

UNIVERSITATEA TEHNICĂ “GHEORGHE ASACHI” IAȘI

Facultatea Design Industrial și Managementul Afacerilor

Domeniul de licență: Inginerie Chimică

Programul de studii universitare de masterat: Ecodesign în Finisarea Textilelor

Forma de învățământ (*zi/seral/fără frecvență/la distanță*): zi

Durata studiilor: 4 semestre

Dovezi ale diseminării cunoașterii științifice în perioada 2025-2020

(publicații, comunicări, etc. în care au fost implicați studenții masteranzi/doctoranzi cu numele scris cu bold)

Articole ISI

1. Vasilica Popescu, **Ana-Diana Alexandrescu**, Gabriel Popescu, Viorica Vasilache, *Eco-Friendly Extraction of Curcumin from Turmeric and Dyeability of Textile Fibers*, *Fibers*, 13, 73, (2025), FI =3,9.
2. Valentina-Gabi Stănescu, Vasilica Popescu*, Viorica Vasilache, Gabriel Popescu*, Cristina Mihaela Rimbu and **Andrei Popescu**, *Cleaner Processes for Making Laundry Soap from Vegetable Oils and an Essential Oil*, *Applied Sciences (Appl. Sci.)*, 15, 3821, (2025) p. 1-30, FI =2,5.
3. Lotos, E., Danila, A., Vasiliu, A., Rosca, I., **Stroian, D.**, Simionescu, B. C., Mihai, M. (2024). *The potential emulsions of xanthan gum and Daucus carota macerated oil in functional textiles for skincare applications: Formulation, characterization, and performance evaluation*. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 682, 132960. <https://doi.org/10.1016/j.colsurfa.2023.132960>, FI = 5,4
4. **Cuturicu, L. L.**, Radu, C. D., Rusu, A. R., Lacătușu, C., Danila, A., Rîmbu, C. M., Munteanu, C., Istrate, B., Scripcariu, V., Lupascu, G., Luca, S. (2023). *Studies on release of rifampicin from chitosan-based hydrogel*. *Cellulose Chemistry and Technology*, DOI10.35812/CelluloseChemTechnol.2023.57.26, Accession Number WOS:001005161600004 <https://www.webofscience.com/wos/woscc/full-record/WOS:001005161600004>
5. **Cuturicu, L. L.**, **Macarel, V. C.**, Rusu, R. A., Lacatusu, C., Danila, A., Statescu, L., Rimbu, C. M., Radu, C. D., Luca, S. (2023). *A textile device for the therapy of patients with burn wounds by the use of a drug delivery from a hydrogel to dermis*. *Journal of Engineered Fibers and Fabrics*. <https://doi.org/10.1177/15589250231166113>, DOI10.1177/15589250231166113, Accession Number WOS:001103968900001 <https://www.webofscience.com/wos/woscc/full-record/WOS:001103968900001>
6. **Rosu, G.**, Muresan, E. I., Spac, A. F., Diaconu, M., Ciolacu, D.E., Danila, A., Tita, C., Muresan, A. (2023). *Aromatherapeutic and Antibacterial Properties of Cotton Materials Treated with Emulsions Containing Peppermint Essential Oil (Menthae*

- piperitae aetheroleum*). Polymers, 15(10), 2348.
<https://doi.org/10.3390/polym15102348> Accession Number
WOS:000996614200001
7. Vasilica Popescu*, Marioara Petrea, **Andrei Popescu**, *Multifunctional Finishing of Cotton with Compounds Derived from MCT- α -CD and Quantification of Effects Using MLR Statistical Analysis*, Polymers MDPI 13, 410, (2021) p.1-23, FI=3.426,
 8. Popescu, V; Buciscanu, II; Pruneanu M., **Andrei Popescu** (...); Cretescu Igor; Chelariu P; Marin, M., *Sustainable functionalization of PAN to improve tinctorial capacity*, Polymers 13, 21 (2021), FI= 4,967.
 9. Popescu, V; Blaga, AC; Pruneanu M., (...), **Andrei Popescu**; Cretescu Igor; Cascaval, D, *Green Chemistry in the Extraction of Natural Dyes from Colored Food Waste, for Dyeing Protein Textile Materials*, Polymers 13, no. 22, (2021), FI= 4,967.
 10. Danila, A., Ibanescu, S. A., Zaharia, C., Muresan, E. I., Popescu, A., Danu, M., **Rotaru, V.** (2021). *Eco-friendly O/W emulsions with potential application in skincare products*, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume 612, 5 March 2021, Article number 125969, DOI10.1016/j.colsurfa.2020.125969, Accession Number WOS:000616025000006
 11. Vasilica Popescu, **Daniel Manole**, Luminita Ciobanu, *Multi-Functional Finishing for Cotton Materials*, World Journal of Textile Engineering and Technology, 6 (2020), p. 72- 88, (BDI).
 12. Carmen Zaharia, Mariana Diaconu, Emil Ioan Muresan, Angela Danila, Alina Popescu, **Genoveva Rosu**, *Bioactive emulsions with beneficial antimicrobial application in textile material production*, Cellulose, Cellulose volume 27, pages 9711–9723 (2020), <https://doi.org/10.1007/s10570-020-03432-y>
 13. Emil Ioan Muresan, Mariana Diaconu, Carmen Zaharia, **Genoveva Rosu**, Angela Danila, and Aurel Pui, *Bioactive Textiles Obtained by Using Aqueous Extracts of Vine Leaves*, Fibers and Polymers 2020, Vol.21, No.11, 2505-2512, ISSN 1229-9197 (print version)
 14. Vasilica Popescu*, Dragos-George Astanei, Radu Burlica, **Andrei Popescu**, Corneliu Munteanu, Florin Ciolacu, Mariana Ursache, Luminita Ciobanu, Alexandru Cocean, *Sustainable and cleaner microwave-assisted dyeing process for obtaining eco-friendly and fluorescent acrylic knitted fabrics*, Journal of Cleaner Production 232, (2019), p. 451- 461, FI=7,246.

Articole indexate BDI

1. **Valentina Gabi Miron***, Niki Vlad Mancași, Vasilica Popescu*, Andrei Popescu
Physico-Chemical Characteristics of Some Ecological Products Used for Textile Care
Buletinul Institutului Politehnic din Iași Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iași, Volumul 71 (75), Numărul 1, 2025, Secția Chimie și Inginerie Chimică. [DOI: 10.5281/zenodo.15063019](https://doi.org/10.5281/zenodo.15063019)

2. **Romeo Pruneanu**, Vasilica Popescu, Melinda Pruneanu, *Review - Chemical functionalization of cotton fabrics by selective oxidation*, BULETINUL INSTITUTULUI POLITEHNIC DIN IAȘI, Secția CHIMIE și INGINERIE CHIMICĂ, Volumul 71 (75) Numărul 3, 2025, 85-121. DOI: [10.5281/zenodo.17357520](https://doi.org/10.5281/zenodo.17357520)
3. Melinda Pruneanu, **Ruxandra Bucișcanu**, Ingrid Bucișcanu, *Extraction of anthocyanins from Aronia melanocarpa, as a potential natural textile dye*, ANNALS OF THE UNIVERSITY OF ORADEA FASCICLE OF TEXTILES, LEATHERWORK, Vol. 24, No. 2, 87-93, 2023. https://ibn.idsi.md/sites/default/files/j_nr_file/AUO_FTL_Vol%2024_no%202%202023.pdf#page=87

Lucrări științifice publicate în volumele conferințelor.

1. **Andreea Timofte, Alina Mihaela Palcu, Valentina-Gabi Stanecu, Ioana Roxana Corduneanu, Romeo Pruneanu**, Vasilica Popescu, *Application of ecodesign principles in the dyeing of natural fibre textiles*, The 9th edition of the International Symposium "Technical Textiles - Present and Future", Iasi, Romania, 20 November 2025.
2. **Iuliana Petcu, Nicoleta Tofănescu**, Angela Dănilă, **Romeo Pruneanu**, Vasilica Popescu, *Green chemistry approaches to textile dyeing using plant waste extracts*, The 9th edition of the International Symposium "Technical Textiles - Present and Future", Iasi, Romania, 20 November 2025.
3. Vasilica Popescu, Daniela Rotariu, **Niki Vlad Mancași, Andrei Popescu** *Establishing the optimal method of scouring - bleaching flax fibres using a mathematical method based on equally important criteria* CORTEP 2022 IASI-RO DOI: 10.2478/9788367405133-036
Proceedings of the 18th Romanian Textiles and Leather Conference CORTEP 2022, 17-19 November, Iași, Romania, publicat în Sciendo în Februarie 2023, <https://www.sciendo.com/>; ISBN 978-83-67405-13-3; <https://doi.org/10.0000/9788367405133>; tip BDI, Managing editors: Rodica Harpa, Cristina Piroi, Adrian Buhu, Luminita Ciobanu, <https://sciendo.com/book/9788367405133?tab=authors>
4. Ingrid Ioana BUCIȘCANU, **Melinda PRUNEANU**, Marilena Corina BÎNDEANU, *UV-Absorbing Natural Products and their Potential Applications in Sun-Protective Textiles*, Proceedings of the 18 th Romanian Textiles and Leather Conference **2023**, 288-285. DOI: 10.2478/9788367405133-044.
5. Vasilica Popescu, **Lucian-Florin Puchin, Vlad Rotaru, Andrei Popescu** *Cotton Functionalization by Crosslinking Cellulose with Compounds Type Chlorohydrin In Proceeding of the 7th International Symposium "Technical Textiles - Present and Future"*, 2021, 12 November, Iași, Romania, publicat în Editura Sciendo în Februarie 2022, ISBN978-83-66675-73-5, DOI:10.2478/9788366675735-012; tip BDI <https://sciendo.com/chapter/9788366675735/10.2478/9788366675735-012>
6. **Claudia Roman**, Miguel Ángel Delgado, Francisco Lemos, Maria Amélia Lemos, Jorge Ramírez, Angela Danila, Moisés García-Morales, *Effective integration of computational tools into Chemical Engineering studies at an*

international level, 6th International Conference on Higher Education Advances (HEAd'20), Universitat Politècnica de València, València, 2020, DOI: <http://dx.doi.org/10.4995/HEAd20.2020.11031>

7. **Laura Chirila**, Alina Popescu, Sabina Olaru, Angela Danila, Rodica Roxana Constantinescu, Andreea Tigau, *Bioactive textiles obtained by applying cinnamon essential oil-based emulsions*, ICAMS 2020 – 8th International Conference on Advanced Materials and Systems, pag. 55-60, Bucharest, ROMANIA, 1-3 October, 2020