2017 – World Conference on Carbon: Carbon for grand Challenges, 23-28 July 2017, Melbourne, Australia, p.29
- 2) Alexandru Vlaicu, **Petre Chipurici**, Vasile Lavric, Daniel Ighigeanu, Ioan Călinescu, Unconventional methods for enhancing the fermentation process, 20th Romanian International Conference on Chemistry and Chemical Engineering Poiana Brasov, ROMANIA - September 6-9, 2017
- 3) Alexandru Vlaicu, **Petre Chipurici**, Ioan Calinescu, Marin Vasilescu, Hydrodynamic cavitation – equipment and uses, 20th Romanian International Conference on Chemistry and Chemical Engineering Poiana Brasov, ROMANIA - September 6-9, 2017
- 4) Calinescu I., Vinatoru M., **Chipurici P.**, Vlaicu A., “Biodiesel Synthesis Assisted by Ultrasound, Microwave and Hydrodynamic Cavitation – A Comparative Study”, 16th Meeting of the European Society of Sonochemistry, April 15 -19, 2018, Universite Bourgogne Franche-Comte, Besancon, France, p.247
- 5) A. Vlaicu, **P. Chipurici**, I. Calinescu, M. Vinatoru, „A COMPARATIVE STUDY OF HYDROCAVITATION AND ULTRASOUND ASSISTED BIODIESEL PRODUCTION”, 2<sup>nd</sup> Young Researchers’ International Conference on Chemistry and Chemical Engineering, May 3-5, 2018, Budapest, Hungary, p.31
- 6) Alexandru VLAICU, **Petre CHIPURICI**, Ioan CALINESCU, EFFECTS OF MICROWAVE EXPOSURE ON CELL VIABILITY OF SACCHAROMYCES CEREVISIAE DURING GLUCOSE FERMENTATION, The international symposium "Priorities of Chemistry for a Sustainable Development - PRIOCHEM", 10 – 12 October 2018, Bucharest, ROMANIA
- 7) **P.Chipurici**, A.Diacon, I. Calinescu, M.Vinatoru, A.Trifan, A.Vlaicu, Optimization of Ultrasound - Assisted Extraction (UAE) of Lycopene from Tomato Skins, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE), 4 - 7 septembrie 2019, Constanta-Mamaia, ROMANIA
- 8) A. Vlaicu, **P.Chipurici**, A. Trifan, I.Calinescu, M.Vinatoru, A.C.N. Vintila, A.Diacon, Optimization of ultrasound - assisted extraction (UAE) of biocomponents from microalgal

- biomass, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE), 4 - 7 septembrie 2019, Constanta-Mamaia, ROMANIA
- 9) A. Diacon, A. Vlaicu, C. Boscornea, I. Călinescu, M. Vinătoru, **P. Chipurici**, Conventional and Ultrasound Assisted Extraction (UAE) of Lycopene from Siriana F1 hybrid and Pontica 102 Tomatoes, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE), 4 - 7 septembrie 2019, Constanta-Mamaia, ROMANIA
  - 10) Ioan Calinescu, Mircea Vinatoru, Alexandru Vlaicu, **Petre Chipurici**, Adrian Trifan, Ultrasonic and hydrodynamic biodiesel synthesis-energetic considerations for continuous reactor, 4th Asia-Oceania Sonochemical Society Conference, 19 – 21 septembrie 2019, Nanjing, CHINA
  - 11) A. Vlaicu, **P. Chipurici**, A. Vintilă, I. Călinescu, M. Vinătoru, A. Trifan, A. Diacon, Effects of processing parameters on ultrasound-assisted carotenoids and chlorophyll extraction from *Nannochloris* sp. and *Arthrospira platensis* dry biomass determined by factorial experiment design, 4th Green and Sustainable Chemistry Conference 2019, 5 - 8 mai 2019, Dresda, GERMANIA
  - 12) **Petre Chipurici**, Aurel Diacon, Alexandru Vlaicu, Ioan Calinescu, Mircea Vinatoru, Intensification of Biodiesel Synthesis through Ultrasound Assisted Heterogeneous Catalyzed Transesterification, International Chemical Engineering & Catalysis Conference (Chemical Engineering & Catalysis-2019), 12 - 13 decembrie 2019, Londra, MAREA BRITANIE
  - 13) **Petre CHIPURICI**, Alexandru VLAICU, Ioan CALINESCU, Mircea VINATORU, Nicoleta Daniela IGNAT, Georgeta VOICU, Aurel DIACON, Heterogeneous catalyst activation and process intensification of biodiesel synthesis using ultrasound, 5th Green and Sustainable Chemistry Conference 2020, 10 - 11 noiembrie 2020, Dresda, GERMANIA
  - 14) Ioan Călinescu, Mircea Vinatoru, **Petre Chipurici**, Aurel Diacon, Antimicrobial textiles impregnated with copper and zinc oxides nanoparticles, 5th International Conference on Nanomaterials, Nanodevices, Fabrication and Characterization (ICNNFC'20), 11 - 13 octombrie, 2020, Lisabona, PORTUGALIA
  - 15) I. Călinescu, M. Vinatoru, **P. Chipurici**, A. Vlaicu, Nicoleta Daniela Ignat, T.J. Mason, Ultrasonic, hydrodynamic and microwave biodiesel synthesis – A comparative study for continuous process, 4th International Caparica Conference on Ultrasonic-based Applications: from analysis to synthesis 2020, 01–04 iunie, 2020, Costa de Caparica, PORTUGALIA
  - 16) A. Vlaicu, **P. Chipurici**, I. Calinescu, A. Diacon, A.C.N. Vintila, M. Vinatoru, Study on the effects of microwave and/or ultrasound during the pretreatment with DMP of wet *Nannochloris* sp. Biomass, Chemistry Conference for Young Scientists - ChemCYS 2020, 19–21 februarie, 2020, Blankenberge, Belgia
  - 17) I Quaratesi, V Ferrara, **P Chipurici**, I Călinescu, M Vinătoru, C Carșote, C Casas, A Bacardit, E Badea, Alginate Derivatives: a Green Alternative for Industrial Tanning, 18TH INTERNATIONAL CONFERENCE ON CHEMISTRY AND THE ENVIRONMENT, 327-327, 11-15 june 2023, Venice Italy
  - 18) Quaratesi I. Popa I., Ferrara V., Carșote C., Costantinescu R.R., **Chipurici P.**, Calinescu I., Badea E., Ultrasound-assisted extraction of oak bark soluble fraction as a potential source of tannins, XXXVII IULTCS CONGRESS 2023, 17-20 October 2023 – Chengdu (China)
  - 19) I. Vittoria Ferrara, Ilaria Quaratesi, Immacolata Bruno, Antonio Pauciulo, Andrea R Bartiromo, Ioan Calinescu, Ioana Popa, **Petre Chipurici**, Rocco Gliubizzi, Carmine Gaeta, Carmen Talotta, Veronica Iuliano, Elena Badea, Extraction of polyphenols from oak bark for the tanning industry using greener ultrasonic technology, Book of Abstract del 4th MS NatMedDay, 52-52, 15-16 february 2024 Salerno, Italy

#### E. Brevete obținute în întreaga activitate

1. I. CALINESCU I, **CHIPURICI P**, CIMINIAN C, LAMBESCU S, MIHAIESCU D, PATRUT A, PREDEANU G, SLAVESCU V, VACARCIUC I, PLESOIANU C, Process for purifying

used air and effluents with organic chemical charge by using active coal obtained from recyclable materials, RO125293-B1, 2013

2. **CHIPURICI P**, CALINESCU I, VINATORU M, DIACON A, IGNAT N.D., Procedeu pentru obtinerea esterilor metilici ai acizilor grasi din biomasa algala umeda, RO134128-B1, 2021
3. CĂLINESCU IOAN; VINATORU MIRCEA; DIACON AUREL; **CHIPURICI PETRE**, SOLVENT BIODEGRADABIL ȘI NETOXIC PENTRU EXTRAȚIA PRINCIPIILOR NATURALE LIPOSOLUBILE, Brevet nr RO133507 (B1), 2023

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**Semnătura:**