

PETROLEUM-GAS UNIVERSITY OF PLOIEŞTI
Field: Chemical Engineering, Medical Engineering, Materials Science and Nanomaterials
Prof.dr.eng. Cursaru Diana-Luciana

LIST OF PUBLICATIONS

a) PhD Thesis

Kinetic investigations on direct hydration of n-butene in a multiphase reactor

Scientific coordinator: Prof. dr. eng. Ulrich Kunz (Technical University of Clausthal-Germany) Public presentation on 9.05.2006

b) Books

1. **Cursaru,D.** Tănăsescu, C., *Technology of lubricants*, Ed UPG, Ploieşti, 244 pag, 2013, ISBN 978-973-719-463-3
2. Tănăsescu, C., **Cursaru,D.**, *Technology of lubricating oils*, Ed. UPG, Ploieşti, 212 pag, 2009, ISBN 978-973-719-297-4.
3. Bohîltea I., **Cursaru,D.**, Elements of modelling and optimization of chemical processes, Ed. MatrixRom, Bucureşti, 236 pag, 2009, ISBN 978-973-755-545-8.
4. Tănăsescu, C., **Cursaru,D.**, Jugănaru, T., Bogatu, L., *Technology of lubricants, practical applications*, Ed. UPG, Ploieşti, 171 pag, 2010, ISBN 978-973-719-331-5
5. Roşca, P., Ciuparu, D., Borcea, A., Dragomir, R., **Petre, D.**, – Thermal-catalytical processes- practical applications, Ed. UPG, Ploieşti, 117 pag, 2003, ISBN 973-7965-11-6.

c) Papers

c.1) Papers in journals listed in Web of Science Core Collection (ISI)

51. Brănoiu, Gh., Cehlarov, A., **Cursaru, D.**, Mihai, S., Celestine from Valea Sarii (Vrancea region): New Data and Crystal Structure Refinement, Revista de Chimie, 2020, 71, 8, p. 72-79.
50. Matei, D., Docin, B., **Cursaru, D.L.**, Stănică Ezeanu D., Yield optimization using artificial neural network in biodiesel production from soybean oil, Revista de Chimie, 2020, 71, 5, p. 132-140.
49. Brănoiu, Gh., **Cursaru, D.**, Mihai, S., Ramadan, I., Rietveld Structure Refinement of the Apophyllite Crystals from Deccan Basalt Plateau Using X-ray Powder Diffraction Data, Revista de Chimie, 2019, 70, 12, p. 4248-4254.
48. Rădulescu, G., **Cursaru, D.**, An optimal method for lubricating oil compounds properties estimations-The Computer based approach, Revista de Chimie, 2019, 70, 11, p. 3942-3946.
47. Mihai, S., **Cursaru, D.L.**, Matei, D., Manta, A.M., Šomoghi, R., Brănoiu, Gh., Rutile $\text{Ru}_x\text{Ti}_{1-x}\text{O}_2$ nanobelts to enhance visible light photocatalytic activity, Scientific Reports, 2019, 9, 1-8
46. **Cursaru, D.L.**, Giagkas, N., Vizireanu, S., Mihai, S., Matei, D., Biță, B., Stancu, C., Manta, A.M., Ramadan, I., Improvement of antiwear properties by coating the steel surfaces and by lubricant additivation, Digest Journal of Nanomaterials and Biostructures, vol. 14 (4), 2019, 907-915

45. Matei, D., Docin, B., **Cursaru, D.L.**, Stănică Ezeanu D., Artificial Neural Network for Environmental Air Emissions Prediction Systems, Revista de Chimie, 2019, 70, 9, p. 3338-3342.
44. Manta, A.M., **Cursaru, D.L.**, Mihai, S., The influence of synthesis conditions on the structural and redox properties of Mn-MCM-41, Digest Journal of Nanomaterials and Biostructures, vol. 14 (3), 2019, 509-515.
43. Matei, D., **Cursaru, D.L.**, Stănică Ezeanu D., Reduction of harmful components of cigarette smoke using MCM-48, Digest Journal of Nanomaterials and Biostructures, vol. 14 (2), 2019, 381-386.
42. Song, K., Borcea, A., **Cursaru, D.L.**, Ciuparu, D., Kinetics of gas phase synthesis of ethyl-tert-butyl Ether (ETBE) on H3PW12O40/MCM-41 catalyst, Revista de Chimie, 2018, 69, 11, p. 3042-3047.
41. **D.L. Cursaru**, S. Nassreddine, B. Riachi, M. Neagu, S. Mihai, D. Matei, Gh. Brănoiu, *Impact of moisture on the corrosion behavior of copper and mild carbon steel in corn biodiesel*, Corrosion Reviews, <https://doi.org/10.1515/correv-2018-0015>, 2018, 36 (6), p. 559
40. S. Mihai, **D.L. Cursaru**, D. Matei, A. Dinescu, S. D. Stoica, S. Vizireanu, G. Dinescu, *Carbon nanowalls decorated with gold nanoparticles for surface-enhanced raman spectroscopy*, Digest Journal of Nanomaterials and Biostructures, vol. 13 (3), 2018, 743-749.
39. Doicin, B., Stănică Ezeanu D., **D.L. Cursaru**, *Estimation Relationships for Ethanol Conversion and Hydrogen Yield Using Neural Network for Ethanol Steam Reforming on Co/Al₂O₃ Catalyst*, Revista de Chimie, 2017, 68, 11, p. 2720-2725.
38. Matei, D., Stănică Ezeanu D., **Cursaru, D.L.**, *The Efficiency of Co/CeO₂ Catalyst in Ethanol Steam Reforming Process*, Revista de Chimie, 2017, 68, 11, p. 2601-2604.
37. **D.L. Cursaru**, B. Doicin, S. Mihai, *Connection between Co/MCM-48 catalyst synthesis conditions and performances in the steam reforming process through artificial neural network*, Digest Journal of Nanomaterials and Biostructures, vol. 12 (2), 2017, 483-494.
36. Neagu, M., **Cursaru, D.L.**, *Technical and economic evaluations of the triethylene glycol regeneration processes in natural gas dehydration plants*, Journal of Natural Gas Science and Engineering, 2017, p. 327-340.
35. Song, K., Matei, D., **Cursaru, D.L.**, Matei, V., Ciuparu, D., *Characterization and Stability of Heteropolyacid Catalysts Supported on MCM-41 Materials Synthesized by Ultrasonic Irradiation*, Revista de Chimie, 2017, 68, 1, p. 101-107.
34. Matei, D., Stănică-Ezeanu D., **Cursaru D.**, Mesoporous silica catalyst for steam reforming process Digest Journal of Nanomaterials and Biostructures, 2016, 11, No 4, p. 1343-1350.
33. Matei, D., Doicin B., **Cursaru, D.L.**, *Pd/SBA-15 mesoporous catalyst for ethanol steam reforming. A neural network approach*, Digest Journal of Nanomaterials and Biostructures, 2016, 11, No 2, p. 443-451.
32. Ghiță D., **Cursaru, D.L.**, Mihai, S., *Preparation of MCM-48 mesoporous molecular sieve influence of preparation conditions on the structural properties*, Digest Journal of Nanomaterials and Biostructures, 2016, 11, No 1, p. 271-276.
31. Ghiță Dănuță, Dorin Stănică Ezeanu, **Cursaru Diana**, Roșca Paul, Hydrogen production by steam reforming of bioethanol over Pt based catalysts, Revista de Chimie, 2016, 67, 1, p. 145-149.
30. Mihai, S., **Cursaru, D.L.**, Matei, D., Dinescu, A., *Morpho ierarhic TiO₂ with plasmonic gold decoration for highly active photocatalysis properties*, Materials Letters, 2016, 162, p. 222-225
29. Ghiță D., Brezeanu G., Stănică-Ezeanu D., **Cursaru D.**, *Hydrogen Production by Ethanol Steam Reforming*, Revista de Chimie, 2015, 66, 6, p. 847-850
28. Brănoiu Gh., Mihai S., **Cursaru D.**, *Rietveld Structure Refinement of the Stibnite Crystals from Herja (Romania) using X-ray Powder Diffraction Data*, Revista de Chimie, 2015, 66, 6, p. 825-828

27. Bogatu L., Onuțu I., **Cursaru D.**, *New alternative for conditioned oils revaluation*, Journal of the Balkan Tribology Association, 2015, 21, 1, p. 222-232
26. **Cursaru D.**, Ghiță D., Mihai S., *Effect of functionalization of single walled carbon nanotubes on antiwear properties of a mineral oil*, Digest Journal of Nanomaterials and Biostructures, 2014, 9, No 4, p. 1379-1388, ISSN 1842–3582
25. Ghiță D., Stănică-Ezeanu D, Roșca P., **Cursaru D.**, *Performances of Al_2O_3 supported catalysts for steam reforming process*, Revista de Chimie, 2014, 65, nr. 11, p. 1395-1398, ISSN 0034-7752
24. Proșcanu R., Ganea R., **Cursaru D.**, Matei V., Vasilievici G., *Effect of introduction of lanthanum cations in ZSM-5 crystallization step on ethanol conversion to hydrocarbons*, Revista de Chimie, 65, nr. 12, 2014, p. 1517-1520, ISSN 0034-7752
23. **Cursaru D.**, Vizireanu S., Mihai S., Ghiță D., Stoica, D.S., Dinescu Gh., *Friction and wear properties of carbon nanowalls coatings*, Digest Journal of Nanomaterials and Biostructures, 9, No 3, 2014, p. 1105-1114, ISSN 1842–3582
22. **Cursaru D.**, Brănoiu Gh., Ramadan I., Miculescu F., *Degradation of automotive materials upon exposure to sunflower biodiesel*, Industrial Crops and Products, 54, 2014, p. 149-158, ISSN 0926-6690 **WOS:000336340600021**
21. **Cursaru D.**, Mihai S., *Evaluation of thermal stability of biodiesel synthesized from different edible oils by thermogravimetric analysis*, Revista de Chimie, Vol. 64, No. 10, 2013, p. 1156-1159, ISSN 0034-7752. **WOS:000327577600020**
20. **Cursaru D.**, Ramadan I, Tănăsescu C, Rîpeanu R, *Study of the tribological behavior of different carbonaceous nanomaterials such as antiwear additives for an environmentally friendly lubricant*, Digest Journal of Nanomaterials and Biostructures, Vol. 8, No 2, 2013, p. 805-815, ISSN 1842–3582; **WOS:000322737500034**
19. Vizireanu S, Stoyanova A, Filipescu M, **Cursaru D**, Dinescu Gh., *Carbon nanowalls as suitable layers for lubricity improvement*, Digest Journal of Nanomaterials and Biostructures, Vol. 8, No 3, 2013, p. 1145-1156, ISSN 1842–3582; (autor de corespondență) **WOS:000327816300023**
18. Neagu M., **Cursaru D.**, Movileanu D., Dinu F., *Thermal Energy Approach of a Conventional Propylene/propane Splitter II. Accuracy method for estimating thermal energy*, Revista de Chimie, Vol. 64, nr. 9, 2013 p. 1024-1027, ISSN 0034-7752. **WOS:000326855900021**
17. Neagu M., **Cursaru D.**, *Thermal Energy Approach of a Conventional Propylene/propane Splitter. I. Graphical correlation*, Revista de Chimie, Vol. 64, nr. 8, 2013 p. 880-885, ISSN 0034-7752.
16. **Cursaru D.**, Neagu M., Bogatu L., *Investigations on the oxidation stability of biodiesel synthesized from different vegetable oils*, Revista de Chimie, Vol. 64, nr. 4, 2013, p. 438-441, ISSN 0034-7752. **WOS:000318326600019**
15. **Cursaru D.**, Neagu M., *Effect of biodiesel from sunflower oil on diesel engine performances and exhaust emissions*, Revista de Chimie, Vol. 64, nr. 3, 2013, p. 317-320, ISSN 0034-7752. **WOS:000319179300022**
14. Proșcanu R., Ganea R., Matei V., **Cursaru D.**, *Synthesis and characterization of ZSM-5 zeolite from amorphous sodium aluminosilicate dry gel*, Revista de Chimie, Vol. 64, nr. 2, 2013, p. 202-204, ISSN 0034-7752. **WOS:000315756400019**
13. Neagu M., **Cursaru D.**, *Bioethanol dehydratation by extractive distillation with propylene glycol entrainer. A preliminary case study*, Revista de Chimie, Vol. 64, nr. 1, 2013, p. 92-94, ISSN 0034-7752. **WOS:000315934900017**
12. Ghiță D., Stănică-Ezeanu D, **Cursaru D.**, Roșca P., *Pt Supported Catalysts for Steam Reforming Reaction*, Revista de Chimie, Vol. 63, nr. 12, 2012, p. 1296-1300, ISSN 0034-7752. **WOS:000313229100019**

11. **Cursaru D.**, Mihai S., *Corrosion behavior of automotive materials in biodiesel from sunflower oil*, Revista de Chimie, Vol. 63, nr. 9, 2012, p. 945-948, ISSN 0034-7752 . **WOS:000310928900018**
10. **Cursaru D.**, Andronescu C, Pîrvu C, Rîpeanu R, *The efficiency of Co-based single wall carbon nanotubes (SWNTs) in comparison with a commercial additive as AW and EP additives to mineral base oil*, Wear, 290-291, 2012, p. 133-139, ISSN 00431648, DOI: 10.1016/j.wear.2012.04.019.
9. **Cursaru D.**, Tănasescu C., *Improving of diesel fuel lubricity by fatty acid esters derived from palm oil*, Revista de Chimie, Vol. 63, nr. 8, 2012, p. 835-838, ISSN 0034-7752. **WOS:000309782900019**
8. Trăistaru G., Covaliu I.C., Gallios G.P., **Cursaru D.**, Jitaru I., *Removal of nitrate from water by two types of catalysts: Characterization and sorption studies*, Revista de Chimie, 2012, Vol. 63, nr. 3, 2012, p. 268-271, ISSN 0034-7752. **WOS:000303091400006**
7. Trăistaru G., Covaliu I. C., Matei V., **Cursaru D.**, Jitaru, I., *Synthesis and characterization of $NiTiO_3$ and $NiFe_2O_4$ as catalyst in toluene oxidation*, in Digest Journal of Nanomaterials and Biostructures, Vol. 6, No 3, 2011, p. 1257-1263, ISSN 1842-3582; **WOS:000297986100042**
6. **Cursaru D.**, Enescu D., Ciuparu D., *Control of (n,m) selectivity in single wall carbon nanotubes (SWNT) growth by varying the Co-Ni ratio in bimetallic Co-Ni-MCM 41 catalysts*, Revista de Chimie, Vol. 62, nr. 8, 2011, p. 792-798, ISSN 0034-7752. **WOS:000293807200007**
5. Trăistaru G., Covaliu I.C., Oprea O., Matei V., Matei D., **Cursaru D.**, Jitaru I., *$MTiO_3$ ($M=Cu, Ni$) as catalysts in toluene oxidation*, Revista de Chimie, Vol. 62, nr. 8, 2011, p773-776, ISSN 0034-7752. **WOS:000293807200003**
4. **Cursaru D.**, Kunz U., *Kinetic investigation on direct hydration of n-butene in a multiphase reactor*, Revista de Chimie, Vol. 61, nr. 12, 2010, p. 1245-1253, ISSN 0034-7752; **WOS:000288339300023**
3. Stancu, M., **Cursaru, D.**, Manta, A.M., Grigore, R., Stamatin, I., Ciuparu, D., *Synthesis of single walled carbon nanotubes (SWNT) by chemical vapour deposition on MCM-41 supported Ni catalysts obtained by incorporation and impregnation*, Revista de Chimie, Vol. 61, nr. 6, 2010, p.604-607, ISSN 0034-7752. **WOS:000279757800018**
2. **Petre, D.** *Investigations on secondary butanol extraction by supercritical butene*, Revista de Chimie, Vol. 58, nr. 8, 2007, p. 833-837, ISSN 0034-7752. **WOS:000249456200027**
1. Tănasescu, C., **Petre D.**, Stănică-Ezeanu, D., Brebeanu, Gh., Popa, M., *Process for refining waste lubricating oil*, Revista de Chimie, 2003, vol. 54. nr.6, 2003, p 522-524, ISSN 0034-7752; **WOS:000184448100014**

c.2) Papers published in journals indexed in other databases

1. **Cursaru D.**, Tănasescu C., *Co-SWNTs-like material as antiwear and extreme pressure additive for biodegradable lubricants*, Buletinul UPG, Vol. LXII, 2012, Seria Tehnică, Nr. 1/2012
2. **Cursaru D.**, Manta, A.M., Ghiță, D., Tănasescu, C., *An alternative route for biodiesel synthesis from bioethanol*, Buletinul UPG, Vol. LXII, 2010, Seria Tehnică, Nr. 3A/2010
3. Teodoriu, C., **Cursaru, D.**, Bourne, D., *Investigations on API Modified Thread Compound Properties with respect to sealing capacity of open type threads*, Buletinul UPG, Vol. LXII, 2010, Seria Tehnică, Nr. 3A/2010
4. Bogatu, L., Petre, I., Marin, A., Tănasescu, C., **Petre, D.**, Antonescu, N.N., Mirci, L., *Hydraulic oils from regenerable feed stocks with a low environmental impact*, Acta Tribologica, vol.17, 13-16, 2009, ISSN 1220-8434

- 5.Tănăsescu, C., **Petre, D.**, Bogatu, L., Antonescu, N.N., *Industrial gear oils from regenerable feed stocks*, Analele Universității Dunărea de Jos, VIII, seria Tribologie, 2007, p157-160, 12-2008
6. **Cursaru, D.**, Tănăsescu, C., Stănică-Ezeanu, D., *Improving the lubricity of gas oils by BioDiesel additivation*, Buletinul UPG, Vol. LX, 2008, Seria Tehnică, Nr. 4B/2008
7. Dogariu, A., **Cursaru,D.**, Ciuparu, D., *Synthesis and characterization of manganese catalyst incorporated in MCM-41 molecular sieve*, - Buletinul UPG, Vol. LX, 2008, Seria Tehnică, Nr. 4B/2008.
8. **Petre, D.** (2006).- *An inferential method for VLLE prediction- application for n-butene-water-secondary butanol mixtures*, Symposium on Process Control SPC-2003 Proceedings, Buletinul UPG, Vol. LVIII, Seria Tehnică, Nr. 1/2006.
9. Rădulescu, G., **Petre, D.** *Distillation Processes Modeling and Dynamic Simulation – A Critical Survey*, Symposium on Process Control SPC-2003 Proceedings, Buletinul UPG, Vol. LV, 2003, Seria Tehnică, Nr. 2/2003.
10. **Petre, D.**, Rădulescu, G., Tănăsescu, C. *Computer-Aided Optimal Method for Lubricating Oil Mixtures*, Symposium on Process Control SPC-2003 Proceedings, Buletinul UPG, Vol. LV, 2003, Seria Tehnică, Nr. 2/2003.
11. Matei, V., Patron, L., Matei, D., Suciu, C., **Petre D.**, *Study of some hydrocarbons oxidation over mixed oxides catalysts spinel and perovskit type*, Progress in Catalysis, Vol. 11, Nr. 1-2, 2002;
12. Tănăsescu, C., **Petre, D.**, Boiangiu, B., Paisa, C., *Aditivi pentru deparafinarea uleiurilor*, Buletinul UPG volumul sesiunii „35 de ani de activitate a Universității Petrol-Gaze la Ploiești”, noiembrie, 2002.
13. Matei, G., **Petre, D.**, Matei, V., Enache, D., *Studiul experimental al oxidării etanolului la acid acetic pe catalizator de tip oxizi de metale tranziționale pe suport titanie*, Buletinul UPG, suplimentul Buletinului UPG, Ploiești, 1999, p.125;

d.1) Papers published at international conferences

38. Postelnicu Mihai Ion, Cursaru DianaLuciana, Light olefins recovery by oligomerization process in order to obtain fuels, 4th International Colloquium Energy and Environmental Protection, 4-6.11.2020, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
37. Micu Iuliana, Stan Răzvan, Cursaru Diana, Synthesis of a sodium grease by using alternative raw materials 4th International Colloquium Energy and Environmental Protection, 4-6.11.2020, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
36. Mocanu (Jora) Maria Narcisa, Cursaru Diana, Manta Ana Maria, Msheik Malek, Nassreddine Salim, A cheaper and cleaner alternative raw material for biodiesel synthesis 4th International Colloquium Energy and Environmental Protection, 4-6.11.2020, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
35. Giagkas Nikolaos, Cursaru Diana , Vizireanu Sorin, Mihai Sonia, Tribological properties of Zr and ZrN coatings 4th International Colloquium Energy and Environmental Protection, 4-6.11.2020, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
34. Diana Cursaru, Decarbonizing and desulfurization of maritime fuels – challenges, Climate needs action: workshop on achieving low carbon transport in cities, 3-4.09.2020 online
33. Khoury Nivine, Nassreddine Salim, Riachi Bassam, **Cursaru Diana**, Juganaru Traian (2018), Catalytic hydroprocessing of light cycle oil - vegetable oil mixture for biofuels production, 3rd International Colloquium Energy and Environmental Protection, 14-16.11.2018, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
32. Giagkas Nikolaos, Ibrahim Ramadan, **Cursaru Diana**, Vizireanu Sorin., (2018), Improvement of antiwear properties by coating the steel surfaces and by lubricant

- additivation, 3rd International Colloquium Energy and Environmental Protection, 14-16.11.2018, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
31. Msheik M., **Cursaru D.**, (2018), Biodiesel from edible oils: Pro and Cons, International Symposium “The Environment and The Industry”, SIMI 2018, 20-21.09.2018, Bucharest, Romania <http://www.simiecoind.ro/doi-httdoi-org10-21698simi-2018-ab22biodiesel-from-edible-oils-pro-and-cons/> <http://doi.org/10.21698/simi.2018.ab22>
30. Msheik M., **Cursaru D.**, Nassreddine S., Mihai S., (2018), Effectiveness of various amines on oxidation stability of palm oil biodiesel, 3rd International Colloquium Energy and Environmental Protection, 14-16.11.2018, Ploiești, Romania. <http://tppconferinte.upg-ploiesti.ro/>
29. **Cursaru, D.**, (2016), Biodiesel: The Pros and Cons of Oil Substitutes, 2nd International Colloquium Energy and Environmental Protection, 9-11.11.2016, Ploiești, România.
28. Kong, S.I., Matei, D., **Cursaru, D.**, Ciuparu, D., (2016), H₃PW₁₂O₄₀ Catalyst Supported on MCM-41 for the Synthesis of ETBE, 2nd International Colloquium Energy and Environmental Protection, 9-11.11.2016, Ploiești, România.
27. **Cursaru, D.**, Ghiță D., Bogatu, L., (2015), *Investigations on corrosion potential of sunflower biodiesel over automotive materials-* 10th International Colloquium Fuels, 20-22.01.2015, Esslingen, Germany
<http://www.tae.de/de/kolloquien-symposien/maschinenbau-fahrzeugtechnik-und-tribologie/10th-international-colloquium-fuels.html>
26. Ghiță D., **Cursaru, D.**, (2015), *Hydrogen production through steam reforming of ethanol using a ceria supported Pt catalyst -* 10th International Colloquium Fuels, 20-22.01.2015, Esslingen, Germany
<http://www.tae.de/de/kolloquien-symposien/maschinenbau-fahrzeugtechnik-und-tribologie/10th-international-colloquium-fuels.html>
25. **Cursaru, D.**, Mihai, S., Bogatu, L., Vizireanu, S., (2014), *Friction and wear properties of carbon nanowalls coatings -* 1st International Colloquium Energy and Environmental Protection, 20-21.11.2014, Ploiești, România
<http://tppconferinte.upg-ploiesti.ro/>
24. Bogatu, L., Onuțu, I., **Cursaru, D.**, (2014), *New alternative for regenerated oil revaluation -* 8th International Conference on Tribology, 30.10-1.11.2014, Sinaia, România
<http://balkantrib.upg-ploiesti.ro/>
23. **Cursaru, D.**, Vizireanu, S., Tănăsescu, C., (2013), *Fatty acid methyl esters, carbon nanotubes and carbon nanowalls coatings such as lubricity improvers of low sulfur diesel fuels-* 9th International Colloquium Fuels, 15-17.01.2013, Esslingen, Germany
<http://www.tae.de/de/kolloquien-symposien/maschinenbau-fahrzeugtechnik-und-tribologie/9th-international-colloquium-fuels.html>
22. **Cursaru, D.**, Mihai, S., (2012), *Corrosion behaviors of automotive materials in biodiesel from sunflower oil*, 5th International Mechanical Engineering Forum, 20-22.06.2012, Praga, Cehia
<http://www.imef.cz>
21. **Cursaru, D.**, Tănăsescu, C., Rîpeanu, R., (2012), *The tribological behavior of a commercial additive and single wall carbon nanotubes (SWNTs) as antiwear and extreme pressure additives for SAE 20 base oil*, 18th International Colloquium Tribology, 10-12.01.2012, Esslingen, Germany
<http://www.tae.de/de/kolloquien-symposien/maschinenbau-fahrzeugtechnik-und-tribologie/18th-international-colloquium-tribology.html>
20. Voicu, V., Mangourilos, V., **Cursaru, D.**, Ciuparu, D., (2011)- *Bio-derived Oxygenated Additives for Diesel Fuels and their Performance Observed on Model Engines*, 17th Romanian International Conference on Chemistry and Chemical Engineering, 7-10 Septembrie, Sinaia
<http://www.riccce17.upb.ro/>

19. **Cursaru, D.**, Tănasescu, C., Mărdărescu, V., (2011), *Effect of biodiesel and alkyl ether on diesel engine emissions and performances*, Air Pollution 2011, 19-21.09.2011, Malta
(WIT Transactions on Ecology and the Environment, Volume 147, 2011, Pages 331-341, 19th International Conference on Modelling, Monitoring and Management of Air Pollution, AIR 2011; 19 September 2011 through 21 September 2011; Code 92382, ISSN: 17433541 ISBN: 978-184564528-1, DOI: 10.2495/AIR110311)
18. **Cursaru, D.**, Tănasescu, C., Ciuparu, D., Rîpeanu, R., (2011), *The tribological properties of fatty acid methyl esters and single wall carbon nanotubes*-3rd European Conference on Tribology, 4th Vienna International Conference on Nano-Technology Viennano, 7-9.06.2011, Viena, Austria
<http://www.oetg.at/>
17. **Cursaru, D.**, Manta, A.M., Ciuparu, D., (2011), *Fatty acid methyl esters, alkyl ethers of glycerol and carbon nanotubes as lubricity improvers of diesel fuels*- 8th International Colloquium Fuels, 18-19.01.2011, Esslingen, Germany
<http://www.tae.de/de/kolloquien-symposien/maschinenbau-fahrzeugtechnik-und-tribologie/8th-international-colloquium-fuels.html>
16. **Cursaru, D.**, Tănasescu, C., Manta, A., Ciuparu, D., (2010) *Effects of methyl esters derived from sunflower oil on lubricity and corrosion of diesel fuels*, CONAT 2010, 26-29 October, Brașov, Romania
15. Manta, A.M., **Cursaru, D.**, Ciuparu, D., (2010) - *Catalytic activity on Mn ions in different coordination sites investigated by liquid phase ethyl benzene oxidation*, The 9th International Symposium of the Romanian Catalysis Society-RomCat 2010, 23-25.06.2010, Iași, România
14. Bogatu, L., **Cursaru, D.**, Tănasescu, C., Ciuparu, D., (2009) – *Improvement of the oxidation stability of vegetable oils with different degrees of unsaturation* , 16th Romanian International Conference on Chemistry and Chemical Engineering, 19-22 Septembrie, Sinaia
13. Dogariu, A., **Cursaru,D.**, Ciuparu, D., (2009)- *Redox Properties Of Manganese Ions On Surface Sites Of Different Curvatures Investigated By Liquid Phase Ethylbenzene Oxidation*,The 16th International Conference of Physical Chemistry RICCCE 9-12 September, Sinaia,
12. Dogariu, A., **Cursaru,D.**, Ciuparu, D., (2008)- *Synthesis, structure and redox properties of transition metal substituted mesoporous molecular sieves*,The 13th International Conference of Physical Chemistry ROMPHYSCHM 3-5 September, 2008, București
11. **Cursaru,D.**, Tănasescu, C., Juganaru, T., Ciuparu, D., Bogatu, L., (2008)- *Improving of tribological properties of vegetable oils by solid lubricant nanoparticles*, LubMat08 4-6 iunie, 2008, San Sebastián, Spania
10. Tănasescu, C., **Petre, D.**, Bogatu, L., Antonescu, N.N., (2007)-*Industrial gear oils from regenerable feed stocks*, ROTRIB the 10th International Conference on Tribology, 8-10 Noiembrie, București.
9. Bogatu, L., Petre, I., Marin, A., Tănasescu, C., **Petre, D.**, Antonescu, N.N., Mirci, L., (2007) - *Hydraulic oils from regenerable feed stocks with low environmental impact*, RnOTRIB the 10th International Conference on Tribology, 8-10 Noiembrie, Bucurști.
8. **Petre, D.**, Enescu, D., Zoican, C., Dogariu, A., Ciuparu, D., (2007)- *Synthesis and characterization of single wall carbon nanotubes grown on bimetallic Co-Ni-MCM-41 catalysts*, 15th Romanian International Conference on Chemistry and Chemical Engineering, 19-22 Septembrie, Sinaia
7. Enescu, D., **Petre, D.**, Zoican, C., Dogariu, A., Ciuparu, D., (2007)- *Synthesis and characterization of bimetallic Co-Ni catalysts incorporated in MCM-41 molecular sieves*, 15th

Romanian International Conference on Chemistry and Chemical Engineering, 19-22 Septembrie, Sinaia

6. **Petre, D.**, Enescu, D., Ciuparu, D., (2007)- *Hydrothermal synthesis of bimetallic Co-Ni-MCM-41 with different Co-Ni molar ratios for production of single wall carbon nanotubes*, International Symposium of the Romanian Catalysis Society, 21-23 iunie, Bucureşti
5. Tănăsescu, C., **Petre, D.**, Jugănaru, T., Ciuparu, D., Bogatu, L., (2007) - *Increasing the oxidation stability of vegetable oils by catalytic hydrogenation for application in lubrication*, 10th International Conference on Tribology, SerbiaTrib'07, Kragujevac, Serbia
4. **Petre, D.**, Pfeuffer, B., Kunz, U., Hoffmann, U., Turek, T. (2006) – *Prozessintensivierung durch reaktive Extraktion: Untersuchungen zur Hydratisierung von n-Buten*, 39th Jahrestreffen Deutscher Katalytiker, 15-17 March 2006, Weimar, Germany
3. Matei, V., Patron, L., Matei, D., Suciu, C., **Petre, D.**, (2002) *Study of some hydrocarbons oxidation over mixed oxides catalysts spinel and perovskit type*, 3rd International Conference of Chemical Sciences for Sustainable Development, South-Eastern European Countries, sept. 22-25, 2002, Bucureşti
2. Tănăsescu, C., **Petre D**, Stănică-Ezeanu, D., Brebeanu, Gh., Popa, M., (2002)- *Process for re-refining waste lubricating oil*, 3rd International Conference of Chemical Sciences for Sustainable Development, South-Eastern European Countries, sept. 22-25, 2002, Bucureşti
1. Strătulă, C., Oprea, F., Petre, M., **Petre, D.**, (2000) – *Benzene removal from hexane cut using extractive distillation with NMP*, SiChem 2000 International Show, Bucureşti, 2000, p.140;

d3) Other publications

1. Trăistaru, G.A., Covaliu, I., Matei, V., **Cursaru, D.**, Jitaru, I., *Nickel titanate obtained by autocombustion method as catalyst in toluene oxidation*, Global and regional environmental protection" Glorep 2010 (BENA), 26-28.11.2010, Timișoara, România
2. Tănăsescu, C., **Cursaru, D.**, *Extraction of catalytic cracking gas oil with N-methyl pyrrolidone*, The 7th International Symposium of the Romanian Chemistry Society-ICOSECS7, 2010, 15-17.09.2010, Bucureşti, România.
3. Matei, V., Matei, D., **Cursaru, D.**, Airimioaei, M., Iordan, A.R., Palamaru, M., *The study of the toluene oxidation using catalysts of type nickel ferrite substituted with manganese*, The 7th International Symposium of the Romanian Chemistry Society-ICOSECS7, 2010, 15-17.09.2010, Bucureşti, România.
4. Manta, A.M., **Cursaru, D.**, Ciuparu, D., *Catalytic activity on Mn ions in different coordination sites investigated by liquid phase ethyl benzene oxidation*, The 9th International Symposium of the Romanian Catalysis Society-RomCat 2010, 23-25.06.2010, Iași, România.
5. Tănăsescu, C., **Cursaru, D.**, Jugănaru, T., Ciuparu, D., Tănăsescu, A., Bolocan, I., Bădulescu, R., *Technical alternative solutions for superior lubricants fabrication from renewable raw materials according to the European rules and environmental protection*, UPG 1 oct 2008, Ploieşti
6. Pfeuffer, B., **Petre, D.**, Kunz, U., Hoffmann, U., Turek, T., *Production of sec-butyl alcohol by olefin hydration – a candidate for process intensification?*, ECCE 6, 2007, Copenhagen, Denmark.

e) Patents

Bogatu, L., Petre, I., Marin, A., Luca, M., Amira, V., Tănasescu, C., **Cursaru, D.**, Ciuparu, D., *Ecological lubricant composition for industrial applications obtained from raw renewable materials, OSIM, ROI25228 B1 din 30.06.2011.* 2010-J60106

f) Research - development projects

1. **2/2016** Calcule privind determinarea coeficienților maximi de pierderi, specifici activităților de depozitare, desfășurate la depozitele grupului OMV-Petrom, Beneficiar PETRODESIGN S.A.- **director proiect**
2. **26/2015** Analize difracție de raze X pentru cenușă, Beneficiar Lukoil Energy&Gas Romania, Ploiești-**director proiect**
3. **14/2015** Caracterizarea fizico-chimică a condensatului de la sondele de extracție a gazelor, Beneficiar S.C. STRATUM ENERGY ROMÂNIA LLC WILMINGTON, Suc. Blejoi – membru
4. **12/2015** Calcule privind determinarea coeficienților maximi de pierderi, specifici activităților de depozitare, manipulare, distribuție și transport, desfășurate la rafinaria Petrotel-Lukoil Ploiești, Beneficiar PETRODESIGN S.A.-membru
5. **42/2014** Cercetări și expertiză tehnică privind evaluarea coeficienților de consum tehnologic, specifici activității de depozitare și manipulare produse petroliere finite, în depozitele și stațiile de carburanți aparținând Rompetrol Downstream, Beneficiar PETRODESIGN S.A.-membru
6. **34/2014** Studiu privind coeficienții maximi de consumuri tehnologice din rafinăriile Petromidia și Vega, Beneficiar PETRODESIGN S.A.-**director proiect**
7. **27/2014** Analize difracție de raze X pe carote, Beneficiar OMV-PETROM S.A-ICTP Câmpina.-**director proiect**
8. **9/2014** . Analize fizico-chimice pentru condensul de la sondele Caragele 7, Mecea 1, 2 și 3, Piscu 174, Alunu 91-Beneficiar ROMGAZ S.A.-membru
9. **5/2014** Analiza de difracție de raze X pentru o probă de oxizi Waelz; Beneficiar SC. SOMETRA SA. Copșa Mică, Sibiu.-**director proiect**
10. **97/2013** (CTTIAP). Analize prin metoda termogravimetrică TG pentru probe sub formă de pulbere de la Copșa Mică, Beneficiar SOMETRA S.A.-**director proiect**
11. **98/2013** (CTTIAP). Analize difracție de raze X pe carote, Beneficiar OMV-PETROM S.A-ICTP Câmpina.-**director proiect**
12. **107/2013** (CTTIAP). Analiza tehnologică a instalației de hidrocracare din cadrul rafinăriei Midia Năvodari, Beneficiar PETRODESIGN S.A.-membru;
13. **168/2012** Analiza fizico-chimică a unor motorine- Beneficiar COMITETUL OLIMPIC SI SPORTIV ROMAN, COMPLEX OLIMPIC SYDNEI 2000-**director proiect**;
14. **33/2010** - Proces alternativ de fabricare a biodieselului din bioetanol. Noi metode de separare a biodieselului de glicerină-Beneficiar UEFISCSU-**director proiect**;
15. **150/2010** - Studiu privind evaluarea pierderilor de produse petroliere lichide în activitatea de descarcare, incarcare, depozitare, manipulare și transport- Beneficiar SC OLCHIM SA-membru;
16. **149/2010** - Studiu privind determinarea randamentelor reale pentru instalațiile tehnologice aferente diviziei petrochimice Bradu a societății comerciale SC OLCHIM SA- Beneficiar OLCHIM SA-membru;
17. **POSDRU/89/1.5/S/54785**-Nanomat- beneficiar UEFISCDI-membru;

18. **61/2007**-Traducere manual OMV-Beneficiar OMV Petrom –membru;
19. **61/2007-2009** - Sistem bioanalitic pt detecția reziduurilor de pesticide din matrice complexe de alimente, beneficiar UEFISCDI – membru;
20. **62/2007-2009** - Sursa de energie miniaturizată pt electronica portabila obținuta prin asamblarea 3D a unor micro și nanosisteme complexe hibride, beneficiar UEFISCDI – membru;
21. **63/2007-2009** - 2D Nano, beneficiar UEFISCDI-membru;
22. **81 MCT / 746 2006-2008**- Soluții tehnice alternative pentru obținerea de lubrifianti performanți, din materii prime regenerabile - La nivelul exigentelor europene de competitivitate și protecția mediului, Grant CEEEX, sursa de finanțare Planul Național de Cercetare Dezvoltare, -membru;
23. **PD 22/2005-2007** Materiale nanostructurate cu aplicații în cataliză, beneficiar UEFISCTU -membru;
24. **2004-2006** Sinteza secundar butanolului-SASOL GmbH Moers, Germania-membru;
25. **49/2001** Determinarea consumurilor tehnologice la activitatea de transport a țățeiului, gazolinei și a condensatului de la punctele de preluare până la rafinarii- CONPET Ploiești-membru;
26. **74/2001** Catalizatori de hidrogenare selectivă, obținuți prin otrăvire parțială-MATNANTECH- membru;
27. **33/2001** Bitumuri din smoale petroliere de distilare-RELANSIN- membru;
28. **25/2001** Aditivi pentru micșorarea conținutului de aerosoli rutieri în Municipiul Ploiești-membru

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