

LISTA

Lucrărilor științifice în domeniul disciplinelor din postul didactic

A. TEZA DE DOCTORAT

T1. Iancu P., Optimizarea rețelelor de apa de pe platforme industriale, Domeniul Inginerie Chimică, îndrumător științific, Prof.dr.ing. DANCIU Emil, Universitatea POLITEHNICA din Bucuresti, 2008

B. CĂRȚI ȘI CAPITOLE ÎN CĂRȚI PUBLICATE în ultimii 10 ani

C. LUCRĂRI INDEXATE ISI/BDI publicate în ultimii 10 ani

Articole ISI

1. Popescu, M.; **Iancu, P.**; Plesu, V.; Bildea, C.S.; Manolache, F.A.; *Mathematical Modeling of Thin-Layer Drying Kinetics of Tomato Peels: Influence of Drying Temperature on the Energy Requirements and Extracts Quality*, Foods, 12(20), 2023, WOS:001097824600001, Factor impact (2023) 4.7, Q1, eISSN 2304-8158
2. Popescu, M.; **Iancu P.**; Pleșu, V.; Bildea C.S., *Carotenoids Recovery Enhancement by Supercritical CO₂ Extraction from Tomato Using Seed Oils as Modifiers*, Processes, 10(12), 2022, WOS:000904227800001, Factor impact (2023) 2,8, Q2, eISSN 2227-9717
3. Stefan, D.S.; Popescu, M.; Luntraru, C.M.; Suciuc, A.; Belcu, M.; Ionescu, L.E.; Popescu, M.; **Iancu, P.**; Stefan, M. *Comparative Study of Useful Compounds Extracted from Lophanthus anisatus by Green Extraction*, Molecules, 27(22), 2022, WOS:000887411900001, Factor impact (2023) 4.2, Q2, eISSN 1420-3049
4. Popescu, M.; **Iancu P.**; Pleșu, V.; Todașca C.M.; Isopencu G.O.; Bildea C.S. *Valuable Natural Antioxidant Products Recovered from Tomatoes by Green Extraction*, Molecules, 27(13), 2022, WOS:000825633900001, Factor impact (2023) 4.2, Q2, eISSN 1420-3049
5. Popescu, M.; **Iancu P.**; Pleșu, V.; Bildea C.S. ; Todașca C.M. *Different spectrophotometric methods for simultaneous quantification of lycopene and β -carotene from a binary mixture*, LWT - Food Science and Technology, 160, 2022, WOS:000779414200002, Factor impact (2023) 6.0, Q1, ISSN 0023-6438
6. Ștefan, N.G.; **Iancu, P.**; Pleșu, V.; Călinescu, I.; Ignat, N.D. *Highly Efficient Deacidification Process for Camelina sativa Crude Oil by Molecular Distillation*. Sustainability, 13, 2818, 2021, WOS:000628579400001, Factor impact (2023) 3.3, Q2, ISSN: 2071-1050
7. Ștefan N.G., **Iancu P.**, Plesu V., Calinescu I., *Vapor pressure of two fatty acids alkyl esters: experimental vs. predicted data*, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 81(4), 45-58, 2020, WOS:000501994100005, Factor impact (2023) 0.3, Q4, ISSN: 1454-2331
8. Popescu M., **Iancu P.**, Plesu V., Todasca M.C., Bildea C.S., *Effect of different drying processes on lycopene recovery from tomato peels of crystal variety*, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 82(1), 85-102, 2019, WOS:000550837300008, Factor impact (2023) 0.3, Q4, ISSN: 1454-2331
9. Dimian, A.C., **Iancu, P.**, Plesu, V., Bonet-Ruiz, A.E., Bonet-Ruiz, J., *Castor oil biorefinery: Conceptual process design, simulation and economic analysis*, Chemical Engineering Research& Design, 141, 198-219, 2019, WOS:000456640800016, Factor impact (2023) 3.7, Q2, ISSN:0263-8762
10. Risco, A., Plesu, V., , Bonet, J., Bonet-Ruiz, A.E., **Iancu, P.**, Llorens, J. , *Pressure selection for non-reactive and reactive pressure-swing distillation*, Chemical Engineering and Progressing – Process

Intensification, 135, 9-21, 2019, WOS:000457511600002, Factor impact (2023) 3,8, Q2, ISSN: 0255-2701

11. Pleșu, V., Marton G.I., Marton A.L., **Iancu, P.**, Ruiz, A.E.B, Bonet, J., *DIMCARB - A Quantum Mechanics Study of its Structure*, Revista de chimie, 67(8), 1637-1640, 2016, WOS:000384514200048, Factor impact (2019): 1.755, Q3, ISSN: 0034-7752
12. Pleșu, V., Ruiz, A.E.B, Bonet, J., Llorens, J., **Iancu, P.**, *Shortcut assessment of alternative distillation sequence process intensification*, Computers & Chemical Engineering, 83, 58-71, 2015, WOS:000364166700006, Factor impact (2023): 3.9, Q2, ISSN: 0098-1354.
13. Perederic, O.A., Pleșu, V., **Iancu, P.**, Bumbac, G., Bonet-Ruiz, A.E., Bonet-Ruiz, J., Muchan, B., *Simulation and process integration for tert-amyl-methyl ether (TAME) synthesis*, Computers & Chemical Engineering, 83, 79-96, 2015, WOS: 000364166700008, Factor impact (2023): 3.9, Q2, ISSN: 0098-1354
14. Șoriga, S.G., **Iancu, P.**, Man, I.C., Marton, G., Pleșu, V., *Optimizing Parallel Electronic Structure Calculations Through Customized Software Environment Study of GPAW on Small HPC Clusters*, Revista de chimie, 66(11), 1826-1831, 2015, WOS:000368213500025, Factor impact (2019): 1.755, Q3, ISSN: 0034-7752
15. Marton, G.I., Marton, A.L., Plesu, V., **Iancu, P.**, Soriga, S.G., *TAME - a Quantum Mechanics Study of the Reaction Mechanism for Methoxylation of Isoamylenes*, Revista de chimie, 66(10), 1711-1715, 2015, WOS:000368436300035, Factor impact (2019): 1.755, Q3, ISSN: 0034-7752
16. **Iancu, P.**, Stefan, N.-G., Plesu, V., Toma, A., Stepan, E., *Advanced high vacuum techniques for ω -3 polyunsaturated fatty acids esters concentration*, Revista de chimie, 66(6), 911-917, 2015, WOS:000357403600033, Factor impact (2019): 1.755, Q3, ISSN: 0034-7752
17. Bonet, J., Plesu, V., Bonet-Ruiz, A.E., Tuluc, A., **Iancu, P.**, Tohaneanu, M.C., Llorens, J., *Fast solvent screening for counter-current liquid-liquid extraction columns*, Clean Technologies and Environmental Policy, 17(5), 1227-1238, 2015, WOS:000356878600011, Factor impact (2023): 4.2, Q2, ISSN: 1618-954X
18. Bonet-Ruiz, A.E., Plesu, V., Bonet, J., **Iancu, P.**, Llorens, J., *Preliminary technical feasibility analysis of carbon dioxide absorption by ecological residual solvents rich in ammonia to be used in fertigation*, Clean Technologies and Environmental Policy, 17(5), 1313-1321, 2015, WOS:000356878600019, Factor impact (2023): 4.2, Q2, ISSN: 1618-954X
19. Marton, G.I., **Iancu, P.**, Plesu, V., Marton, A., Soriga, S.G., *Solketal - a Quantum Mecanics Study of the Reaction Mechanism of Ketalization*, Revista de chimie, 66(5), 750-753, 2015, WOS:000355126000031, Factor impact (2019): 1.755, Q3, ISSN: 0034-7752
20. Tuluc, A., **Iancu, P.**, Plesu, V., Bonet-Ruiz, J., Bozga, G., Bumbac, G., *Biodiesel Plant Optimisation Study by using Aspen-HYSYS® Process Simulator*, Revista de chimie, 66(4), 565-569, 2015, WOS:000354914500027, Factor impact (2019): 1.755, Q3, ISSN: 0034-7752

Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate ISI

1. Dimian A.C., **Iancu P.**, Plesu V., Bonet-Ruiz A.E., Bonet J., *Innovative design and simulation of castor oil biorefinery*, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), Computer Aided Chemical Engineering, 40 PART A, 1111-1116, 2017, WOS:000417380000187, ISSN: 1570-7946
2. **Iancu P.**, Vilas-Bonafoux S., Iglesias-Fernandez J.M., Plesu V., Bonet J., Bonet-Ruiz A.E., Llorens J., *Computational Fluid Dynamics (CFD) Simulation of Fuel Gas and Stream Mixtures to Decrease Nox Emissions of Industrial Burners*, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), Computer Aided Chemical Engineering, 40 PART A, 565-570, 2017, WOS:000417380000096, ISSN: 1570-7946
3. Plesu V., Valverde H.C., Curco D., Bonet-Ruiz A.E., Bonet J., **Iancu P.**, Llorens J., *Software Tool for Computing and Visualization of Enhanced Residue Curve Maps*, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), Computer Aided Chemical Engineering, 40 PART A, 199-204, 2017, WOS:000417380000035, ISSN: 15707946
4. Bonet-Ruiz A.E., Surinyach R.L., Plesu V., Bonet J., **Iancu P.**, Llorens J., *Distillation Sequence Efficiency (DSE) for Suitable Liquid-Liquid Extraction Solvents: Acetic Acid Extraction with TOA*, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), Computer Aided Chemical Engineering, 40 PART A, 397-402, 2017, WOS:000417380000068, ISSN: 15707946

5. Bonet J., Para Paz A., Bonet-Ruiz A.E., Plesu V., **Iancu P.**, Llorens J., *Distillation Sequence Efficiency (DSE) Applied to Trains of Columns with Recycle Streams*, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), Computer Aided Chemical Engineering, 40 PART A, 751-756, 2017, WOS:000417380000127, ISSN: 15707946
6. Mendez-Alvarez, C., Plesu V., Bonet-Ruiz A.E., Bonet-Ruiz J., **Iancu, P.**, Llorens J., *Distillation Energy Assessment for Solvent Recovery from Carbon Dioxide Absorption*, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38, 1917-1922, 2016, WOS:000406968900117, ISSN: 15707-946
7. Onofrei R., **Iancu, P.**, Danciu T.D., Plesu V., *Quality Education in Romanian Chemical Engineering Higher Education*, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38, 1917-1922, 2016, WOS:000406968900160, ISSN: 1570-7946
8. Perederic O.,A., Plesu, V., Ianuc, P., Bonet-Ruiz A.E., Bonet-Ruiz J., Bertran M., TAAE Sustainable Process Design and Simulation, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38B, 2199-2204, 2016, WOS:000406968900164, ISSN: 1570-7946
9. Ortuno-Boyer D., Plesu V., Bonet-Ruiz A.E., Bonet-Ruiz J., **Iancu, P.**, Llorens J., *Enhanced Distillation Based on Feed Impurities*, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38, 1923-1928, 2016, WOS:000406968900118, ISSN: 15707946
10. Tohaneanu, M.C., Plesu, V., **Iancu, P.**, Bonet-Ruiz, A., Bonet-Ruiz, J., Muchan, B., *Rational Use of Cooling Water in Heat Exchanger Network on Industrial Site*, 18th International conference on process integration, modelling and optimisation for energy saving and pollution reduction (PRES2015), Chemical Engineering Transactions, 45, 1837-1842, 2015, WOS:000366034200307, ISSN: 1974-9791
11. Ceausescu, M.M., Bonet-Ruiz, J., Plesu, V., **Iancu, P.**, Bonet-Ruiz, A.E., *Theoretical Modeling Of (Non) Reactive Residue Curve Maps For TAME Synthesis System Using MATLAB - SIMULIS Thermodynamics Communication Facility's*, 25th European Symposium on Computer Aided Process Engineering (ESCAPE25), Computer Aided Chemical Engineering, 37(Part A), 659-664, 2015, WOS:000366889500105, ISSN: 1570-7946

Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate BDI

1. Exposito S., Bone J., Bonet-Ruiz A.E., Llorens J., **Iancu P.**, *Energy consumption in sharp and non-sharp splits of ideal ternary mixtures*, Chemical Engineering Transactions, 76, 799-804, 2019, ISSN: 2283-9216 (scopus.com)
2. Marin K., Bonet-Ruiz J., Bonet-Ruiz A.E., Plesu V., **Iancu P.**, Llorens J., *Integrated reaction-separation processes sequencing and screening at early stages of design*, Chemical Engineering Transactions, 76, 631-636, 2019, ISSN: 2283-9216 (scopus.com)
3. Marchante I., Ruiz A.E.B., Plesu V., Bonet-Ruiz J., **Iancu P.**, *Hydration of cyclohexene to cyclohexanol in a hybrid reactive distillation with a side decanter*, Chemical Engineering Transactions, 76, 25-30, 2019, ISSN: 2283-9216 (scopus.com)
4. Plesu V., Bonet J., Bonet-Ruiz A.E., Chavarria A., **Iancu P.**, Llorens J., *Surrogate model for carbon dioxide equilibrium absorption using aqueous monoethanolamine*, Chemical Engineering Transactions, 70, 919-924, 2018, ISSN: 2283-9216 (scopus.com)
5. Plesu V., Bonet-Ruiz A.E., Bonet J., **Iancu P.**, Llorens J., Becerra L.I., *Immision assessment inside an industrial ventilated room using CFD*, Chemical Engineering Transactions, 70, 1825-1830, 2018, ISSN: 2283-9216 (scopus.com)
6. Plesu V., Cantero S., Bonet-Ruiz A.E., Bonet J., **Iancu P.**, Llorens J., *A heuristic for extractive agent flow rate in extractive distillation*, Chemical Engineering Transactions, 70, 1849-1854, 2018, ISSN: 2283-9216 (scopus.com)
7. Osle A., Bonet Ruiz A.E., Bonet J., Plesu V., **Iancu P.**, Llorens J., *Distillation pressure influence on total site*, 19th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction (PRES 2016), Prague, Czech Republic, 27-31 August 2016, vol 2, pp.1383-1384, 2016, ISBN: 978-151085962-3 (scopus.com)

8. Bonet J., Bonet Ruiz A.E., Plesu V., **Iancu P.**, Llorens J., *Screening of reaction-separation processes with recycle streams based on distillation efficiency*, 19th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction (PRES 2016), Prague, Czech Republic, 27-31 August 2016, vol 2, pp.1423, 2016, ISBN: 978-151085962-3 (scopus.com)

D. BREVETE OBȚINUTE ÎN ȐNTREAGA ACTIVITATE

1. Tuluc A., Stepan E., **Plesu V.**, Iancu P., *Process and catalyst for preparing biodiesel fuel and catalyst comprises calcium ethylene glycolate or calcium diethylene glycolate*, Brevet nr.130618/30.10.2017, University POLITEHNICA din Bucuresti, Derwent Primary Accession Number: 2015-66045A [01]
2. Enascuta C.E., Stepan E., **Plesu V.**, Iancu P., Stefan N.G., *Procedeu de obtinere a unui ulei cu continut marit de acizi grasi polinesaturati si a unui biocarburant diesel*, Brevet nr. 129836/30.03.2017, University POLITEHNICA din Bucuresti, Derwent Primary Accession Number: 2015-10373L [51]
3. **Plesu V.**, Stepan E., Iancu P., *Procedeu in flux continuu de preparare a 1,2-o-isopropylidene-glyceroului*, Brevet nr.129835/30.05.2017, University POLITEHNICA din Bucuresti, Derwent Primary Accession Number: 2015-10373T [51]
4. Stepan E., **Plesu V.**, Neamtu C., Iancu P., *Procedeu pentru obtinerea esterilor 1,2-o-isopropylidene-glyceroului*, Brevet nr. 129837/30.05.2017, University POLITEHNICA din Bucuresti, Stepan E. Plesu V., Neamtu C., Iancu P., Brevet nr. 129837/30.05.2017, *Procedeu de preparare a esterilor 1,2-o-izopropiliden-glicerolului*, Derwent Primary Accession Number: 2015-10373G [51]

E. Lucrări prezentate la diferite seminarii/expoziții, conferințe, etc. în ultimii 10 ani

1. Popescu, M.; **Iancu, P.**; Pleșu, V.; Todașcă, M.C.; Bîldea, C.S. *Supercritical CO₂ extraction of plant oils and pigments* (Oral Presentation), 22nd Romanian International Conference on Chemistry and Chemical Engineering, RICCCE 22, Sinaia, 7-9 September 2022
2. Popescu, M.; **Iancu, P.**; Pleșu, V.; Todașcă, M.C.; Bîldea, C.S.; Guzun, A.S.; Marculescu, A. *Optimal parameters for sea buckthorn oil extracted with supercritical CO₂* (Poster Presentation), 22nd Romanian International Conference on Chemistry and Chemical Engineering, RICCCE 22, Sinaia, 7-9 September 2022
3. Popescu M., **Iancu P.**, Bildea C.S., Plesu V., Todasca M.C., *Antioxidant activities and total phenolic content of tomato residue extracts* (Poster Presentation) – Advances in Food Chemistry, AdFoodChem 2021, Bucuresti, 15-17 April 2021
4. Popescu M., **Iancu P.**, Bildea C.S., Plesu V., Todasca M.C., *The use of supercritical CO₂ extraction in the food industry* (Oral Presentation), Advances in Food Chemistry, AdFoodChem 2021, Bucuresti, 15-17 April 2021
5. Popescu M., **Iancu P.**, Plesu V., Bildea C.S., Todasca M.C., *Carotenoids green extraction from tomatoes* - International Chemical Engineering and Material Symposium, SICHEM 2020, Bucuresti, 17-18 September 2020
6. Popescu M., **Iancu P.**, Plesu V., Bildea C.S., Todasca M.C., *Improving the efficiency of the supercritical CO₂ extraction process of cannabis sativa l. seed oil* - International Chemical Engineering and Material Symposium, SICHEM 2020, Bucuresti, 17-18 September 2020
7. Popescu M., **Iancu P.**, Plesu V., Todasca M.C., Bildea C.S., *Carotenoids recovery from tomato pomace: conventional vs. green extraction method*, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE21), Mamaia, 4-7 Septembrie 2019
8. Stefan N.G., **Iancu P.**, Plesu V., Calinescu I., *Strategies to concentrate ω-PUFA methyl esters through molecular distillation*, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE21), Mamaia, 4-7 Septembrie 2019
9. Popescu M., **Iancu P.**, Plesu V., Todasca C., *Extraction of valuable products from tomatoes*, SICHEM2018, 6-7 September, 2018, Bucharest, Romania
10. Iordache A., **Iancu P.**, Plesu V., *Coal combustion gases heat recovery*, SICHEM2018, 6-7 September, 2018, Bucharest, Romania
11. **Iancu P.**, Plesu V., Bumbac G., Coman D., *Fuel gases by carbon dioxide matanization*, SICHEM2018, 6-7 September, 2018, Bucharest, Romania
12. Safta L.G., **Iancu P.**, Plesu V., Bumbac G., *Methanol to olefines (MTO) from syngas design sustainable process*, SICHEM2018, 6-7 September, 2018, Bucharest, Romania

13. Popescu M., **Iancu P.**, Crisicu A.V., Plesu V., Heat capacity models for solutions of some natural products in supercritical CO₂, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
14. Stefan N.G., Plesu V., Calinescu I., **Iancu P.**, Bonet-Ruiz A.E., Bonet J., Toma A., *Mathematical modelling of molecular distillation*, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
15. Patrascu I., Nicolae M., Bildea C.S., **Iancu P.**, Plesu V., *Hybrid Separation Techniques for Butanol Recovery from the ABE Process*, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
16. Bucur S.S., **Iancu P.**, Plesu V., Coman D., *CO₂ as a Source to obtain Synthetic Natural Gas*, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
17. Plesu V., **Iancu P.**, Bonet-Ruiz A.E., Bonet J., Botella Tapiador E., Toma A., Stefan N.G., Toader S., *TAME Synthesis Pilot Plant Modelling and Experiments*, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
18. Neagu A.A., Plesu V., Bumbac G., **Iancu P.**, Bonet-Ruiz A.E., Bonet J., *Energy efficiency of Oil Refining Processes*, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
19. Badea B.C., Petre L.I., **Iancu P.**, Plesu V., Bumbac G., *LNG simulation with mixed refrigerants cycles*, 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE20), 6-9 September, 2017, Poiana Brasov, Romania
20. Ștefan N.G., *Iancu P.*, Pleșu V., Bonet-Ruiz A., Bonet-Ruiz J., *Mathematical modelling of molecular distillation process*, XXXIVth Romanian Chemistry Conference, Călimănești-Căciulata, Vâlcea, 4-7 Octombrie 2016;
21. **Iancu P.**, Danciu T.D., Onofrei R., *New trends in teaching Chemical Engineering*, 19th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE19), 2-5 September, 2015, Sibiu, Romania, Lecture 358
22. Stefan N.G., Pleșu V., **Iancu P.**, Georgescu E.B., Toma A., Stepan E., *Concentration of polyunsaturated fatty acids methyl esters from hempseed oil obtained by high vacuum distillation*, 19th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE19), Sibiu, 2-5 Septembrie 2015;
23. Stefan N.G., Plesu V., Georgescu E.B., **Iancu P.**, *New possibilities to obtain concentrates of PUFA esters by high vacuum distillation*, 3rd European Congress of Applied Biotechnology, 27 September – 1 October 2015, Nice, France, S01-344