

UNIVERSITATEA PETROL-GAZE DIN PLOIEȘTI
FACULTATEA: TEHNOLOGIA PETROLULUI ȘI PETROCHIMIE
DEPARTAMENTUL: CHIMIE

LISTA DE LUCRĂRI

Șef lucrări dr. chim. GHEORGHE CĂTĂLINA GABRIELA

A. Lista celor 10 lucrări relevante (Articole publicate în reviste indexate ISI)

1. C. G. Gheorghe, C M Dușescu-Vasile , D. R Popovici, D. Bombos; R.-E. Dragomir; F. M. Dima; M. Bajan; G.I Vasilievici, Monitoring the Biodegradation Progress of Naphthenic Acids in the Presence of *Spirulina platensis* Algae Toxics, 2025, 13(5), 368 <https://doi.org/10.3390/toxics13050368>
2. D. R Popovici, C. G. Gheorghe, C M Dușescu-Vasile Assessment of the Active Sludge Microorganisms Population During Wastewater Treatment in a Micro-Pilot Plant Bioengineering, 2024, 11 (12), 1306, <https://doi.org/10.3390/bioengineering11121306>
3. V.Gheorghe, C. G. Gheorghe, D. R. Popovici, S. Mihai, R. E. Dragomir, R.Somoghi, Reduction of Oxygen Production by Algal Cells in the Presence of O-Chlorobenzylidene Malononitrile, Bioengineering, 2024, 11, (6), 623 <https://doi.org/10.3390/bioengineering11060623>
4. V. Gheorghe, C. G. Gheorghe, D.R. Popovici , S..Mihai., C. Calin., E. Sarbu, R.Doukeh, N. Grigoriu, C. N. Toader, C. .Epure, V. Matei -Synthesis, Purity Check, Hydrolysis and Removal of o-Chlorobenzyliden Malononitrile (CBM) by Biological Selective Media, Toxics, 2023, 11(8), 672, <https://doi.org/10.3390/toxics11080672>
5. V Gheorghe, C. G. Gheorghe, A Bondarev, R Somoghi, Ecotoxicity of o-Chlorobenzylidene Malononitrile (CBM) and Toxicological Risk assessment for SCLP Biological Cultures (*Saccharomyces* sp., *Chlorella* sp., *Lactobacillus* sp , *Paramecium* sp.), Toxics, 2023, Volume 11, Issue 3, 285, <https://doi.org/10.3390/toxics11030285>

6. **C. G. Gheorghe**, A.Bondarev, I. Onutu Asseessment of Water Quality Parameters in Some Potential Pollutant Areas from Romania REV.CHIM.(Bucharest), 69 (8), 2018 pag 2045-2049 <http://dx.doi.org/10.37358/RC.18.8.6470>
7. **C. G. Gheorghe**, C.M. Dutescu, M Carbureanu Asphaltenes biodegradation in biosystems adapted on selective media Revista de Chimie, 67(10), 2016, 2106-2110, ISSN 0034-7752
8. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea Testing of bacterial and fungal selection în the pollution of water with cationic detergents, Revista de Chimie, nr 62 (7), 2011, 707-711, ISSN 0034-7752
9. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea Testing the behavior of pure bacterial suspension (*Bacillus subtilis*, *Pseudomonas aeruginosa* and *Micrococcus luteus*) în case of hydrocarbons contaminators, Revista de Chimie, 62(9):2011, 926-929, ISSN 0034-7752
10. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea Research on the influence of diesel oil on the bacterial stems of *Bacillus subtilis* and *Pseudomonas aeruginosa*, Revista de Chimie, 62(5), 2011, 582-584 , ISSN 0034-7752

B. Teza de doctorat

1. **Procese biologice selective pentru epurarea apelor contaminate cu reziduuri industriale** – Universitatea Petrol-Gaze din Ploiești, 2011

C. Cărți și capitole în cărți, culegeri și îndrumare

1. **C. G. Gheorghe** V. Matei *Microbiologie si ecotoxicologie Lucrari de laborator*, Ed. Universitatea Petrol-Gaze din Ploiești, 2012, ISBN 978-973-719-466-4
2. **C. G. Gheorghe** A.Bondarev *Microbiologie si ecotoxicologie Lucrări de laborator* Editia a II-a, Ed. Universitatea Petrol-Gaze din Ploiești, 2019, ISBN 978-973-719-773-

D. Articole/studii in extenso publicate în reviste din fluxul științific internațional;

1. **C. G. Gheorghe**, R.E.Dragomir Optimization of diesel fuel quality and production by hydrotreated gasoil mixtures using Co-Mo/ γ -Al₂O₃ catalysts Reaction Kinetics, Mechanisms and Catalysis, 1-18, 2025 <https://doi.org/10.1007/s11144-025-02913-0>
2. **C. G. Gheorghe**, C M Dușescu-Vasile , D. R Popovici, D. Bombos; R.-E. Dragomir; F. M. Dima; M. Bajan; G.I Vasilievici, Monitoring the Biodegradation Progress of Naphthenic Acids in the Presence of *Spirulina platensis* Algae Toxics, 2025, 13(5), 368 <https://doi.org/10.3390/toxics13050368>
3. D. R Popovici, **C. G. Gheorghe**, C M Dușescu-Vasile Assessment of the Active Sludge Microorganisms Population During Wastewater Treatment in a Micro-Pilot Plant Bioengineering, 2024, 11 (12), 1306, <https://doi.org/10.3390/bioengineering11121306>
4. A Bondarev, S. Mihai, A.Usman, D. Cursaru, D Matei, V Satulu, **C. G. Gheorghe**, G.Branoiu, R. Somoghi A facile microwave promoted formation of highly photoresponsive Au-decorated TiO₂ nanorods for the enhanced photo-degradation of methylene blue, Nanomaterials, 2024, 14(22), 1780 <https://doi.org/10.3390/nano14221780>
5. V.Gheorghe, **C. G. Gheorghe**, D. R. Popovici, S. Mihai, R. E. Dragomir, R.Somoghi, Reduction of Oxygen Production by Algal Cells in the Presence of O-Chlorobenzylidene Malononitrile, Bioengineering, 2024, 11, (6), 623 <https://doi.org/10.3390/bioengineering11060623>
6. V. Gheorghe, **C. G. Gheorghe**, D.R. Popovici , S..Mihai., C. Calin., E. Sarbu, R.Doukeh, N. Grigoriu, C. N. Toader, C. .Epure, V. Matei -Synthesis, Purity Check, Hydrolysis and Removal of o-Chlorobenzyliden Malononitrile (CBM) by Biological Selective Media, Toxics 2023, 11(8), 672, <https://doi.org/10.3390/toxics11080672>
7. V Gheorghe, **C. G. Gheorghe**, A Bondarev, R Somoghi, Ecotoxicity of o-Chlorobenzylidene Malononitrile (CBM) and Toxicological Risk assessment for SCLP Biological Cultures (*Saccharomyces* sp., *Chlorella* sp., *Lactobacillus* sp , *Paramecium* sp.), Toxics 2023, Volume 11, Issue 3, 285, <https://doi.org/10.3390/toxics11030285>

8. Bondarev, **C. G. Gheorghe** Adsorptive removal of crystal violet dye from aqueous solutions using natural resource systems, Desalination and Water Treat , 2022, 264,215-232 <http://dx.doi.org/10.5004/dwt.2022.28560>
9. V Gheorghe, **C. G. Gheorghe**, A Bondarev, CN Toader, M Bomboș -The contamination effects and toxicological characterization of o-chlorobenzylidene manolonitrile, Rev. Chim 71 (12), 67-75, 2021, <https://doi.org/10.37358/Rev.Chim.1949>
10. A Bondarev, **C. G. Gheorghe**, V Gheorghe, M Bombos, Removal of dyes from textile wastewater using sawdust as low-cost biosorbent Revista de Chimie 71 (3), 387-396, 2020, <https://doi.org/10.37358/Rev>
11. V Gheorghe, **C. G. Gheorghe** A Bondarev, V Matei, M Bombos The Malachite Green Biodegradation in Bioreactors on Various pH Domains, Revista de chimie 70 (8), 2996-2999, 2019 <http://dx.doi.org/10.37358/RC.19.8.7472>
12. **C. G. Gheorghe**, A.Bondarev, I. Onutu Assesment of Water Quality Parameters in Some Potential Pollutant Areas from Romania REV.CHIM.(Bucharest) 69 (8), 2018 pag 2045-2049 <http://dx.doi.org/10.37358/RC.18.8.6470>
13. A.Bondarev, **C. G. Gheorghe** Waste biomass as biosorbent for lead removal from aqueous solutions, International Journal of Sciences and Applied Research, **4**(8), 2017; 83-92
14. Mihai, O Pantea, D Popovici, **C. G. Gheorghe** Evaluation of Metal Contents in Correlation with Phytosanitary Treatments at Vineyard REV.CHIM.(Bucharest) 68 (6), 2017 1387-1391 <https://doi.org/10.37358/rc.17.6.5659>
15. M Carbureanu, Sf Mihalache, **C. G. Gheorghe**, A hardware ann-based controller for ph neutralization in industrial plants, Revista de chimie, 67 (7), 2016, 1309-1313 , ISSN 0034-7752
16. A Bondarev, O Pantea, S Mihai, C Calin, **C. G. Gheorghe**, Removal of cadmium from aqueous solutions using low cost sorbents, Revista de Chimie, 67(4) 2016 , 728-733, ISSN 0034-7752
17. **C. G. Gheorghe**, C Dutescu, M Carbureanu Asphaltenes biodegradation in biosystems adapted on selective media Revista de Chimie, 67(10), 2016, 2106-2110, ISSN 0034-7752

18. F. Nicolescu, F. Lupu, O.Pantea, **C. G. Gheorghe**, A. Bondarev, C. Calin Toxicity study of benzene, toluene and xylene (btx) at exposure on some experimental groups REV. CHIM. (Bucharest) 66 (8), 2015, 1181-1183, ISSN 0034-7752
19. E. Grigore, O. Pantea, D. Bombos, C. Calin, A. Bondarev, **C. G. Gheorghe** Effect of inhibitors based amine derivates on some carbon steel corrosion, Revista de Chimie, (Bucharest) 66(5) 2015, 685-690, ISSN 0034-7752
20. M. Carbureanu, **C. G. Gheorghe** -pH variation in the presence of the coagulants used in oil-well industry wastewater treatment REV. CHIM. 2014 , 65(12), 1498-1501, ISSN 0034-7752 WOS:000345946400021
21. F. Lupu, **C. G. Gheorghe**, C. Calin, O. Pantea, Biotreatment of the oil pollutants, Revista de Chimie, 64 (2), 2013, 210-212, ISSN 0034-7752
22. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea The Efficiency of Flocculants in Biological Treatment with Activated Sludge Revista de Chimie, nr 62(10), **2011**, 1023-1026 , ISSN 0034-7752 WOS:000296933300014
23. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea Testing the behavior of pure bacterial suspension (*Bacillus subtilis*, *Pseudomonas aeruginosa* and *Micrococcus luteus*) în case of hydrocarbons contaminators, Revista de Chimie, 62(9):2011, 926-929, ISSN 0034-7752
24. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea Testing of bacterial and fungal selection în the pollution of water with cationic detergents, Revista de Chimie, nr 62 (7), 2011, 707-711, ISSN 0034-7752
25. **C. G. Gheorghe**, O. Pantea, V. Matei, D. Bombos, A.F. Borcea Testing the biodegradation of contaminated water with petroleum products through convențional treatment în comparison with treatment through biological sludge enriched with activated charcoal, Revista de Chimie, **2011**, 62 (6), 655-658, ISSN 0034-7752 WOS:000292629400013
26. **C. G. Gheorghe**, O.Pantea, V. Matei, D. Bombos, A.F. Borcea Research on the influence of diesel oil on the bacterial stems of *Bacillus subtilis* and *Pseudomonas aeruginosa*, Revista de Chimie, 62(5), 2011, 582-584 , ISSN 0034-7752

E. Publicații apărute în lucrări ale conferințelor internaționale de specialitate

1. **C. G. Gheorghe** C. M. Dutescu Vasile, D. R. Popovici Removing of emerging contaminants from aquifers environments trough bioconversions Main direction of ensuring sustenable development:Contmporary issues of ecological education and environmental protection Magtymguly Turkmen State University, 2025 (4)
2. **C. G. Gheorghe** C. M. Dutescu Vasile, D. R. Popovici Quantification of the degree of toxicity of an organic substance on algal cultures Revista Institutului de Cercetare-Dezvoltare pentru Ecologie Acvatică Pescuit și Acvacultură Simpozionul Utilizarea algelor pentru o acvacultură durabilă 2024, vol 2, p. 89, ISSN 3061
3. V.Gheorghe, **C. G. Gheorghe**, Screening behavioral responses of certain microorganisms to CBM toxic used in military and law enforcement operations, 5 th International Colloquium Energy and Environmental Protection, 2023, Ploiesti;
4. V. Gheorghe, **C. G. Gheorghe**, A Bondarev, C. N. Toader, Growth kinetic of SPLC-cultures for CBM and toxicological risk assesment Catalysis, Chemical Engineering and Technology, 2023, Tokyo, Japan 15-th Edition;
5. A Bondarev, **C. G. Gheorghe** The Use of Lignin for Environmental Protection: An Overview of Recent Literature The Annals of “Dunarea de Jos” University of Galati. Fascicle IX, Fascicle IX, Metallurgy and Materials Science, 2022, 45 (1) p5-8
6. **C. G. Gheorghe**, V. Gheorghe, A. Bondarev Environmental Bioremediation-the malachit green adsorption in bioreactors on various pH domains Journal of Petroleum & Environmental Biotechnology, 2018, (ISSN: 2157-7463), 86, Roma, DOI: 10.4172/2157-7463-C2-044.
7. A Bondarev, **C. G. Gheorghe** Biosorption, a green approach for heavy metal removal from water International Colloquium Energy and Environmental Protection, 2018, 14 (11)
8. S. Mihai A. Bondarev, **C. G. Gheorghe** Adsorptive Bioremediation of Petroleum Refinery Wastewater Effluent 8th International Conference on Petroleum Engineering & 9th International Conference and Expo on Oil and Gas, 2018, 10(15), ISSN: 2157-7463

9. F. Lupu, C. G. Gheorghe, O. Pantea Biodegradation of toxic contaminants coming from petroleum residues through biotreatment, The 9th international conference OPROTECH, "Vasile Alecsandri" University of Bacau, 24-26 mai 2011

F. Alte lucrări și contribuții științifice

1. C. G. Gheorghe, N. Naum Depoluarea apelor impurificate cu produse petroliere prin metoda cu namol activ in prezenta speciilor *Zooglea ramigera* si *Paramecium* sp. Buletinul Universitatii Petrol-Gaze din Ploiesti, 2005, Seria Tehnica nr 2, 57, Editura UPG

2. V. Popa, I. Codita, V. Ungureanu, C. G. Gheorghe Research regarding to the use and in vitro testing of antibiotic association in veterinary medicine", Avicol magazine / Bulletin of Romanian Veterinary Society in Avian and Small Animal Pathology 3: 5 – 11, Anul 7, nr.2 (29), 2010, ISSN 1841 – 0472.

Membru in Contracte de cercetare/Proiecte

1. Dezvoltarea de ambalaje alimentare inovative fără impact negativ asupra mediului ambiant", acronim AMBAL-INOV, My SMIS: 120994, Contract: 375/390051 / 30.09.2021, Competitia 63/POC/163/1/3/LDR, S.C. MEDACRIL S.R.L.

2. GO-GICS nr. 30757/11.12.2024- cu tema: -DEZVOLTAREA UNOR SISTEME POLIMERICE BIODEGRADABILE- beneficiar Universitatea Petrol-Gaze din Ploiești;

3. GO-GICS nr. 30833/11.12.2024 cu tema: BIOMASĂ LIGNOCELULOZICĂ – SOLUȚIE ALTERNATIVĂ ȘI ECOLOGICĂ PENTRU ENERGIE ȘI INFRASTRUCTURĂ, beneficiar Universitatea Petrol-Gaze din Ploiești;

4. CN FIS-FDI-2025-F-0199-Viața de student la UPG-Facilitarea accesului tinerilor ce provin din medii defavorabile la învățământul superior Prahovean

Data

10.12.2025

Semnatura