

## LISTA LUCRĂRI perioada 1995-2017

## 1. TEZĂ DE DOCTORAT

1. **Cornelia Muntean**, Studii asupra comportamentului termic al îngrășămintelor complexe de tipul NP cu microelemente, Universitatea Politehnica Timișoara, susținută public în 19.12.2003, confirmată prin OMEdC 3876/19.05.2004.

## 2. CĂRȚI DE SPECIALITATE/MONOGRAFII

1. **Cornelia Muntean**, Marcela Stoia, Ilie Julean, *Echilibre în soluție apoasă. Constante condiționale - Principii. Aplicații numerice. Programe dedicate*, Editura Politehnica, Timișoara, 2012, 404, pagini, ISBN: 978-606-554-472-7.
2. **Cornelia Muntean**, Adina Negrea, Lavinia Lupa, Mihaela Ciopec, *Analiză chimică și fizico-chimică cu aplicații în protecția mediului*, Editura Politehnica Timișoara, 2009, 220 pagini, ISBN: 978-973-625-973-9.
3. Didina Oprescu, Mircea Ștefănescu, Marcela Stoia, **Cornelia Muntean**, *Analiză chimică cantitativă*, Editura Politehnica, Timișoara, 2002, 420 pagini, ISBN: 973-625-033-4.
4. Didina Oprescu, Veronica Chiriac, Marcela Stoia, **Cornelia Muntean**, *Analiză chimică titrimetrică*, Editura Politehnica, Timișoara, 2001, 274 pagini, ISBN: 973-8247-44-6.
5. Maria Pârlea, **Cornelia Muntean**, *Chimie analitică calitativă. Aspecte teoretice*, Editura Eurobit, Timișoara, 2001, 234 pgini, ISBN: 973-8181-36-4.
6. Maria Pârlea, **Cornelia Muntean**, *Chimie analitică calitativă*, Editura Eurobit, Timișoara, 2000, 66 pagini, ISBN: 973-8181-21-6.

## 3. ARTICOLE / STUDII PUBLICATE ÎN REVISTE

## a. Articole publicate în reviste de specialitate de circulație internațională recunoscute

## 2017

1. Alexandra Carmen Grigorie, **Cornelia Muntean** (✉), Titus Vlase, Cosmin Locovei, Mircea Stefanescu, ZnO-SiO<sub>2</sub> based nanocomposites prepared by a modified sol-gel method, *Materials Chemistry and Physics*, 186, 2017, pp. 399-406.
2. Andreea Gabor, Corneliu Mircea Davidescu, Adina Negrea, Mihaela Ciopec, **Cornelia Muntean** (✉), Petru Negrea, Catalin Ianasi, Monica Butnariu, Magnesium silicate doped with environmentally friendly extractants used for rare earth elements adsorption, *Desalination and Water Treatment*, 2017, 63, 124-134.
3. Marcela Stoia, **Cornelia Muntean** (✉), Bogdan Militaru, MnFe<sub>2</sub>O<sub>4</sub> nanoparticles as new catalyst for oxidative degradation of phenol by peroxydisulfate, *Journal of Environmental Sciences*, 2017, 53, 269-277.
4. Alexandra Carmen Grigorie, **Cornelia Muntean** (✉), Gabriela Vlase, Mircea Ștefănescu, Synthesis and characterization of ZnAl<sub>2</sub>O<sub>4</sub> spinel from Zn(II) and Al(III) carboxylates, *Journal of Thermal Analysis and Calorimetry* (2017), DOI: 10.1007/s10973-017-6268-6, in press.
5. Eniko Berei, **Cornelia Muntean**, Oana Ștefănescu, Mircea Niculescu, Mircea Ștefănescu, Preparation of CuCr<sub>2</sub>O<sub>4</sub> nanopowders using two different chromium sources, *Journal of Thermal Analysis and Calorimetry* (2017), DOI: 10.1007/s10973-017-6328-y, in press.
6. Mircea Niculescu, Mihai-Cosmin Pascariu, Cornelia Muntean (✉), Viorel Sasca, Lavinia Lupa, Marius-Silviu Milea, Mihail Birzescu, Thermal and spectroscopic analysis of Co(II)-Fe(III) polyglyoxylate obtained through the reaction of ethylene glycol with metal nitrates, *Journal of Thermal Analysis and Calorimetry* (2017), DOI: 10.1007/s10973-016-6079-1, in press.

## 2016

7. Andreea Gabor, Corneliu Mircea Davidescu, Adina Negrea, Mihaela Ciopec, Monica Butnariu, Cătălin Ianăși, **Cornelia Muntean** (✉), Petru Negrea, Lanthanum separation from aqueous solutions using magnesium silicate functionalized with tetrabutylammonium dihydrogen phosphate, *Journal of Chemical Engineering and Data*, 2016, 61, pp. 535-542.
8. Gabor Galbacs, Hajnalka Szokolai, Attila Kormanyos, Aniko Metzinger, Levente Szekeres, Claudiu Marcu, Francisc Peter, **Cornelia Muntean**, Adina Negrea, Mihaela Ciopec, Attila Jancso, Cd (II) capture ability of an immobilized, fluorescent hexapeptide, *Bull. Chem. Soc. Jpn.* 2016, vol. 89, pp. 243-253.
9. Petru Negrea, Adina Negrea, Marilena Motoc, Mihaela Ciopec, Andreea Gabor, **Cornelia Muntean** (✉), Influence of pH on enzymatic extract with *allelopathic potential*, *Revista de chimie*, 2016, 67(2), pp. 372-374.
10. A. Wächter, Ioana Ionel, Mihai Wächter, L.A. Varga, Adina Negrea, Vasile Minzatu, **Cornelia Muntean**, Mihaela Ciopec, Encapsulation of municipal solid waste incineration residues into coal fly ash rock matrix, *Journal of Environmental Protection and Ecology*, 2016, 17(3), pp. 1037-1047.
11. Andreea Gabor, Corneliu Mircea Davidescu, Adina Negrea, Mihaela Ciopec, **Cornelia Muntean**, Narcis Duțeanu, Sorption properties of Amberlite XAD7 functionalized with sodium  $\beta$ -glycerophosphate, 16th International Conference on Polymers and Organics Chemistry (POC-16), Hersonissos, Crete, Greece, 13–16 June 2016, *Pure and Applied Chemistry*, 2016, 88(12), pp. 1143-1154
12. Mircea Niculescu, Viorel Sasca, **Cornelia Muntean**, Marius-Silviu Milea, Dan Rosu, Mihai-Cosmin Pascariu, Eugen Sisu, Ioan Ursoiu, Vasile Pode, Petru Budrugaec, Thermal behavior studies of the homopolynuclear coordination compound iron(III) polyoxalate, *Thermochimica Acta*, 2016, 623, pp. 36-42
13. **Cornelia Muntean**, M. Bozdog, S. Duma, Mircea Stefanescu, Study on the formation of  $\text{Co}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$  system using two low temperature synthesis methods, *Journal of Thermal Analysis and Calorimetry* (2016) 123(1), pp. 117-126

## 2015

14. Alexandra Carmen Grigorie, **Cornelia Muntean** (✉), Mircea Stefanescu, Obtaining of gamma- $\text{Fe}_2\text{O}_3$  nanoparticles by thermal decomposition of polyethyleneglycol-iron nitrate mixtures, *Thermochimica Acta* 621, 2015, pp. 61-67
15. Oana Stefanescu, Corneliu Mircea Davidescu, **Cornelia Muntean**, Preparation and characterization of cobalt oxides nanoparticles starting from Co(II) carboxylate precursors, *Journal of Optoelectronics and Advanced Materials*, 17(7-8), 2015, pp. 991-996
16. Mircea Stefanescu, M. Bozdog, **Cornelia Muntean** (✉), Oana Stefanescu, Titus Vlase, Synthesis and magnetic properties of  $\text{Co}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$  ( $x=0\div 1$ ) nano- powders by thermal decomposition of Co(II), Zn(II) and Fe(III) carboxylates, *Journal of Magnetism and Magnetic Materials*, 393, 2015, pp. 92–98
17. Marcela Stoia, **Cornelia Muntean** (✉), Preparation, characterization and adsorption properties of  $\text{MFe}_2\text{O}_4$  (M = Ni, Co, Cu) nanopowders, *Environmental Engineering and Management Journal*, 14(6), 2015, pp. 1247-1260
18. Marcela Stoia, **Cornelia Muntean**, Bogdan Militaru, Fine  $\text{MnFe}_2\text{O}_4$  nanoparticles for potential environmental applications, *Journal of Thermal Analysis and Calorimetry*, 121, 2015, pp.1003-1010
19. R.O. Pop, M. Ilici, M. Andoni, V.N. Bercean, **Cornelia Muntean**, M.M. Venter, I. Julean, Theoretical considerations regarding the thione-thiol tautomerism in 2-(5-mercapto-1, 3, 4-thiadiazol-2-ylthio) acetic acid, *Acta Chimica Slovenica*, 62(1), 2015, pp. 8-14

## 2013

20. Mihaela Ciopec, Corneliu Mircea Davidescu, Adina Negrea, Lavinia Lupa, Adriana Popa, **Cornelia Muntean**, Radu Ardelean, Gheorghe Ilia, Synthesis, characterization and adsorption behavior of aminophosphonic grafted on poly(styrene-co-divinylbenzene) for divalent metal ions in aqueous solutions, *Polymer Engineering & Sci*, 2013, 53(5), pp.1118-1124.

21. Adina Negrea, **Cornelia Muntean** (✉), Ioana Bodnarescu, Mihaela Ciopec, Marinela Motoc, Effect of Matrix Solution on As(V) adsorption onto Iron-containing Materials, *Revista de Chimie*, 2013, 64(4), pp. 397-406.
22. Adina Negrea, Mihaela Ciopec, Corneliu Mircea Davidescu, **Cornelia Muntean** (✉), Petru Negrea, Lavinia Lupa, Kinetic, equilibrium and thermodynamic studies of cesium removal from aqueous solution using Amberjet UP1400 and Amberlite IR 120 resins, *Environmental Engineering & Management Journal*, 2013, 12(5), pp. 991-998.
23. **Cornelia Muntean**, Marcela Stoia, P. Barvinschi, Synthesis of nanocrystalline  $ZnFe_2O_4$  and its use for the removal of Congo Red from aqueous solutions, *Environmental Engineering and Management Journal*, 12(5), 2013, pp. 959-967
24. Marian Bobină, Nicolae Vaszilcsin, **Cornelia Muntean**, Influence of Tryptophan on the corrosion Process of Carbon Steel in Aqueous Weak Acid Solutions, *Revista de Chimie (Bucharest)* 64 (1), 2013, pp. 83-88
25. Marian Bobină, Andrea Kellenberger, Jean-Pierre Millet, **Cornelia Muntean**, Nicolae Vaszilcsin, Corrosion resistance of carbon steel in weak acid solutions in the presence of L-histidine as corrosion inhibitor, *Corrosion Science*, 69, 2013, pp. 389–395

**2012**

26. Mihaela Ciopec, Corneliu Mircea Davidescu, Adina Negrea, Ion Grozav, Lavinia Lupa, **Cornelia Muntean**, Petru Negrea, Adriana Popa, Statistical optimization of chromium ions adsorption on DEHPA-impregnated Amberlite XAD7, *Environmental Engineering & Management Journal*, 2012, 11(3), pp. 525-531.

**2011**

27. Mihaela Ciopec, Corneliu Mircea Davidescu, Adina Negrea, **Cornelia Muntean** (✉), Adriana Popa, Petru Negrea, Lavinia Lupa, Equilibrium and Kinetic Studies of the Adsorption of Cr(III) ions onto Amberlite XAD8 impregnated with Di (2-ethylhexyl) phosphoric acid (DEHPA), *Absorption Science and Technology*, 2011, 29(10), pp. 989-1005.
28. Mihaela Ciopec, Corneliu Mircea Davidescu, Adina Negrea, Lavinia Lupa, Petru Negrea, Adriana Popa, **Cornelia Muntean**, Use of D2EHPA-impregnated XAD7 resin for the removal of Cd(II) and Zn(II) from aqueous solution, *Environmental Engineering and Management Journal*, 2011, 10(10), pp. 1597-1608.
29. Corneliu Mircea Davidescu, Mihaela Ciopec, Adina Negrea, Adriana Popa, Lavinia Lupa, Petru Negrea, **Cornelia Muntean**, Marinela Motoc, Use of di-(2-ethylhexyl)phosphoric acid (DEHPA) impregnated XAD7 copolymer resin for the removal of chromium (III) from water, *Revista de Chimie*, 2011, 62(7), pp. 712-717.

**2010**

30. Adina Negrea, Lupa Lavinia, Mihaela Ciopec, Radu Lazău, **Cornelia Muntean**, Petru Negrea, Adsorption of As(III) ions onto iron-containing waste sludge, *Absorption Science & Technology*, 2010, 28(6), pp. 467-480.
31. Adina Negrea, Lavinia Lupa, Mihaela Ciopec, **Cornelia Muntean**, Radu Lazău, Marinela Motoc, Arsenic removal from Aqueous solutions using a binary mixed oxide, *Revista de Chimie*, 2010, 61(7), pp. 691-695.
32. Angela Magda, Rodica Pode, **Cornelia Muntean**, Mihai Medeleanu, Adriana Popa, Synthesis and characterization of ammonium phosphates fertilizers with boron, *Journal of the Serbian Chemical Society*, 75(7), 2010, pp. 951-963

**2009**

33. Mihaela Ciopec, **Cornelia Muntean** (✉), Adina Negrea, Lavinia Lupa, Petru Negrea, Paul Barvinschi, Synthesis and thermal behavior of double copper and potassium pyrophosphate, *Termochimica Acta*, 2009, 488, pp. 10-16.

34. Mihaela Ciopec, **Cornelia Muntean**, Adina Negrea, Lavinia Lupa, Petru Negrea, Marinela Motoc, Corina Samuila, Synthesis and Characterization of a PK Fertilizer containing Zinc as Micronutrient, *Revista de Chimie*, 2009, 60(7), pp. 678-682.
35. Angela Magda, **Cornelia Muntean**, Aurel Iovi, Marius Jurca, Lavinia Lupa, M. Simon, Vasile Pode, Studies about ammonium phosphates fertilizers with boron added as boric acid, *Revista de Chimie (Bucuresti)*, 60(3), 2009, pp. 226-230

**2008**

36. Angela Magda, Vasile Pode, Mircea Niculescu, **Cornelia Muntean**, Geza Bandur, Aurel Iovi, Studies on process of obtaining the fertilizers based on ammonium phosphates with addition of boric acid, *Revista de Chimie (Bucuresti)*, 59(12), 2008, pp. 1340-1344
37. Titus Vlase, **Cornelia Muntean**, Kinetics of thermal decomposition of some nitrophosphate fertilizer with micronutrients in isothermal conditions, *Journal of Thermal Analysis and Calorimetry*, 92(2), 2008, pp. 559-562

**2007**

38. Mihaela Ciopec, Aurel Iovi, **Cornelia Muntean**, Adina Negrea, Lavinia Lupa, Marilena Motoc, Studii privind procesul de obtinere a ingrasamintelor de tip PK cu microelementul cobalt, *Revista de Chimie*, 2007, 58(8), pp. 725-728

**2006**

39. N. Pleșu, S. Iliescu, Gheorghe Ilia, Adriana Popa, **Cornelia Muntean**, Rheology of Polyaniline Dispersions in Acrylic Resin, *Turk. J. Chem.* 30, 2006, pp.155-163

**2005**

40. **Cornelia Muntean**, W. Brandl, Aurel Iovi, Petru Negrea, Studies on the Thermal Behavior of a Complex Mineral Fertilizer of Nitrophosphate Type, *Thermochim. Acta*, **439**, 2005, pp. 21-26

**2004**

41. **Cornelia Muntean**, G. Mărginean, Aurel Iovi, Petru Negrea, Studii asupra comportamentului termic al fosfatului de cobalt-amoniu, *Revista de chimie (Bucuresti)*, 55(2), 2004, pp. 81-85

**2001**

42. Costică Caizer, Mircea Ștefănescu, **Cornelia Muntean**, I. Hrianca, Studies and magnetic properties of Ni-Zn ferrite obtained from the glyoxylates complex combination, *Journal of Optoelectronics and Advanced Materials*, 3(4), 2001, pp. 919-924

**b. Articole publicate în reviste și volumele unor manifestări științifice indexate ISI (proceeding)****2010**

1. Adina Negrea, Mihaela Ciopec, Lavinia Lupa, **Cornelia Muntean**, Radu Lazău, Petru Negrea, Kinetic and thermodynamic aspects of arsenic (III) adsorption onto iron oxide obtained from iron oxalate, *Water pollution X, WIT Transaction on Ecology and Environment*, vol. 135, 2010, pp. 117-129, ISBN: 978-1-84564-448-2, ISSN: 1743-3541; (Library, Scopus, EBSCO, IEEE Xplore, Thomson Reuters Conference Proceedings Citation Index-Science (ISI Web of Science))

**c. Articole publicate în reviste și volumele unor manifestări științifice indexate în baze de date internaționale (BDI)****2015**

1. Oana Stefanescu, Corneliu Mircea Davidescu, **Cornelia Muntean**, A comparative study on the obtaining of alpha-Fe<sub>2</sub>O<sub>3</sub> nanoparticles by two different synthesis methods, *New Frontiers in Chemistry (Former: Ann. West Univ. Timisoara – Series Chem., 24(1), 2015, pp. 69-79*

**2014**

2. A.C. Grigorie, **Cornelia Muntean**, Mircea Stefanescu, Effect of Polyethylene Glycol on the Magnetic Properties of  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles Synthesized from Fe(III) Carboxylate-Polyethylene Glycol Mixture, *Chem. Bull. "Politehnica" Univ. (Timisoara), 59(73), nr. 2, 2014, pp.9-14*

**2011**

3. Adina Negrea, Mihaela Ciopec, **Cornelia Muntean**, Petru Negrea, Lavinia Lupa, Radu Lazău, Studii comparative privind depoluarea apelor cu conținut de As, prin adsorbție pe materiale oxidice, *Bul. AGIR, nr. 2, 2011, p. 71-77 ( Index Copernicus International, Academic Keys, Getcited)*
4. Mihaela Ciopec, Adina Negrea, Corneliu Mircea Davidescu, **Cornelia Muntean**, Petru Negrea, Lupa Lavinia, Studies regarding the use of phosphate groups-impregnated resins in view of metals ions removal from solutions, *AGIR, nr. 2, 2011, p. 78-81 (Index Copernicus International, Academic Keys, Getcited)*

**2010**

5. Adina Negrea, **Cornelia Muntean**, Lavinia Lupa, Radu Lazau, Mihaela Ciopec, Petru Negrea, Arsenite adsorption on some materials containing iron. Effect of anionic species, *Chem. Bull. "Politehnica" Univ., Timisoara, 55(69), 1, pp.46-49, ISSN: 1224-6018, 2010 (Index Copernicus, Chemical Abstracts Plus)*
6. Mihaela Ciopec, Adina Negrea, Corneliu Mircea Davidescu, Petru Negrea, **Cornelia Muntean**, Adriana Popa, Use of di-(2-ethylhexyl) phosphoric acid (DEHPA) impregnated XAD-8 copolymer resin for the separation of metals ions from water, *Chem. Bull. „Politehnica" Univ., Timisoara, 55 (69), 2, p. 127-131, 2010 (Index Copernicus, Chemical Abstracts Plus)*
7. Adina Negrea, Lavinia Lupa, **Cornelia Muntean**, Mihaela Ciopec, Petru Negrea, Roxana Istrate, Studies on adsorption in column of As(III) from water on iron containing materials, *Chem. Bull. "Politehnica" Univ., Timisoara, 55(69), 2, p. 123-126, 2010 (Index Copernicus, Chemical Abstracts Plus)*
8. Adina Negrea, Lavinia Lupa, Petru Negrea, Mihaela Ciopec, **Cornelia Muntean**, Simultaneous removal of ammonium and phosphate ions from wastewaters and characterization of the resulting product, *Chem. Bull. "Politehnica" Univ., Timisoara, 55(69), 2, pp. 136-142, 2010 (Index Copernicus, Chemical Abstracts Plus)*
9. Mihaela Ciopec, Adina Negrea, Corneliu Mircea Davidescu, Petru Negrea, **Cornelia Muntean**, Adriana Popa, Adsorption of trace metals by XAD-7 impregnated resins with di-(2-ethylhexyl)-phosphoric acid (DEHPA), *Annals of West University of Timisoara, Series Chemistry, 16(1), 2010, pp. 17-27 (EBSCO Publishing, ProQuest)*
10. Petru Negrea, Lavinia Lupa, Dan Visoiu, Raul Brauner, Mihaela Ciopec, **Cornelia Muntean**, Adina Negrea, Cenușa de zinc-sursa secundara de zinc, *Buletinul AGIR, nr. 2-3, 2010, p. 82-87 ( Index Copernicus International, Academic Keys, Getcited)*

**2009**

11. **Cornelia Muntean**, Adina Negrea, Mihaela Ciopec, Lavinia Lupa, Petru Negrea, Dan Rosu, Studies regarding the arsenic removal from water, *Chem. Bull Politehnica Univ. Timisoara, 54(68), 1, 2009, p. 18-20 (Index Copernicus, Chemical Abstracts Plus)*

12. Adina Negrea, **Cornelia Muntean**, Mihaela Ciopec, Lavinia Lupa, Petru Negrea, Removal of arsenic from underground water to obtain drinking water, Chem. Bull., Politehnica, Univ., Timisoara, 54(68), 2, pp. 82-84, 2009, ISSN: 1224-6077 (Index Copernicus, Chemical Abstracts Plus)

**2007**

13. Angela Magda, **Cornelia Muntean**, Petru Negrea, Lavinia Lupa, Geza Bandur, Aurel Iovi, Liviu Costea, Studies on the obtaining process of fertilizers based on ammonium phosphates with addition of sodium tetraborate, Chem. Bull. "Politehnica" Univ. (Timisoara), 52(66), nr. 1-2, 2007, pp. 66-70
14. Lavinia Lupa, Petru Negrea, Aurel Iovi, Mihaela Ciopec, **Cornelia Muntean**, The obtaining of iron red pigment from sludge resulted by spent acid neutralization, Proceedings of the 3<sup>rd</sup> International Conference on Life Cycle Management "From analysis to implementation", LCM 2007, Zürich, Elveția, 27-29 august 2007, CD 6

**2006**

15. **Cornelia Muntean**, Adina Negrea, Lavinia Lupa, Petru. Negrea, Studies on the extraction of copper and zinc from sterile resulted in mining operations, Environmental Engineering and Management Journal, Vol. 5, Nr. 4, 2006, p. 765-770
16. **Cornelia Muntean**, Petru Negrea, Mihaela Ciopec, Lavinia Lupa, Ioan Ursoiu, Giannin Moșoarcă, Ramona Ghiga, Studies Regarding the Ground Water Pollution in a Rural Area, Chem. Bull. "Politehnica" Univ. (Timisoara), 51(65), nr. 1-2, (2006) 75-78

**2003**

17. **Cornelia Muntean**, Titus Vlase, G. Vlase, Petru Negrea, Comparison between Isothermal and non-Isothermal Decomposition of some Nitrates-Phosphates Fertilizers, Annals of West University of Timisoara, Ser. Chem., 12(3) (2003), pp. 331-338
18. **Cornelia Muntean**, Titus Vlase, G. Vlase, Aurel Iovi, Non-isothermal Kinetics of a Phosphates and Nitrates Mixture used as Fertilizer, Annals of West University of Timisoara, Ser. Chem., **12(3)** (2003) 325-330

**2002**

19. **Cornelia Muntean**, Aurel Iovi, Petru Negrea, Mircea Ștefănescu, Studies on the Thermal Behavior of a Complex Mineral Fertilizer of Nitrophosphate Type with Addition of Micronutrient Zinc, Chem. Bull. "Politehnica" Univ. (Timisoara), 47(61) (2002) 7-16
20. **Cornelia Muntean**, Diana Toma, Corina Iovi, Aurel Iovi, Petru Negrea, Studies on the Thermal Behavior of the Manganese Ammonium Phosphate, Chem. Bull. "Politehnica" Univ. (Timisoara), 47(61) (2002) 1-6

**2000**

21. Mircea Ștefănescu, Costică Caizer, **Cornelia Muntean**, I. Hrianca, Studiul prin analiză termică diferențială și difractometrie X al feritei de Ni-Zn obținută din complecși de tip glioxilat, Analele Universității din Oradea, Ser. Fiz. B, Tom X, 2000, p. 73-80
22. Mircea Ștefănescu, Costică Caizer, **Cornelia Muntean**, Marcela Stoia, Mihail Bîrzescu, Studies on the Formation of the Spinel Phase  $Ni_{0.36}Zn_{0.64}Fe_2O_4$  and its Magnetic Properties, Chem. Bull. "Politehnica" Univ. (Timisoara), 45(59), Nr. 1, 2000, p. 30-36
23. Mircea Niculescu, Nicolae Vaszilcsin, **Cornelia Muntean**, Corneliu Mircea Davidescu, Mihail Bîrzescu, Oxidation Reaction of Some Diols with  $M(NO_3)_2 \cdot 6H_2O$  (M: Ni(II), Co(II)). Thermal Behaviour of the Obtained Complex Intermediates (I), Chem. Bull. "Politehnica" Univ. (Timisoara) 43(57), Nr.2 (1998) 259-274
24. Ioan Goanță, Adrian Grozav, **Cornelia Muntean**, M. Iorga, D. Vezoc, M. Jurcuța, Dan Roșu, Relative Dependencies Between the Operating Parameters and the Characteristics of the Products in Air Blowing of Oil Residues, Chem. Bull. "Politehnica" Univ. (Timisoara), 41(55), (1996), pp. 59-64

**d. Articole publicate în reviste neindexate in baze de date****2016**

1. Daliana Mocuța, Carmen Todea, Andreea Lazea, Elena Hogeia, **Cornelia Muntean**, Study on the influence of laser radiation in the plaque compared with 0.2 % chlorhexidine – microbiological and microscopic analysis, Revista Română de Stomatologie, vol. LXII, nr. 3, 2016
2. Daliana Mocuța, Carmen Todea, Andreea Lazea, Elena Hogeia, **Cornelia Muntean**, The influence of laser radiation in decontamination of bacterial plaque in patients with orthodontic treatment. A microbiological “in vitro” investigation, Archives of the Balkan Medical Union, 51(3), 2016, pp. 352-357

**2009**

3. Adina Negrea, Lavinia Lupa, Petru Negrea, Mihaela Ciopec, **Cornelia Muntean**, Materiale neconvenționale utilizate în absorbția arsenului din ape subterane Bul. AGIR, nr. 2-3/2009, aprilie-septembrie, ISSN 1224-7928, p. 44-48.
4. **Cornelia Muntean**, Adina Negrea, Lavinia Lupa, Petru Negrea, Mihaela Ciopec, Controlul calității apelor subterane, Bul. AGIR, nr. 2-3/2009, aprilie-septembrie, ISSN 1224-7928, p. 38-43.

**2008**

5. Adina Negrea, **Cornelia Muntean**, Petru Negrea, Mihaela Ciopec, Lavinia Lupa, Bio-remediation of the Zinc polluted Soils from Mining Areas, Chem. Bull. “Politehnica” Univ. (Timisoara), 53(67), 1-2, 2008, p. 83-88
6. Adina Negrea, Mihaela Ciopec, Lavinia Lupa, **Cornelia Muntean**, Petru Negrea, Studies regarding the Copper Ions Removal from Waste Waters, Chem. Bull. “Politehnica” Univ. (Timisoara), 53(67), 1-2, 2008, p. 93-97
7. Adina Negrea, Lavinia Lupa, Mihaela Ciopec, **Cornelia Muntean**, Petru Negrea, Georgiana Mladin, Studies regarding the Establishment of the optimum Conditions of Ammonium and Phosphate Ions Removal from Water, Chem. Bull. “Politehnica” Univ. (Timisoara), 53(67), 1-2, 2008, p. 98-101
8. Adina Negrea, Lavinia Lupa, **Cornelia Muntean**, Mihaela Ciopec, Petru Negrea, Carmen Ghimboasă, Marinela Motoc, Studies regarding the possibilities of ammonium ions removal from underground waters, Chem. Bull. “Politehnica” Univ. (Timisoara), 53(67), 1-2, 2008, p. 106-109
9. Ramona Ghiga, Aurel Iovi, Petru Negrea, Adina Negrea, **Cornelia Muntean**, Lavinia Lupa, Mihaela Ciopec, Studies regarding the establishment of the optimum conditions of obtaining process of NP fertilizers with micronutrients, Chem. Bull. “Politehnica” Univ. (Timisoara), 53(67), 1-2, 2008, p. 276-279.
10. Petru Negrea, Florian Sidea, Adina Negrea, Lavinia Lupa, Mihaela Ciopec, **Cornelia Muntean**, Studies regarding the benzene, Toluene and o-xylene removal from waste water, Chem. Bull. „Politehnica” Univ. Timisoara, 53(67), 1-2, 2008, p. 144-146.
11. Adina Negrea, Mihaela Ciopec, Lavinia Lupa, **Cornelia Muntean**, Obținerea îngrășămintelor de tipul PK cu microelementul cupru în vederea îmbunătățirii calității recoltelor, Bul. AGIR, nr. 1-2/2008, ianuarie-iunie, ISSN 1224-7928, p. 46-53.
12. **Cornelia Muntean**, Adina Negrea, Mihaela Ciopec, Lavinia Lupa, Studii asupra calității cătinei albe utilizată în scop terapeutic, Bul. AGIR, nr. 1-2/2008, ianuarie-iunie, ISSN 1224-7928, p. 42-45

**2006**

13. Lavinia Lupa, Aurel Iovi, Petru Negrea, Adina Negrea, **Cornelia Muntean**, Bogdan Gyrfas, Studies about the separation process of iron and zinc ions from residual solutions resulted from dezincing process, Bul. UPT, Seria Mecanică, Fascicola 2, Tom 51(65), 2006, p. 129-132
14. Petru Negrea, Adina Negrea, **Cornelia Muntean**, Lavinia Lupa, Mihaela Antonescu, Studies about nickel ions elimination from residual waters resulted from nickel coat baths, Bul. UPT, Seria Mecanică, Fascicola 2, Tom 51(65), 2006, p. 133-136

15. Adina Negrea, Lavinia Lupa, Petru Negrea, **Cornelia Muntean**, Alina Gușetoiu, Studies about copper ions elimination from residual waters, Bul. UPT, Seria Mecanica, Fasciola 2, Tom 51(65), 2006, p. 137-140
16. **Cornelia Muntean**, Adina Negrea, Petru Negrea, Lavinia Lupa, Roxana Țig, Studies regarding the pollution in Roșia Poieni area, Bul. UPT, Seria Mecanică, Fascicola 1, Tom 51(65), 2006, p. 279-280, ISSN: 1582-9596
17. Ramona Ghiga, Aurel Iovi, **Cornelia Muntean**, Adina Negrea, Giannin Moșoarcă Studies on the extraction of cooper and zinc from waste catalysts resulted from catalytic conversion of CO, Chem. Bull. "Politehnica" Univ. (Timisoara), vol. 51(65), 1-2, 2006, p. 57-60

#### 5. ARTICOLE/STUDII PUBLICATE ÎN VOLUMELE UNOR MANIFESTĂRI ȘTIINȚIFICE

##### 2015

1. Carmen-Kristina Vinczi, **Cornelia Muntean**, Îndepărtarea coloranților din ape reziduale cu ajutorul materialelor cu proprietăți adsorbante, Simpozionul Științific Studentesc "Turism și Dezvoltare Durabilă", Ediția A IV-A, Timișoara, 22 mai 2015, pp.78-85

##### 2012

2. Lavinia Lupa, Adina Negrea, Mihaela Ciopec, Petru Negrea, Gabriela Garban, **Cornelia Muntean**, Andreea Dragota, Studies regarding the possibilities of slag immobilization in concrete, The International Symposium on Analytical and Environmental problems, with special emphasis on heavy metals ions as contaminants, Szeged, 2012, pp. 24-27, ISBN: 978-963-306-165-7
3. Mihaela Ciopec, Gabor Galbacs, Corneliu Mircea Davidescu, Lavinia Lupa, Negrea Adina, Petru Negrea, **Cornelia Muntean**, Studies regarding the advanced treatment of wastewaters resulted from hot-zinc galvanizing, The International Symposium on Analytical and Environmental problems, with special emphasis on heavy metals ions as contaminants, Szeged, 2012, pp. 28-31

##### 2011

4. Petru Negrea, Mihaela Ciopec, **Cornelia Muntean**, Gabriela Gârban, Lupa Lavinia, Negrea Adina, Studies on the purification of wastewaters with high nickel ions content, The International Symposium on Analytical and Environmental problems, with special emphasis on heavy metals ions as contaminants, Szeged, 2011, p. 291-294, ISBN: 978-963-315-066-5
5. Negrea Adina, Gabriela Gârban, Mihaela Ciopec, **Cornelia Muntean**, Petru Negrea, Ioneta Dragomir, Studies regarding the turning to account of the waste resulting from coal exploitation, The International Symposium on Analytical and Environmental problems, with special emphasis on heavy metals ions as contaminants, Szeged, 2011, p. 295-298
6. Mihaela Ciopec, Zoltan Galbacs, Gabor Garbacs, Negrea Adina, **Cornelia Muntean**, Corneliu Mircea Davidescu, Lavinia Lupa, Studies on column adsorption of arsenic (V) from a real water on DEHPA-impregnated XAD8 resin, The International Symposium on Analytical and Environmental problems, with special emphasis on heavy metals ions as contaminants, Szeged, 2011, p. 287-290
7. Mihaela Ciopec, Negrea Adina, Corneliu Mircea Davidescu, Adriana Popa, **Cornelia Muntean**, Petru Negrea, Lavinia Lupa, Use of chelating resins bearing aminomethyl phosphoric acid groups attached to phenyl groups of a styrene divinylbenzene copolymer matrix for recovery of arsenic (V) from aqueous solutions, Xeme Colloque Franco-Roumain sur les polymers, sept. 2011, Douai, Franta, p. 170-173, ISSN: 978-1-61668-624-6

##### 2009

8. **Cornelia Muntean**, Adina Negrea, Mihaela Ciopec, Lavinia Lupa, Petru Negrea, Studies regarding the stabilization of sterile dumps by bio-accumulation, The 16th International Symposium on Analytical and Environmental Problems, Szeged, 2009, p. 416-419



9. Adina Negrea, Anamaria Tecsi, **Cornelia Muntean**, Lavinia Lupa, Mihaela Ciopec, Dan Rosu, Studies regarding the establishment of the adsorption conditions of arsenic on an unconventional material, The 16th International Symposium on Analytical and Environmental Problems, Szeged, 2009, p 412-415
10. Mihaela Ciopec, Adina Negrea, **Cornelia Muntean**, Lavinia Lupa, Petru Negrea, Studies regarding the turning into account of incineration ash as copper and iron sulphate, The 16th International Symposium on Analytical and Environmental Problems, Szeged, 2009, p. 420-423

**2008**

11. Adina Negrea, **Cornelia Muntean**, Lavinia Lupa, Mihaela Ciopec, Petru Negrea, Studies regarding the sequential extraction of zinc from soil, Proceedings of The 15<sup>th</sup> symposium on analytical and environmental problems, 22 September 2008, Szeged Hungary, ISBN 978-963-87720-0-8, p. 258-261
12. Petru Negrea, Lavinia Lupa, Mihaela Ciopec, **Cornelia Muntean**, Adina Negrea, Aerobe biological treatment of waste waters on a pilot installation, Proceedings of The 15<sup>th</sup> symposium on analytical and environmental problems, 22 September 2008, Szeged Hungary, ISBN 978-963-87720-0-8, p. 262-265
13. **Cornelia Muntean**, Petru Negrea, Mihaela Ciopec, Lavinia Lupa, **Adina Negrea**, Marinela Motoc, Studies on the copper ions removal from waste solutions through precipitation with Na<sub>2</sub>CO<sub>3</sub>, Proceedings of The 15<sup>th</sup> symposium on analytical and environmental problems, 22 September 2008, Szeged Hungary, ISBN 978-963-87720-0-8, p. 266-270
14. **Cornelia Muntean**, Petru Negrea, Adina Negrea, Mihaela Ciopec, Lavinia Lupa, Giannin Moșoarcă, Ramona Ghiga, IR-Spectroscopy and SEM Studies on Some Nitrophosphate Fertilizers Containing Microelements, International Scientific Symposium: „Increase of Profitability and Sustainability of Agricultural Production in Trans-Frontier Area”, PHARE CBC RO 2005/017-536.01.01.01.25., 15 Mai 2008, ISBN 978-973-620-392-3, p. 66-74
15. Ramona Ghiga, Aurel Iovi, Petru Negrea, Adina Negrea, Lavinia Lupa, Mihaela Ciopec, **Cornelia Muntean**, Giannin Moșoarcă, Studies Regarding the Obtaining Process of NP Fertilizers with Copper and Zinc Microelements, International Scientific Symposium: „Increase of Profitability and Sustainability of Agricultural Production in Trans-Frontier Area”, PHARE CBC RO 2005/017-536.01.01.01.25., 15 Mai 2008, ISBN 978-973-620-392-3, p. 51-58

**2007**

16. **Cornelia Muntean**, Adina Negrea, Mihaela Ciopec, Lavinia Lupa, Marinela Motoc, Studii privind poluarea cu metale grele in zone viticole, Simpozionul National „Protectia Mediului in contextul integrarii europene”, 2007, Timisoara, CD
17. Lavinia Lupa, Petru Negrea, Aurel Iovi, Mihaela Ciopec, Adina Negrea, **Cornelia Muntean**, Giannin Moșoarcă, Studies regarding the neutralizations of the waste water resulted from thermal zinc coating, MicroCAD 2007, International Scientific Conference, 22-23 martie, 2007, Miskolk, p. 77-83
18. **Cornelia Muntean**, Adina Negrea, Lavinia Lupa, Mihaela Ciopec, Ramona Ghiga, Petru Negrea, Giannin Moșoarcă, Studies on the recovery of silver from waste water resulted in photoindustry, MicroCAD 2007, International Scientific Conference, 22-23 martie, 2007, Miskolk, p. 95-99
19. Adina Negrea, **Cornelia Muntean**, Mihaela Ciopec, Lavinia Lupa, Marilena Motoc, Studies regarding the quality of drinking water from a rural area, The 14<sup>th</sup> Symposium on analytical and Environmental problems, 24 sept. 2007, Szeged, Ungaria, p.130-133, ISBN 978-963-87720-0-8
20. **Cornelia Muntean**, Petru Negrea, Lavinia Lupa, Mihaela Ciopec, Marinela Motoc, Studies on the heavy metal accumulation in sea buckthorn used for sterile dumps stabilization, Proceedings of “The 14<sup>th</sup> Symposium on Analytical and Environmental Problems” SZAB, Szeged (Ungaria), 24 Septembrie 2007, 126-129
21. Ramona Ghiga, Aurel Iovi, **Cornelia Muntean**, Petru Negrea, Mihaela Ciopec, Giannin Moșoarcă, Studies regarding the fertilizer obtaining with microelements copper and zinc recovered from waste catalysts, Proceedings of the International Conference "Research People and Actual Tasks on Multidisciplinary Sciences", Lozenec, Bulgaria, 6-8 iunie 2007, vol. 3, 205-209

**2006**

22. Lavinia Lupa, Aurel. Iovi, Petru Negrea, Adina Negrea, **Cornelia Muntean**, Mihaela. Bojin, Studies on the recovery of zinc and iron from residual solutions, The 13<sup>th</sup> Symposium on Analytical and Environmental Problems, Szeged, Hungary, 2006, p. 114-117

**2000**

23. Costică Caizer, I. Hrianca, Mircea Ștefănescu, **Cornelia Muntean**, Obtaining of Nanoparticles of Mixed Ni-Zn Ferrite from Complex Combinations, Proceedings of the IV<sup>th</sup> International Symposium "Regional Multidisciplinary Research", 16-18 nov. 2000, Timișoara, p. 1219, CD-ROM

**1996**

24. Ioan Goanță, Dana Vezoc, Mirela Iorga, **Cornelia Muntean**, Dan Roșu, Bitumuri diluate neparafinoase cu calitate rutiere, "Seminarul național de inginerie chimică", 10-11 oct. 1996, Timișoara, pp. 152-157

**1995**

25. Adrian Grozav, **Cornelia Muntean**, Ioan Goanță, Influența parametrilor de oxidare asupra calității biturilor de tip D 80/120, Seminarul internațional "Îmbrăcămînți rutiere moderne", 11-13 aprilie 1995, Cluj-Napoca, p. 156-161
26. Ioan Goanță, Adrian Grozav, **Cornelia Muntean**, Corina Man, Dana Vezoc, Maria Jurcuța, Mirela Iorga, Dan Roșu, Studiul variabilității compoziției maselor asfaltice provenite de la rafinăria "Petrolsub" Suplacu de Barcău, Zilele Academice Timișene, 25-27 mai 1995, Simpozion: Progrese în concepția și realizarea infrastructurilor pentru transporturi, p. 190-195
27. Ioan Goanță, Adrian Grozav, **Cornelia Muntean**, Viorel Raț, Dana Vezoc, Maria Jurcuța, Mirela Iorga, Dan Roșu, Considerații teoretice asupra fenomenului de îmbătrânire a biturilor, Zilele Academice Timișene, 25-27 mai 1995, Simpozion: Progrese în concepția și realizarea infrastructurilor pentru transporturi, p. 208-215
28. Ioan Goanță, Adrian Grozav, Viorel Raț, Dana Vezoc, **Cornelia Muntean**, Corina Man, Mirela Iorga, Maria Jurcuța, Dan Roșu, Oxidarea cu aer a maselor asfaltice într-un reactor continuu tip coloană prevăzut cu promotori statici de amestecare, Zilele Academice Timișene, 25-27 mai 1995, Secția științe chimice, vol. II, p. 11-16

**6. PROIECTE DE CERCETARE-DEZVOLTARE-INOVARĂ PE BAZĂ DE CONTRACT/GRANT****a. Proiecte de cercetare-dezvoltare-inovare obținute prin competiție, pe bază de contract/grant în străinătate**

1. HURO 1001/232/2.2.2 - Study of the interaction of toxic constituents with biomolecules towards application in environmental analysis, METCAP, 01.03.2012-31.08.2013, 76700 EUR, membru (expert, membru al echipei de management și persoană de contact)

**b. Proiecte de cercetare-dezvoltare-inovare obținute prin competiție, pe bază de contract/grant în țară**

1. Proiect Tip A, Cod CNCIS 500/2000, Pelicule oxidice electroactive obținute prin descompunerea termică a combinațiilor heteropolinucleare având ca liganzi produși de oxidare ai polioliilor sau hidroxiacizilor (membru)
2. Proiect Tip A, Cod CNCIS 714, Contract nr. 27688/14.03.2005, Tema nr. 21, Noi metode de sinteză a unor nanomateriale cu proprietăți controlate (membru)
3. Proiect Tip A, Cod CNCIS 648, Contract nr. 27688/14.03.2005, Tema nr. 29, Nanocompozite de tip  $Ni_xZn_{(1-x)}Fe_2O_4$  cu proprietăți magnetice dirijate, obținute prin două metode neconvenționale de sinteză, originale (membru)
4. Proiect Tip A, Cod CNCIS 714, A1/GR181/19.05.2006, Tema nr. 25, Noi metode de sinteză a unor nanomateriale cu proprietăți controlate (membru)

5. Proiect Tip A, Cod CNCIS 648, contract 2738 din 19.05.2006, Tema nr. 32, Nanocompozite de tip  $Ni_xZn_{(1-x)}Fe_2O_4$  cu proprietăți magnetice dirijate, obținute prin două metode neconvenționale de sinteză, originale (membru)
6. CEEX nr. 51/2006, Metode neconvenționale de sinteză a compușilor oxidici MENESCO (membru)
7. CEEX, 47/2006, Consolidarea și lărgirea parteneriatului la nivel regional și european privind aplicarea metodelor electrochimice la controlul și depoluarea apelor (membru)
8. PN-II-RU-TE-2014-4-0514, Development of nanostructured magnetic composites used as nano-adsorbents and nano-catalysts with high performance in environmental applications (membru, cercetător experimentat).

#### **c. Contracte de cercetare-dezvoltare-inovare**

1. 1991-1993, Tehnologii și aditivi pentru industria alimentară, Ministerul Invățământului și Stiinței
2. 1993, Noi căi de chimizare a hidrocarburilor; dehidrodimerizarea oxidativă a metanului, Ministerul Cercetării și Tehnologiei
3. 1994-1996, Studii pentru determinarea condițiilor de stabilitate a parametrilor fizico-chimici ai bitumului de la Suplacu de Barcău pentru a fi apt aditivării și modificării, A.N.D. CESTRIN
4. 1994-1997, Studii privind intensificarea oxidării reziduiilor de distilare a țițeiurilor neparafinoase indigene, Ministerul Cercetării și Tehnologiei
5. 1995-1997, Realizarea și experimentarea instalației pilotului productiv la S.C. 'Petrosub' S.A. cu verificarea gradului de stabilitate a parametrilor bitumului rutier, A.N.D. CESTRIN

#### **d. Alte contracte de cercetare-dezvoltare-inovare (contracte cu terți)**

1. Contract nr. 337/2005-2006, Determinări de laborator privind chimismul componentelor șlamului dens, rocii de cenușă și apei de infiltrație pentru termocentralele Rovinari, Turceni, Ișalnița și Drobeta, beneficiar S.C. ISPE S.A. București (membru)
2. Contract nr. 566/11.12.2006, Determinări de laborator privind deșeurile din depozitele Santăul Mic (depozit vechi, extindere compartiment 1 și extindere compartiment 2) și Episcopia Bihor Balastieră CFR, beneficiar S.C. ISPE S.A. București (membru)
3. Contract nr. 377/28.01.2008, Studii și determinări de laborator pe șlamul dens (produs din cenușă, zgură și subproduse de la desulfurare) de la CET Govora, beneficiar S.C. ISPE S.A. București (membru)
4. Contract nr. 378/28.01.2008, Determinări de laborator privind deșeurile din depozitul Rontău (depozit vechi compartiment 1, depozit vechi compartiment 2, extindere compartiment 1 și extindere compartiment 2) aferent CET Oradea, beneficiar S.C. ISPE S.A. București (membru)
5. Contract nr. 379/28.01.2008, Determinări de laborator privind chimismul componentelor șlamului dens de la CET Deva, beneficiar S.C. ISPE S.A. București (membru)
6. Contract nr. BC 80/ 02.08.2016, Cercetări și investigații privind microstructura și proprietățile componentelor din industria auto, beneficiar S.C. LEMAN INDUSTRIE ROMANIA S.R.L. (responsabil)
7. Contract subsecvent 2/21.11.2016 la contractul cadru BC 111/2016, Analiză privind calitatea suprafețelor unor piese din industria auto, beneficiar CONTINENTAL AUTOMOTIVE ROMANIA S.R.L. (responsabil)