

LISTA LUCRARILOR PUBLICATE

S.I. dr. ing. Ancaelena Eliza STERPU
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Facultatea de Științe Aplicate și Inginerie
Departamentul de Chimie și Inginerie Chimică

A. TEZA DE DOCTORAT: “ *Cercetări privind amestecarea fluidelor cu aplicații în industria chimică* ” la Universitatea „Ovidius” din Constanța, 2010

B. CARTI SI CAPITOLE DIN CARTI PBLICATE

B1. CARTI PUBLICATE

1. D.Mandalopol, C.Koncsag, **A.Sterpu**, Caiet de lucrari de laborator la "Procese hidrodinamice", Constanta, 1997
2. D.Mandalopol, **A.Sterpu**, Caiet de lucrari de laborator la "Procese Calorice", Constanta,1997
3. D.Mandalopol,_C.Koncsag, **A. Sterpu**, Caiet de lucrari de laborator la "Tehnologia fabricarii uleiurilor", Constanta, 1997
4. Anișoara Neagu, **Ancaelena Sterpu**, Procese de transfer căldură-îndrumar de laborator, Constanța 2010
5. **Sterpu Ancaelena Eliza**, Procese Hidrodinamice, Editura PIM, Iasi, 2014, 324 pag., ISBN 978-606-13-1759-2.
6. **Sterpu Ancaelena Eliza**, Cercetări privind amestecarea fluidelor cu aplicații în industria chimică, Editura Ovidius University Press, Constanța, 2015, 214 pag., ISBN 978-973-614-881-1.

C. ARTICOLE/STUDII PUBLICATE ÎN REVISTE DE SPECIALITATE DE CIRCULAȚIE INTERNAȚIONALĂ RECUNOSCUTE SAU ÎN REVISTE DIN ȚARĂ RECUNOSCUTE DE CĂTRE CNCSIS

C.1. ARTICOLE/STUDII PUBLICATE IN REVISTE COTATE ISI REPREZENTATIVE PENTRU DOMENIU

1. **Ancaelena Eliza Sterpu**, Nicoleta Teodorescu, Iuliana Marlina Prodea, Eugeniu Popescu, Irina Niță, *Mathematical models for power consumption at the mixing of*

some lubricating greases, Environmental Engineering and Management Journal, volume 9, 2010, No.8, 1063-1068, 2010

2. **Ancaelena Eliza Sterpu**, Alina Bărbulescu, Lucica Barbes, Claudia-Irina Koncsag, *Modeling the mixing process of industrial and domestic wastewater sludge*, Environmental Engineering and Management Journal, volume 14, No.6, 1241-1246, **2015**.
3. **Sterpu ,AE**, Prodan ·G, Teodorescu, N, Prodea IM, Dumitru AI, Koncsag, CI (2016), *Lubricating Greases From Olive Oil, Corn Oil And Palm Oil*, Revista de Chimie, ISSN 0034-7752, No.67 (8), 1575-1582.
4. Bărbulescu,A., **Sterpu, A.E**, Barbes, L, Koncsag ,CI (2017) New correlation for the mixing of wastewater sludge, Romanian Journal of Physics, 62 (1-2) http://www.nipne.ro/rjp/2017_62_1-2/rjp062_1-2_801.pdf
5. C.A.Vodounon, **A.E.Sterpu**, I.M.Prodea, C.I.Koncsag, *Eco-friendly Additivated Lubricating Greases Made of Agricultural Resources*, Revista de Chimie, 71 (2), p.202-208, 2020, DOI: [10.37358/RC.20.2.7917](https://doi.org/10.37358/RC.20.2.7917)
6. Doinita-Roxana Cioroiu Tirpan, **Ancaelena Eliza Sterpu**, Claudia Irina Koncsag, Alina Georgiana Ciufu and Tănase Dobre, *Enzymatic Process for Cystoseira barbata Valorization: Ethanol Production and Additional By-Products*, **2021**, Processes, 9(5), 741; <https://doi.org/10.3390/pr9050741>
7. Timur Chis, Vasile-Timur Chis, Olga Valerica Sapunaru, **Ancaelena Eliza Sterpu**, *Effects of Biodiesel to Soil*, **2021**, Journal of Environmental Protection, 12, 1009-1018. <https://doi.org/10.4236/jep.2021.1212059>
8. Sivriiu, A.M.; Sapunaru, O.V.; **Sterpu, A.E.**; Cioroiu Tirpan, D.-R.; Chis, T.V.; Dobre, T. *Thermal Treatment under Vacuum for Obtaining a Quenchant from Rapeseed Oil*. Processes **2021**, 9, 2189. <https://doi.org/10.3390/pr9122189>
9. Timur Chis, **Ancaelena Eliza Sterpu**, and Olga Valerica Săpunaru, *The effect of corrosion on crude oil distillation plants*, Chem Engineering 2022, 6(3), 41;, Impact factor , Scor citare 4,0. <https://doi.org/10.3390/chemengineering6030041>

10. Petrache, S.; Chis, T.; **Sterpu, A.E.**; Sapunaru, O.V. Radioactive Elements Detected in Abandoned Oil Tank Farms. *Processes* **2022**, *10*, 374. <https://doi.org/10.3390/pr10020374>
11. Osman, S.; Sapunaru, O.V, **Sterpu, A.E.**; Chis, T.V.; I.Koncsag, C. Impact of Adding Bioethanol and Dimethyl Carbonate on Gasoline Properties. *Energies* **2023**, *16*, 1940. <https://doi.org/10.3390/en16041940>

C.2. LUCRARI PUBLICATE IN VOLUME ALE CONFERINTELOR INDEXATE (ISI PROCEEDINGS)

1. Chis T., **Sterpu AE.**, Koncsag CI, Dumitru, AI, *Ease the transport of viscous crude oil by pipeline through performing right blending recipes*, 14 th GeoConference on Science and Technologies in Geology, Exploration and Mining, SGEM 2014, 17-25 June 2014, Varna, Bulgaria.
2. Koncsag CI., **Sterpu AE.**, Dumitru AI, Chis T., *Olefins production by steam cracking of waste vegetable oil. Preliminary study*, 14 th GeoConference on Science and Technologies in Geology, Exploration and Mining, SGEM 2014, 17-25 June 2014, Varna, Bulgaria.
3. **Sterpu AE.**, Koncsag CI, Dumitru AI, Chis T., *Reformulation of gasoline with a focus to the VOCs emissions mitigation*, 14 th GeoConference on Science and Technologies in Geology, Exploration and Mining, SGEM 2014, 17-25 June 2014, Varna, Bulgaria.
4. Dumitru A.I, Koncsag C.I., **Sterpu A.E.**, Popovici I, Chis T.V. *The metal poisoning effect on the performances of a FCC plant under real operation condition*, The 16 th GeoConference on Energy and Clean Technology, SGEM 2016, Varna, Bulgaria, 30 June – 6 July, 2016, Conference Proceedings ISB-N 978-69-7105-57-5, vol.I, p.979-986

C3. LUCRARI PUBLICATE IN REVISTE DEPARTAMENTALE RECUNOSCUITE BDI

1. C.Koncsag , **A. Sterpu** , A. Chirmus , "Extractia hidrocarburilor aromatice din fractiuni medii petroliere cu acetona"."Ovidius" University Annals of Chemistry, vol VIII, Constanta 1997,pag.77-82.

2. C.Koncsag , **A. Sterpu** , I. Sascau , "Pretratarea apelor provenite de la instalatiile de Cracare Catalitica",pag.82-87. "Ovidius" University Annals of Chemistry, vol VIII Constanta 1997.
3. D.Mandalopol, D.Apostol, **A.Sterpu**, L.Moisei "Modele bidimensionale de simulare ale reactoarelor tubulare in Cracarea Termica" - Lucrare in extenso la Conferinta Nationala "CHIMIA" 2000 , Constanta 2000 - "Ovidius" University Annals of Chemistry 2000 - pag.129-132.
4. C.Koncsag, **A.Sterpu**, R.Lainer "*The Diagnosis Of The Flow In A Catalyst Granular Layer*", "Ovidius" University Annals of Chemistry, vol XIII Constanta 2002 , pag. 52
5. **A.Sterpu**, I.Koncsag, C.Batutu "*Mathematical Model For Homogenising Non-newtonian Solutions Of Polystyrene*" "Ovidius", University Annals of Chemistry, vol XIII, Constanta 2002 , pag.63
6. I.Koncsag, **A.Sterpu** "*The efficiency of the absorption process of mercaptans in amine solutions*" "Ovidius" University Annals of Chemistry, vol XIV, Constanta 2003 , pag.148.
7. I. Nita, **A. Sterpu** "*The influence of the storage condition on the losses by evaporation of oil products*" , "Ovidius" University Annals of Chemistry, vol.XV, Nr.1,2004 .
8. I. Nita , D. Mandalopol, C. Teodorescu, A. Neagu, **A. Sterpu**, A. Rosu, "*Study of the corrosion attack of the acidic organic medium from the ethylbenzene reactor*" , , "Ovidius" University Annals of Chemistry, vol.XV, Nr.1 2004.
9. Anisoara Neagu, **Anca Sterpu**, Maximiliana Patrascu, "*Algorithm for the calculation of heat recovery in the air pre-heaters of a tubular furnace*"; Analele Universitatii "Ovidius" Seria Chimie, ISSN-1223-7221, 18, (2),2007,p. 144-150
10. D. Mandalopol, I. Nita, C. Teodorescu, **A. Sterpu**, A. Neagu, A Biorefinery model, Ovidius University Annals of Chemistry, 18, nr. 2, 2007
11. Dumitru Anca Iuliana , Koncsag Claudia Irina , **Sterpu Ancaelena Eliza** , Neagu Anisoara-Arleziana, "*Jet fuel characterization using structural group analysis*", "Ovidius" University Annals of Chemistry, Vol. 21, Nr. 2, pp.147-151, 2010.
12. Nita I, Neagu A, Geacai S, Dumitru A, **Sterpu A.**, "*Study of the behavior of some vegetable oils during the thermal treatment*. Ovidius Univ Ann Chem 2010;21:5–8.

13. Sterpu A.E., Arsenie D.I., Teodorescu N., Dumitru A.I., Neagu A.A., *Mathematical model for the rheological behavior of industrial and domestic wastewater sludge*, Analele Universitatii "Ovidius" Seria Chimie, ISSN-1223-7221, vol. 22, nr. 1, 2011, p. 41-46

14. Anisoara-Arleziana NEAGU, Ancaelena Eliza STERPU, Anca Iuliana DUMITRU, "Non-stationary heat transfer from spherical vessels under free convection. Investigation of liquid petroleum products storage", Analele Universitatii "Ovidius" Seria Chimie, ISSN-1223-7221, vol. 22, nr. 1, 2011, p. 71-74

15. Ancaelena-Eliza STERPU, Anca Iuliana DUMITRU, Mihai-Florinel POPA, "Corrosion behavior of steel in biodiesel of different origin", "Ovidius" University Annals of Chemistry, Vol. 23, Nr. 2, p.143-148, 2012.

16. Ancaelena-Eliza STERPU, Anca Iuliana DUMITRU, Mihai-Florinel POPA, "Regeneration of used engine lubricating oil by solvent extraction", "Ovidius" University Annals of Chemistry, Vol. 23, Nr. 2, p.149-154, 2012.

17. Sterpu, A.E., Koncsag, C.I., Dumitru A.I., Mihalcea, A.D.(2013), *Mathematical model for power consumption at mixing of industrial and domestic wastewater sludge*, Analele Universitatii "Ovidius" Seria Chimie, ISSN-1223-7221, 24(2), pp.115-120

18. C. A. Vodounon, **A.E. Sterpu**, I. M. Prodea, C.I. Koncsag, Influence of manufacturing temperature on the rheological behavior of some vegetable lubricating greases, Ovidius University Annals of Chemistry, 30 (1), p. 55 - 59, 2019

19. Timur Chis, **Ancaelena Eliza Sterpu**, Olga Valerica Sapunaru, *Rheological study on romanian types of oils*, Bulletin Of Romanian Chemical Engineering Society, vol 8, nr 2, 2021, ISSN 2360-4697, in press, indexată în Index Copernicus Internațional.

D. ARTICOLE/STUDII PUBLICATE IN VOLUMELE UNOR MANIFESTĂRI ȘTIINȚIFICE INTERNAȚIONALE RECUNOSCUTE DIN ȚARĂ ȘI DIN STRĂINĂTATE

D.1. In extenso

1. Ancaelena Eliza Sterpu, Claudia Irina Koncsag, Rodica Sirbu "Homogenising Non-Newtonian Rubber Solutions. The Parameters of the model" - 3rd INTERNATIONAL CONFERENCE OF PHD STUDENTS - University of Miskolc, Hungary - 13-19 August 2001, ENGINEERING SCIENCES, vol.II, 779-785. pag.779.

2. Claudia Irina Koncsag, Gabriela Stanciu, Mariana Nastac, Ancaelena Eliza Sterpu, "The handling and the treatment of phenolic waste for sustainable development", Conferinta Internationala ENERGIE - MEDIU, CIEM 2005, Bucuresti 20 -22 Oct. 2005

3. D. Mandalopol, I. Nita, C. Teodorescu, **A. Sterpu**, A. Neagu, "A Biorefinery model", CONFERINTA INTERNATIONALA "NEW TRENDS IN PETROLEUM REFINING", NTPR, Constanta, 6-8 dec. 2007

4. **Ancaelena Eliza Sterpu**, Nicoleta Teodorescu, Iuliana Marlena Prodea, Anișoara Neagu, Anca Iuliana Dumitru, "The effect of composition and temperature on the rheological properties of greases based on calcium soaps", International Review of Chemical Engineering, Rapid Communications (IRECHE), ian. 2010, vol. 2, nr.1, p. 81-85

5. **Ancaelena Eliza Sterpu**, Irina Niță, Anișoara Arleziana Neagu, Anca Iuliana Dumitru, Sibel Geacai, "*Mathematical Models for Mixing Time of Some Additive Free Calcium Soap Lubricating Greases*" International Review of Chemical Engineering, Rapid Communications (IRECHE) Special Issue, dec. 2010, Vol. 2. nr. 7, p. 801-804

6. **Ancaelena Eliza Sterpu**, Anca Iuliana Dumitru, Anișoara Arleziana Neagu, "*Regeneration of used engine lubrication oil by solvent extraction. The influence of the solvent to oil ratio*", Conferința Internațională Ugal Mat 2011, Technology and Advanced Materials 21-22 oct. Universitatea "Dunarea de jos" Galati, 2011, p 202-208.

7. **Sterpu, Ancaelena Eliza**, Dumitru, Anca Iuliana, Neagu, Anișoara Arleziana, „*Corrosion behavior of steel automotive engine parts in biodiesel of different origin*” Proceeding of “CAR 2011 International Congress AUTOMOTIVE AND ENVIRONMENT”, 2-4 Nov. 2011, ISSN 1453 - 1100

8. **Ancaelena Eliza STERPU**, Nicoleta TEODORESCU, Anca Iuliana DUMITRU, "*Mathematical model for power consumption at mixing of industrial and domestic wastewater sludge*" , Conferința Internațională ARTCAST 2012 "*From rigor of technique to art*", 18-19 mai, Universitatea "Dunarea de jos" Galati, 2012

9. **Ancaelena Eliza Sterpu**, Anca Iuliana Dumitru, "*Mixing Rules For Predicting The Ignition Properties Of Automotive Diesel Engine Fuels*", The 5th international conference on advanced concepts on mechanical engineering, ACME, 14-15 iunie, Iasi, 2012.

10. **Ancaelena-Eliza STERPU**, Anca Iuliana DUMITRU, Mihai-Florinel POPA, "*Corrosion behavior of steel in biodiesel of different origin*", CONFERINTA INTERNATIONALA "CHIMIA 2012 - NEW TRENDS IN APPLIED CHEMISTRY", Constanta, 24-26 may 2012.

11. **Ancaelena-Eliza STERPU**, Anca Iuliana DUMITRU, Mihai-Florinel POPA, "*Regeneration of used engine lubricating oil by solvent extraction*", CONFERINTA INTERNATIONALA "CHIMIA 2012 - NEW TRENDS IN APPLIED CHEMISTRY", Constanta, 24-26 may 2012.

12. Koncsag, C.I. **Sterpu, A.E.** , Dumitru A.I. (2013) *Simulations of C5/C6 isomerization process with a new kinetic model*, XVIIIth Romanian International Conference on

Chemistry and Chemical Engineering, RICCCE XVIII , ISSN 2344-1895, ISSN-L 2247-5389, September 4-7, 2013, Sinaia, Romania, S4-33.....S4-37

13. Anca Iuliana Dumitru, Claudia Irina Koncsag, Nicoleta Teodorescu, Iuliana Marlina Prodea, Cyrille Alode Vodounon, **Ancaelena Eliza Sterpu**, *Rheological Study Of Biodegradable Lubricating Greases*, Proceedings of the 5th International Conference of Advanced Materials and Systems, Bucharest, Romania, 23-25 oct, 2014.

14. Cioroiu-Tîrpan, D.R., **Sterpu, A.E.**, Koncsag, C.I., Ciufu, A.G., Dobre, T. Sustainable approach in bioethanol production from brown algae, International Chemical Engineering and Material Symposium, SICHEM 2020, 17-18 September 2020, ISSN 2537-2254 , p.59 (prezentare orală)

15. Olga ȚAGA (SĂPUNARU), **Ancaelena Eliza STERPU**, Silviu PASCU, Mihaela BRÎNZEI, and Claudia Irina KONCSAG. New Technology for Ethers Manufacturing by Reactive Distillation Process, Conferinta Internationala CHIMIA 2020, Constanta, Romania, 27 – 29 May 2021, ISSN 2360-3941, p.75 (prezentare orală).

D.2. Rezumatul publicat

- 1. A.E. Sterpu**, A. Neagu, A.I. Dumitru, *Characterization of jet fuel by physico-chemical methods*, Chimia 2009, New trends in applied chemistry, mai 13-16 2009 , p.232 (sectiunea postere)
- Irina Niță, Sibel Geacai, Anca Dumitru, Anișoara Neagu, **Anca Sterpu**, *Correlation between physical properties of biodiesel-diesel oil blend*, 2nd International Conference on Chemistry and Chemical Engineering, Timișoara , mai 2010, p.7
- Sibel Geacai, Irina Niță, Anișoara Neagu, Anca Dumitru, **Ancaelena Sterpu**, *Study regarding corrosivity of biodiesel and its blends with diesel fuel*, 2nd International Conference on Chemistry and Chemical Engineering, Timișoara , mai 2010, p.8
- Anca Dumitru, **Ancaelena Sterpu** Anișoara Neagu, Irina Niță, Sibel Geacai, *Composition effect of biodiesel – diesel oil on total unsaturation and acidity*, 2nd International Conference on Chemistry and Chemical Engineering, Timișoara , mai 2010, p.9
- Anca Dumitru, **Ancaelena Sterpu**, Anișoara Neagu, Irina Niță, Sibel Geacai, *Experimental study concerning ignition characteristics of biodiesel – diesel oil blends*, 2nd International Conference on Chemistry and Chemical Engineering, Timișoara , mai 2010, p.10
- Sterpu, Ancaelena Eliza**, Dumitru, Anca Iuliana, Neagu, Anișoara Arleziana,

„Corrosion behavior of steel automotive engine parts in biodiesel of different origin” CAR 2011 International Congress AUTOMOTIVE AND ENVIRONMENT, 2-4 Nov. 2011, p 190.

7. Dumitru E.I., **Sterpu A.E.**, Koncsag,C.I., *Trace metals distribution in refinery heavy distillation cuts*, International Conference Chimia 2012, “New trends in applied chemistry”, 24-26 May, Constanta Romania, Book of abstracts, ISBN 987-973-614-711-1, pg. 141
8. **Sterpu, A.E.**, Koncsag, C.I , Baboia, D.(2013), *Petroleum recovery from oily sludge by solvent extraction*, International Workshop “New trends in oil, gas and petrochemical industry”, 24-25 May, 2013, Constanta, Romania, Book of abstracts, ISBN 987-973-614-776-0, p. 63
9. Koncsag, C.I. , **Sterpu, A.E.**(2013) , *Preliminary study of waste vegetable oil steam cracking for olefins production*, International Workshop “New trends in oil, gas and petrochemical industry”, 24-25 May 2013, Constanta, Romania, Book of abstracts, ISBN 987-973-614-776-0, p. 50
10. **Sterpu, A.E.**, Barbulescu, A., Barbes, L., Koncsag, C.I.(2013), *Modelling the mixing process of industrial and domestic wastewater sludge*, International Conference on Environmental Research and Technology, Ecoimpuls 2013, Timisoara, Romania, O2a01, p.21.

F. PROIECTE DE CERCETARE-DEZVOLTARE PE BAZA DE CONTRACT/ GRANT

F2. CONTRACTE DE CERCETARE PE BAZA DE CONTRACT

1. „Determinarea experimentală a variațiilor parametrilor fizici ai titeiului în mediul marin”, Universitatea "Ovidius" Constanța – Contract nr. 3569/29.04.2013 cu INCDM Constanța, 1000 RON, **membru**

PROIECTE FDI

1. titlul - **CREȘTEREA COMPETITIVITĂȚII TINERILOR PE PIATA FORȚEI DE MUNCĂ PRIN ACCES LA STUDII UNIVERSITARE ȘI PREGĂTIRE PROFESIONALĂ CONTINUA**
ACRONIM - **OVID-COMPETE**

Instituția contractantă: denumirea și adresa	Procedura prin care a fost încredințat contractul	Tipul contractului	Data încheierii contractului	Durata contractului	Valoarea totală a contractului
UOC	competiție	CNFIS-FDI- 2019-0723	Mai 2019	7 luni	200 000 lei

Funcțiile dvs în proiect sunt:

Calin M, Enache R, Raftu G - consilier vocational

Tusa E - specialist în relații publice

Cotrumba M, **Sterpu A**, Juganaru M - **expert invatamant**

Hogea G - asistent manager

Mola D - referent financiar- contabilitate

Titoiu C - expert achizitii

Popescu N - consultant în resurse umane

Andrei S- consilier juridic

Nae M - asistent relații publice și comunicare

2. PROIECT: CNFIS-FDI-2020-0652

ECHITATE SOCIALĂ ȘI COMPETITIVITATE ÎN PARTENERIAT CU MEDIUL SOCIO-ECONOMIC ÎNTR-O UNIVERSITATE EUROPEANĂ MODERNĂ – SMART - COMPETE

buget 284000 lei

data încheierii contractului aprilie 2020

perioada 8 luni

12.10.2023

S.l.dr.ing. Ancaelena Eliza STERPU

