

CURRICULUM VITAE

INFORMAȚII PERSONALE

Nume și prenume
Adresă

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Naționalitate
Locul și data
nașterii
Naționalitate

ARSENE CECILIA

Universitatea Alexandru Ioan Cuza din Iași, Facultatea de Chimie
Departamentul de Chimie, Laborator de Chimie Analitică
Carol I, Nr. 11, 700506-Iași, România
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Română
Ștefan cel Mare-Neamț, 22 Noiembrie 1970
Română

EXPERIENȚA PROFESIONALĂ

Activitate de evaluare și expertiză

Folosirea tehnicilor cromatografice de tip IC, GC-FID-MS, GC-FID-MS-TDS, GC-ECD, GC-MS, HPLC, în diverse aplicații (calibrări, identificări și separări de compuși). Folosirea tehnicilor spectroanalitice de tip FT-IR cu drum optic mărit pentru determinarea și cuantificarea poluanților chimici gazoși în camerele de simulare a condițiilor atmosferice. Utilizarea tehnicilor spectrofotometrice (UV-vis), tehnicilor de spectroscopie de absorbție atomică (ContrAA 700 with flame and graphite furnace) pentru caracterizarea chimică a unor matrici. Utilizarea analizoarelor de scanare a mobilității particulelor de aerosoli (SMPS-CNC) și a analizoarelor termo-optice pentru discriminarea componentelor OC-EC în particulele de aerosoli. Utilizarea camerelor de reacție folosite în studiul poluanților chimici gazoși în condiții de atmosferă simulată; Analizoare automate pentru măsurarea intensității radiației solare, SO₂, CO, NO_x, O₃.

Specialist pentru sisteme de management al laboratoarelor de încercări și etalonări, conform standardului european EN ISO/IEC 17025:2005 (Nr. de înregistrare al certificatului TRRO AK-32-2010, eliberat de TUV Rheinland Romania SRL).

Auditor intern pentru laboratoarele de încercări și etalonări conform standardelor ISO 17025:2005 și ISO 9011:2002 (Nr. de înregistrare al certificatului TAR AK/58/2010, eliberat de TUV Austria Romania).

Domenii de competență

Mediu (Chimia aerosolilor atmosferici, Poluanți organici și anorganici prezenți în aer, apă, sol, CINETICĂ, reactivitate și mecanisme de reacție pentru procesele fotochimice induse de speciile radicalice și atomice (OH, Cl, NO₃, etc) asupra compușilor organici din aer și apă.

Tehnici instrumentale adecvate (spectroscopice și cromatografice) pentru identificarea și cuantificarea unor analiți specifici din diverse matrici naturale (aer, apă, sol, matrici biologice).

Materiale noi pentru procese de decontaminare (Dezvoltarea și caracterizarea unor materiale noi pentru extracție în fază solidă sub formă de faze staționare (polioxometalați) și membrane cu incluziuni polimerice.

Rolul tehnicilor instrumentale și preparative în investigarea stării de sănătate a omului și mediului (Metode preparative în studiul interdependenței dintre acțiunea terapeutică și manifestarea unor

Activitatea științifică (vezi Anexe)

Experiență de lucru în cercetare și instruire

Specializări postuniversitare

Educație

boli infecțioase (tuberculoza pulmonară, etc.).

Cărți / articole publicate

- Cărți, cursuri universitare și manuale de lucrări practice: 5
- Articole științifice publicate în reviste de specialitate: 64, din care: 21 cu ISI in reviste din străinătate, 20 cu ISI in reviste din țară, 23 in reviste non ISI din tara și din străinătate.
- Participări la manifestări științifice 16, din care în străinătate 9
- Citări lucrări indexate/recenzate în baze de date internaționale: 361; în SCOPUS
- Indice Hirsh = 9

Coordonator științific: lucrări de licență (4), lucrări de disertație (3),

Referent științific: La o teza de doctorat; La 10 referate și examene în programului de pregătire individuală la doctorat; La 32 articole publicate în Atmospheric Environment – Elsevier, Chemosphere - Elsevier, Environmental Science and Pollution Research – Springer, Journal of Membrane Science – Elsevier, Journal of Environmental Analytical Chemistry - Taylor&Francis, Atmospheric Chemistry and Physics – Copernicus, Environmental Chemistry Letters – Springer, Atmospheric Research – Elsevier, Science of the Total Environment – Elsevier, Environmental Monitoring and Assessment – Springer, CLEAN - Soil, Air, Water – Springer, Malaysian Journal of Medical Sciences.

Director/responsabil granturi de cercetare/dezvoltare: cu finanțare internă: 1; cu finanțare externă: 5

Colaborator în granturi de cercetare: cu finanțare internă: 4; cu finanțare externă: 4

2013– : **conferențiar universitar**, prin concurs la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie

2003-2013: **lector universitar**, prin concurs, la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie

1999-2003: **asistent universitar**, prin concurs, la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie

1996-1999: **preparator universitar**, prin concurs, la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie

2005-2007: (24 luni, 07/2005-07/2007), Stagiul postdoctoral la Universitatea din Creta, Laboratorul de Investigarea Proceselor Chimice din Mediu, Tema de cercetare: Evaluarea impactului aerosolilor atmosferici asupra climei în zona Mediteraneană, Marie Curie Intra-European Fellowship, FP6-MEIF-CT-2005-009578 ECITAMA.

1998-2001: (48 luni, martie 1998 – martie 2002), bursa de cercetare doctorat la Bergische Universität, Gesamthochschule Wuppertal, Germania

14.12.2000 susținerea tezei de doctorat în Chimie, Specialitatea Chimia atmosferei, la la Bergische Universität, Gesamthochschule Wuppertal, Germania.

10.1995-06.1996:Diplomă de Studii Aprofundate, Facultatea de Chimie, Universitatea "Al I Cuza" Iasi.

Stagii pregătire mobilități	de și	<p>10.1990-06.1995:Diploma de licență în Chimie, Facultatea de Chimie Universitatea "Al. I. Cuza" Iași.</p> <p>09.1985-06.1989:Diplomă de Bacalaureat, Liceul de Matematică-Fizică, Petru Rareș, Piatra Neamț.</p> <p>09.1977-06.1985:Școala generală cu clasele I-VIII din Ștefan cel Mare-Neamț.</p> <p>08/2011-09/2011:profesor invitat la Departamentul de Chimie și Mediu de la Ecole des Mines din Douai, Franța.</p> <p>03/2009: Laborator de Investigare a Proceselor Chimice din Mediu, Universitatea din Creta, Heraklion, Grecia.</p> <p>12/2008:Laborator de Chimie Analitică, Universitatea din Torino, Facultatea de Chimie, prin 15th Italian-Romanian Executive Programme of S&T Co-operation.</p>
Membru societăți științifice	în	Membru al Societății Române de Chimie (din 2005)
Cunoștințe utilizare computere		Operare bună PC (Microsoft Office Word; Microsoft Office Power Point; Microsoft Office Excel; Origin, Internet (Explorer, Mozilla, Opera), Chem Draw, Isis draw), operare specială aparate (Spectra manager, Opus, Igor, WinSpect etc). ș.a.
Limbi străine cunoscute		Engleza - foarte bine (citit, scris, vorbit) Germana - bine (citit, scris, vorbit)

Iași
14.12.2013

a) **Lucrări ISI**

1. Olariu, R.I., Barnes, I., Bejan, I., Arsene, C., Vione, D., Klotz, B., Becker, K.H., FTIR product study of the reactions of NO₃ radicals with ortho-, meta-, and para-cresol, *Environmental Science and Technology*, 47, 7729-7738, **2013**.
2. Pindaru, D.M., Tanase, C., Olariu, R.I., Arsene, C.*, Chemical composition and ions concentrations in *Xanthoria Parietina* and *Phaeosphyscia orbicularis* lichenised fungi species from Iasi, north-eastern Romania, *Revista de Chimie*, Bucharest, 64, 807-814, **2013**.
3. Pindaru, D.M., Tanase, C., Olariu, R.I., Arsene, C.*, Extra and intercellular concentrations of water soluble cations from *Xanthoria Parietina* and *Phaeosphyscia orbicularis* lichenised fungi species, *Revista de Chimie*, Bucharest, 64, 715-719, **2013**.
4. Arsene, C., Vione, D., Grinberg, N., Olariu, R.I., GCxGC-MS hyphenated techniques for the analysis of volatile organic compounds in air, *Journal of Liquid Chromatography & Related Technologies*, 34, 1077-1111, **2011**.
5. Gherasim, C.V.I., Bourceanu, G., Olariu, R.I., Arsene, C., Removal of lead(II) from aqueous solutions by a polyvinyl-chloride inclusion membrane without added plasticizer, *Journal of Membrane Science*, 377(1-2), 167-174, **2011**.
6. Cernat, R.I., Mihaescu, T., Vornicu, M., Vione, D., Olariu, R.I., Arsene, C.*, Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis, *International Journal of Tuberculosis and Lung Diseases*, 15, 1239-1245, **2011**.
7. Arsene, C., Olariu, R.I., Zampas, P., Kanakidou, M., Mihalopoulos, N., Ion composition of coarse and fine particles in Iasi, north-eastern Romania. Implications for aerosols chemistry in the area, *Atmospheric Environment*, 45, 906-916, **2011**.
8. Gherasim, C.V., Bourceanu, G., Olariu, R.I., Arsene, C., A novel polymer inclusion membrane applied in chromium (VI) separation from aqueous solutions, *Journal of Hazardous Materials*, 197, 244-253, **2011**.
9. Stefanescu, I.A., Gavrilă, L., Mocanu, R.D., Olariu, R.I., Arsene, C.*, Bioremediation perspective of *Bacillus Megaterium* towards heavy metals in environments enriched with phosphogypsum, *Revista de Chimie*, 62, 245-249, **2011**.
10. Olariu, R.I., Arsene, C., Humelnicu, D., Duncianu, M., Mantu, D., Investigation on environmental radionuclide retention on hetero-polioxo-metallic sorbents for radionuclide analysis by ionic chromatography, *International Journal of Conservation Science*, 1, 248, **2010**.
11. Cernat, R.I., Mocanu, R.D., Popa, E., Sandu, I., Olariu, R.I., Arsene, C.*, Investigation of chemical parameters in biological systems, *Revista de Chimie*, 61, 1130-1135, **2010**.
12. Humelnicu, D., Arsene, C., Burgele, B., Bertescu, M., Humelnicu, I., Sandu, I., Mantu, D., Olariu, R.I., Interaction of actinide cations with heteropolytungstate ions [SiW₁₁O₃₉]⁸⁻ and [SiW₁₂O₄₀]⁴⁻, *Revista de Chimie*, 61, 841-844, **2010**.
13. Olariu, R.I., Vione, D., Grinberg, N., Arsene, C.*, Sample preparation for trace analysis by chromatographic methods, *Journal of Liquid Chromatography & Related Technologies*, 33, 1174-1207, **2010**.
14. Arsene, C.*, Bougiatioti, A., Mihalopoulos, N., Sources and variability of non-methane hydrocarbons in the Eastern Mediterranean, *Global NEST Journal*, 11, 333-340, **2009**.
15. Humelnicu, D., Olariu, R.I., Sandu, I., Humelnicu, I., Sandu, A.V., Arsene, C., Studies on chemical interferences on uranium (VI) and thorium (IV) reaction with (iso)polyoxometalates, *Revista de Chimie*, 60, 1264-1269, **2009**.
16. Olariu, R.I., Humelnicu, D., Sandu, I., Humelnicu, I., Arsene, C.*, Physico-chemical characterization of a new silica-polyoxometalate thermally modified unit, *Revista de Chimie*, 60, 1216-1219, **2009**.
17. Vione, D., Khanra, S., Cucu Man, S., Maddigapu, P.R., Das, R., Arsene, C., Olariu, R.I., Maurino, V., Minero, C., Inhibition vs. enhancement of the nitrate-induced phototransformation of organic substrates by the OH scavengers bicarbonate and carbonate, *Water Research*, 43, 4718 – 4728, **2009**.
18. Vione, D., Rinaldi, E., Minero, C., Maurino, V., Olariu, R.I., Arsene, C., Studies regarding groundwater quality at rural sites. 2. Photochemical generation of OH and NO₂ radicals upon UV-A irradiation of nitrate-rich groundwater, *Revista de Chimie*, 60, 551-554, **2009**.
19. Vione, D., Maurino, V., Minero, C., Duncianu, M., Olariu, R.I., Arsene, C., Sarakha, M., Mailhot, G., Assessing the transformation kinetics of 2- and 4-nitrophenol in the atmospheric aqueous phase. Implications for the distribution of both nitroisomers in the atmosphere, *Atmospheric Environment*, 43, 2321-2327, **2009**.
20. Vione, D., Lauri, V., Minero, C., Maurino, V., Malandrino, M., Carlotti, M.E., Olariu, R.I., Arsene, C., Photostability and photolability of dissolved organic matter upon irradiation of natural water samples under simulated sunlight, *Aquatic Sciences*, 71, 34-45, **2009**.
21. Vione, D., Ravizzoli, B., Rinaldi, E., Pettinato, F., Arsene, C., Olariu, R.I., Studies regarding groundwater quality at rural sites: 1. Estimation of the anthropic factor impact by complementary chemical analyses, *Revista de Chimie*, 60, 237-240, **2009**.

22. Vione, D., Casanova, I., Minero, C., Duncianu, M., Olariu, R. I., Arsene, C.^{*}, Assessing the potentiality of Romanian surface waters to produce hydroxyl and nitrite radicals, *Revista de Chimie*, 60, 123-126, **2009**.
23. Drochioiu, G., Arsene, C., Murariu, M., Oniscu, C., Analysis of cyanogens with resorcinol and picrate, *Food and Chemical Toxicology*, 46, 3540-3545, **2008**.
24. Olariu, R.I., Humelnicu, D., Arsene, C., Sandu, I., Carja, G., Synthesis and chemical characterisation of new derivative complexes from UO_2^{2+} and Th^{4+} ions with (iso)polyoxomolybdate and (iso)polyoxotungstate clusters, *Revista de Chimie*, 59, 1052-1056, **2008**.
25. Humelnicu, D., Olariu, R.I., Sandu, I., Apostolescu, N., Sandu, A.V., Arsene, C.^{*}, New heteropolyoxotungstates and heteropolyoxomolybdates containing radioactive ions (uranyl and thorium) in their structure, *Revista de Chimie*, 59, 920-925, **2008**.
26. Vione, D., Maurino, V., Cucu-Man, S., Khanra, S., Arsene, C., Olariu, R., Minero, C., Formation of organobrominated compounds in the presence of bromide under simulated atmospheric aerosol conditions, *Chemistry Sustainable Chemistry*, 1, 197-204, **2008**.
27. Arsene, C.^{*}, Olariu, R.I., Mihalopoulos, N., Chemical composition of rainwater in the north-eastern Romania, Iasi region (2003-2006), *Atmospheric Environment*, 41, 9452-9467, **2007**.
28. Arsene, C.^{*}, Bougiatioti, A., Kanakidou, M., Bonsang, B., Mihalopoulos, N., Tropospheric OH and Cl levels deduced from non-methane hydrocarbon measurements in a marine site, *Atmospheric Chemistry and Physics*, 7, 4661-4673, **2007**.
29. Vione, D., Maurino, V., Minero, C., Pelizzetti, E., Harrison, M.A.J., Olariu, R.I., Arsene, C., Photochemical reactions in the tropospheric aqueous phase and on particulate matter, *Chemical Society Reviews*, 35, 441-453, **2006**.
30. Vione, D., Falletti, G., Maurino, V., Minero, C., Pelizzetti, E., Malandrino, M., Ajassa, R., Olariu, R.I., Arsene, C., Sources and sinks of hydroxyl radical upon irradiation of natural water samples, *Environmental Science and Technology*, 40, 3775-3781, **2006**.
31. Arsene, C., Barnes, I., Becker, K.H., Benter, Th., Gas phase reaction of Cl with dimethyl sulphide. Temperature and oxygen partial pressure dependence of the rate constant, *International Journal of Chemical Kinetics*, 36, 66-73, **2005**.
32. Harrison, M.A.J., Barra, S., Borghesi, D., Vione, D., Arsene, C., Olariu, R.I., Nitrated phenols in the atmosphere. A review, *Atmospheric Environment*, 39, 231-248, **2005**.
33. Arsene, C., Barnes, I., Olariu, R.I., Becker, K.H., Dimethyl sulphide photo-oxidation at various NO_2 concentrations. 2. Investigation on particle formation, *Revue Roumanie de Chimie*, 50, 485-490, **2005**.
34. Arsene, C., Barnes, I., Olariu, R.I., Becker, K.H., Dimethyl sulphide photo-oxidation at various NO_2 concentrations. 1. Product study and mechanistic investigations, *Revue Roumanie de Chimie*, 50, 359-369, **2005**.
35. Arsene, C., Barnes, I., Becker, K.H., Schneider, W., Wallington, T., Mihalopoulos, N., Patroescu-Klotz, I., Formation of methane sulphinic acid in the gas phase OH-radical initiated oxidation of dimethyl sulphoxide, *Environmental Science and Technology*, 36, 5155-5163, **2002**.
36. Onofrei, T., Arsene, C., Hurduc, N., A non-isothermal kinetic study upon the Pb(II) sorption on chemically-modified celluloses, *Cellulose Chemistry and Technology*, 36, 507-514, **2002**.
37. Arsene, C., Barnes, I., Becker, K.H., Mocanu, R., FT-IR product study in the photo-oxidation of dimethyl sulphide in the presence of NO_x . Temperature dependence, *Atmospheric Environment*, 35, 3769-3780, **2001**.
38. Onofrei, T., Hurduc, N., Arsene, C., A non-isothermal kinetic study on the sorption of elements from group IIA on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, *Cellulose Chemistry and Technology*, 35, 235-241, **2001**.
39. Onofrei, T., Arsene, C., Mita, C., Agache, C., Sorption of elements from group IIA on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, *Cellulose Chemistry and Technology*, 35, 15-23, **2001**.
40. Onofrei, T., Hurduc, N., Arsene, C., Ionescu, D., Sorption of Cu(II), Co(II) and Ni(II) on 1-(4'-azobenzylcellulose)-2-naphtol. Thermogravimetric characterisation, *Cellulose Chemistry and Technology*, 34, 261-268, **2000**.
41. Arsene, C., Barnes, I., Becker, K.H., FT-IR product study of the photo-oxidation of dimethyl sulphide. Temperature and O_2 partial pressure dependence, *Physical Chemistry Chemical Physics*, 1, 5463-5470, **1999**.

b) Teza de doctorat

Atmospheric Degradation Mechanism of Organic Sulphur Compounds

Thesis submitted to the Faculty of Chemistry, Bergische Universität – Gesamthochschule Wuppertal, Germany, for the Degree of Doctor in Science (Dr. rerum naturalium.) by Cecilia Arsene in October **2001**. Thesis defended in December 14th 2001.

c) Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate

1. Arsene, C.*, Bougiatioti, A., Mihalopoulos, N., Non-methane hydrocarbons variability in the Eastern Mediterranean, pp. 197-206, in Regional Climate Variability and its Impacts in the Mediterranean Area, Mellouki, A., Ravishankara, A.R., eds, NATO Science Series, IV. Earth and Environmental Sciences, Vol. 79, ISBN: 978-1-4020-6428-9, Springer, Netherlands, **2007**.
2. Arsene, C.*, Mihalopoulos, N., Olariu, R.I., Atmospheric wet deposition monitoring in Iasi, Romania, pp. 369-377, in Environmental Simulation Chambers - Application to Atmospheric Chemical Processes, Barnes, I., Rudzinski, K. J., eds., NATO Science Series, IV. Earth and Environmental Sciences, Vol. 62, ISBN: 1-4020-4231-0, Springer, Netherlands, **2006**.
3. Arsene, C., Olariu, R.I., Violaki, K., Mihalopoulos, N., Dissolved organic nitrogen deposition on land in the northeastern part of Romania, Workshop on agricultural air quality. State of the science, Aneja, V.P., Schlesinger, W.H., Knighton, R., Jennings, G., Niyogi, D., Gillian, W., Duke, C.S., eds., Potomac, Maryland USA, pp. 464-467, **2006**.
4. Olariu, R.I., Duncianu, M., Arsene, C., Wirtz, K., Determination of photolysis frequencies for small carbonyl compounds using the EUPHORE chamber facilities, pp. 121-128, in Environmental Simulation Chambers - Application to Atmospheric Chemical Processes, Barnes, I., Rudzinski, K. J., eds., NATO Science Series, IV. Earth and Environmental Sciences, Vol. 62, ISBN: 1-4020-4231-0, Springer, Netherlands, **2006**.
5. Arsene, C., Barnes, I., Albu, M., Becker, K.H., Investigation of particle formation in the photo-oxidation of dimethyl sulphide, pp. 141-146, in Global Atmospheric Change and its Impact on Regional Air Quality, Barnes, I., ed., NATO Science Series, IV. Earth and Environmental Sciences, Vol. 16, ISBN 1-4020-0959-3, Kluwer Academic Publishers, Netherlands, **2002**.
6. Arsene, C., Barnes, I., Albu, M., Product study of the Cl Atom initiated photo-oxidation of dimethyl sulphide, 7th Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC), Heraklion, Crete, Greece, pp.145-146, **2002**.
7. Albu, M., Arsene, C., Barnes, I., Investigations of the OH-initiated oxidation of dimethyl sulphide at sub-zero temperatures, 7th Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC), Heraklion, Crete, Greece, pp. 144-145, **2002**.
8. Arsene, C., Barnes, I., Becker, K.H., Studies on the Photo-oxidation of dimethyl sulphide and dimethyl sulphoxide under atmospheric conditions, in Proceedings of the A Changing Atmosphere, 8th European Symposium on the Physico-Chemical Behaviour of Atmospheric Pollutants, Hjorth, J., Jensen, N., eds., Torino, Italy, **2001**.
9. Arsene, C., Barnes, I., Becker, K.H., Mocanu, R., Product studies on the photo-oxidation of dimethyl sulphoxide (DMSO:CH₃S(O)CH₃), in EC Cluster, Chemical Processes and Mechanisms and EUROTRAC-2, Chemical Mechanism Development, Rossi, M.J., Rossi, E.M., eds., Switzerland, pp. 17-20, **2000**.
10. Arsene, C., Barnes, I., Becker, K.H., New product studies on the photo-oxidation of dimethyl sulphide, in EC Cluster, Chemical Processes and Mechanisms and EUROTRAC-2, Chemical Mechanism Development, Vogt, R., Axelsdottir, G., eds., ISBN 3-00-005414-6, Germany, pp. 117-121, **1999**.

d) Alte lucrări și contribuții științifice

Articole științifice publicate în extenso în reviste internaționale și naționale indexate BDI

1. Pindaru, D.M., Tanase, C., Arsene, C., Olariu, R.I., Micromorphological and chemical aspects of some lichenized fungi species, Journal of Plant Development, 19, 73-82, **2012**.
2. Olariu, R.I., Arsene, C., Humelnicu, D., Vasilache, V., Solid-phase extraction and spectrophotometric determination of ultra trace thorium (IV) in water samples, International Journal of Criminal Investigation, 1, 25-30, **2011**.
3. Humelnicu, D., Olariu, R.I., Arsene, C., Bertescu, M., Burghel, B.D., A comparative study on the removal of uranyl ions from artificially enriched radioactive waters using clays from Romania, Analele Stiintifice ale Universitatii Al.I. Cuza Iasi, Geologie, LVI, 1, 85-93, **2010**.
4. Cernat, R.I., Butnaru, L., Mihaescu, T., Olariu, R.I., Arsene, C., Concentratiile ceruloplasminei si cuprului in serul pacientilor cu tuberculoza pulmonara activa, Ceruloplasmin and copper concentrations in patients with active pulmonary tuberculosis, Revista Romana de Medicina de Laborator, Romanian Review of Laboratory Medicine, ISSN 1841-6624, 18, (2/4), 13-14, **2010**.
5. Humelnicu, D., Olariu, R.I., Arsene, C., Humelnicu, I., New isopolyoxomolybdates derived from heptamolybdate with UO₂²⁺ and Th⁴⁺ ions, Ovidius University Annals of Chemistry, 20, 227-231, **2009**.
6. Arsene, C., Barnes, I., Albu, M., Olariu, R.I., Becker, K.H., Wirtz, K., Mechanistic studies on the atmospheric oxidation of organic sulphur compounds, in The European Photoreactor EUPHORE, 4TH REPORT 2001, Barnes, I., Wirtz, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany and Fundacion Centro de Estudios del Mediterraneo, ISBN 84-921259, Valencia, Spain, pp. 152-165, **2004**.
7. Bossoutrot, V., LeBras, G., Arsene, C., Albu, M., Barnes, I., OH-initiated oxidation of dimethyl sulphoxide, in The European Photoreactor EUPHORE 4TH REPORT 2001, Barnes, I., Wirtz, K., eds., Compiled and

Produced by Institute of Physical Chemistry, Bergische Universität Wuppertal, Germany and Fundacion Centro de Estudios del Mediterraneo, ISBN 84-921259, Valencia, Spain, pp. 171-174, **2004**.

8. Arsene, C., Barnes, I., Olariu, I., Becker, K.H., Wirtz, K., Maldonado, C., OH-radical initiated oxidation of dimethyl sulphide and its impact on particle formation, pp. 82-98, in The European Photoreactor EUPHORE, 3RD REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universität Wuppertal, Germany, **2001**.
9. Olariu, R.I., Barnes, I., Arsene, C., Becker, K.H., Wirtz, K., Maldonado, C., Ponds, M., Studies on the atmospheric oxidation of phenol: I. Gas-phase product analysis, pp. 16-26, in The European Photoreactor EUPHORE, 3RD REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universität Wuppertal, Germany, **2001**.
10. Olariu, R.I., Barnes, I., Arsene, C., Becker, K.H., Wirtz, K., Studies on the atmospheric oxidation of phenol: II. Secondary organic aerosol formation, pp. 27-38, in The European Photoreactor EUPHORE, 3RD REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universität Wuppertal, Germany, **2001**.
11. Arsene, C., Barnes, I., Becker, K.H., Studies on the atmospheric oxidation of dimethyl sulphide and dimethyl sulphoxide, pp. 225-236, in The European Photoreactor EUPHORE, 2ND REPORT 1998 - 1999, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universität Wuppertal, Germany, **2000**.
12. Barnes, I., Beyer, H., Arsene, C., Patroescu, I., Individual contributions, University of Wuppertal, pp. 28-42, in Dimethyl sulphide (DMS). Oxidation mechanism in relation to aerosols and climate, DOMAC, EUR 19569 EN, European Communities, **2000**.
13. Onofrei, T., Arsene, C., Mita, C., Sorption and separation of Cu(II), Co(II) and Ni(II) on 1(4'-azobenzylcellulose)-2-naphthol, Southern Brazilian Journal of Chemistry, ISSN 0104-5431, 5, 79-85, **1997**.

Lucrări susținute la manifestări științifice (conferințe, congrese, simpozioane, seminarii și ateliere de lucru), străinătate

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