

**FIȘĂ DE AUTOEVALUARE**  
(conform fișei de exaluare generală a standardelor Universității)

**Anexa 1**

**Conf. dr. habil. Cecilia ARSENE**

**CRITERIUL I**

**I.1 ACTIVITATEA DE CERCETARE**

**Total Criteriul I: 11541.151 puncte**

**Cercetare: 10271.001 puncte**

**1. Articole științifice publicate în extenso în reviste cotate Web of Science cu factor de impact**

**Total: 1470.973 puncte**

<b>Internaționale</b>		
<b>Număr</b>	<b>Articol</b>	<b>Factor impact</b>
1.	Olariu, R.I., Vione, D., Grinberg, N., <a href="#">Arsene C.*</a> , Applications of liquid chromatographic techniques in the chemical characterization of atmospheric aerosols, Journal of Liquid Chromatography and Related Technologies, 38, 322-348, <b>2015</b> .	<b>0.638</b>
2.	Sandu, I., Olariu, R.I., Sandu, I.G., Stirbu, C., Pascu, C., Vasilache, V., Vione, D., <a href="#">Arsene, C.*</a> , Investigation of the dynamics and kinetics involved in saline aerosol generation under air erosion of pure and contaminated halide salts, accepted to be published in the Journal of Aerosol Science, JAEROSCI-D-14-00179, december <b>2014</b> .	<b>2.705</b>
3.	Olariu, R.I., Barnes, I., Bejan, I., <a href="#">Arsene, C.</a> , Vione, D., Klotz, B., Becker, K.H., FTIR product study of the reactions of NO <sub>3</sub> radicals with ortho-, meta-, and para-cresol, Environmental Science and Technology, 47, 7729-7738, <b>2013</b> .	<b>5.257</b>
4.	<a href="#">Arsene, C.</a> , 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, <b>2011</b> .	<b>0.638</b>
5.	Cernat, R.I., Mihaescu, T., Vornicu, M. Vione, D., Olariu, R.I., <a href="#">Arsene, C.*</a> , Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis, International Journal of Tuberculosis and Lung Diseases, 15, 1239-1245, <b>2011</b> .	<b>2.610</b>
6.	<a href="#">Arsene, C.*</a> , 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, <b>2011</b> .	<b>3.110</b>
7.	Gherasim, C.V., Bourceanu, G., Olariu, R.I., <a href="#">Arsene, C.</a> , A novel polymer inclusion membrane applied in chromium (VI) separation from aqueous solutions, Journal of Hazardous Materials, 197, 244-253, <b>2011</b> .	<b>3.925</b>
8.	Gherasim, C.V.I., Bourceanu, G., Olariu, R.I., <a href="#">Arsene, C.</a> , 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, <b>2011</b> .	<b>4.093</b>
9.	Olariu, R.I., Vione, D., Grinberg, N., <a href="#">Arsene, C.*</a> , Sample preparation for trace analysis by chromatographic methods, Journal of Liquid Chromatography & Related Technologies, 33, 1174-1207, <b>2010</b> .	<b>0.638</b>
10.	<a href="#">Arsene, C.*</a> , Bougiatioti, A., Mihalopoulos, N., Sources and variability of non-methane hydrocarbons in the Eastern Mediterranean, Global NEST Journal, 11, 333-340, <b>2009</b> .	<b>0.698</b>
11.	Vione, D., Khanra, S., Cucu Man, S., Maddigapu, P.R., Das, R., <a href="#">Arsene, C.</a> , 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, <b>2009</b> .	<b>4.655</b>
12.	Vione, D., Maurino, V., Minero, C., Duncianu, M., Olariu, R.I., <a href="#">Arsene, C.</a> , 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, <b>2009</b> .	<b>3.110</b>
13.	Vione, D., Lauri, V., Minero, C., Maurino, V., Malandrino, M., Carlotti, M.E., Olariu, R.I., <a href="#">Arsene, C.</a> , Photostability and photolability of dissolved organic matter upon irradiation of natural water samples under simulated sunlight, Aquatic Sciences, 71, 34-45, <b>2009</b> .	<b>2.602</b>
14.	Vione, D., Maurino, V., Cucu-Man, S., Khanra, S., <a href="#">Arsene, C.</a> , Olariu, R., Minero, C., Formation of organobrominated compounds in the presence of bromide under simulated atmospheric aerosol conditions, Chemistry Sustainable Chemistry, 1, 197–204, <b>2008</b> .	<b>7.475</b>

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15.	Drochioiu, G., <a href="#">Arsene, C.</a> , Murariu, M., Oniscu, C., Analysis of cyanogens with resorcinol and picrate, Food and Chemical Toxicology, 46, 3540-3545, <b>2008</b> .	<b>3.010</b>
16.	<a href="#">Arsene, C.</a> , Olariu, R.I., Mihalopoulos, N., Chemical composition of rainwater in the north-eastern Romania, Iasi region (2003-2006), Atmospheric Environment, 41, 9452-9467, <b>2007</b> .	<b>3.110</b>
17.	<a href="#">Arsene, C.</a> , 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, <b>2007</b> .	<b>5.510</b>
18.	<a href="#">Arsene, C.</a> , 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 Discussions, 7, 6329-6356, <b>2007</b> .	<b>0.000</b>
19.	<a href="#">Arsene, C.</a> , 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, 79, 197-206, <b>2007</b> .	<b>0.000</b>
20.	Vione, D., Maurino, V., Minero, C., Pelizzetti, E., Harrison, M.A.J., Olariu, R.I., <a href="#">Arsene, C.</a> , Photochemical reactions in the tropospheric aqueous phase and on particulate matter, Chemical Society Reviews, 35, 441-453, <b>2006</b> .	<b>24.892</b>
21.	Vione, D., Falletti, G., Maurino, V., Minero, C., Pelizzetti, E., Malandrino, M., Ajassa, R., Olariu, R.I., <a href="#">Arsene, C.</a> , Sources and sinks of hydroxyl radical upon irradiation of natural water samples, Environmental Science and Technology, 40, 3775-3781, <b>2006</b> .	<b>5.257</b>
22.	<a href="#">Arsene, C.</a> , Mihalopoulos, N., Olariu, R.I., Atmospheric wet deposition monitoring in Iasi, Romania, in Environmental Simulation Chambers - Application to Atmospheric Chemical Processes, Barnes, I., Rudzinski, K. J., eds., NATO Science Series, IV. Earth and Environmental Sciences, 62, 369-377, <b>2006</b> .	<b>0.000</b>
23.	Olariu, R.I., Duncianu, M., <a href="#">Arsene, C.</a> , Wirtz, K., Determination of photolysis frequencies for small carbonyl compounds using the EUPHORE chamber facilities, in Environmental Simulation Chambers - Application to Atmospheric Chemical Processes, Barnes, I., Rudzinski, K. J., eds., NATO Science Series, IV. Earth and Environmental Sciences, 62, 121-128, <b>2006</b> .	<b>0.000</b>
24.	<a href="#">Arsene, C.</a> , 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, <b>2005</b> .	<b>1.187</b>
25.	Harrison, M.A.J., Barra, S., Borghesi, D., Vione, D., <a href="#">Arsene, C.</a> , Olariu, R.I., Nitrated phenols in the atmosphere. A review, Atmospheric Environment, 39, 231-248, <b>2005</b> .	<b>3.110</b>
26.	<a href="#">Arsene, C.</a> , 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, <b>2002</b> .	<b>5.257</b>
27.	<a href="#">Arsene, C.</a> , Barnes, I., Becker, K.H., Mocanu, R., FT-IR product study in the photo-oxidation of dimethyl sulphide in the presence of NO <sub>x</sub> . Temperature dependence, Atmospheric Environment, 35, 3769-3780, <b>2001</b> .	<b>3.110</b>
28.	<a href="#">Arsene, C.</a> , Barnes, I., Becker, K.H., FT-IR product study of the photo-oxidation of dimethyl sulphide. Temperature and O <sub>2</sub> partial pressure dependence, Physical Chemistry Chemical Physics, 1, 5463-5470, <b>1999</b> .	<b>3.829</b>
29.	Onofrei, T., <a href="#">Arsene, C.</a> , Mita, C., Sorption and separation of Cu(II), Co(II) and Ni(II) on 1,4'-azobenzylcellulose-2-naphtol, Southern Brazilian Journal of Chemistry, 5, 79-85, <b>1997</b> .	<b>0.000</b>
<b>Naționale</b>		
30.	Pindaru, D.M., Tanase, C., Olariu, R.I., <a href="#">Arsene, C.</a> , Chemical composition and ions concentrations in Xanthoria Parietina and Phaeosphyrcia orbicularis lichenised fungi species from Iasi, north-eastern Romania, Revista de Chimie, Bucharest, 64, 808-814, <b>2013</b> .	<b>0.538</b>

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|-----|---|--------------|
| 31. | Pindaru, D.M., Tanase, C., Olariu, R.I., <a href="#">Arsene, C.*</a> , Extra and intercellular concentrations of water soluble cations from Xanthoria Parietina and Phaeosphyscia orbicularis lichenised fungi species, Revista de Chimie, Bucharest, 64, 715-719, <b>2013</b> .  | <b>0.538</b> |
| 32. | Stefanescu, I.A., Gavrilă, L., Mocanu, R.D., Olariu, R.I., <a href="#">Arsene, C.*</a> , Bioremediation perspective of <i>Bacillus Megaterium</i> towards heavy metals in environments enriched with phosphogypsum, Revista de Chimie, 62, 245-249, <b>2011</b> .   | <b>0.538</b> |
| 33. | Olariu, R.I., <a href="#">Arsene, C.</a> , 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, <b>2010</b> .                            | <b>0.000</b> |
| 34. | Cernat, R.I., Mocanu, R.D., Popa, E., Sandu, I., Olariu, R.I., <a href="#">Arsene, C.*</a> , Investigation of chemical parameters in biological systems, Revista de Chimie, 61, 1130-1135, <b>2010</b> .  | <b>0.538</b> |
| 35. | Humelnicu, D., <a href="#">Arsene, C.</a> , Burghele, B., Bertescu, M., Humelnicu, I., Sandu, I., Mantu, D., Olariu, R.I., Interaction of actinide cations with heteropolytungstate ions $[\text{SiW}_{11}\text{O}_{39}]^{8-}$ and $[\text{SiW}_{12}\text{O}_{40}]^{4-}$ , Revista de Chimie, 61, 841-844, <b>2010</b> .        | <b>0.538</b> |
| 36. | Humelnicu, D., Olariu, R.I., Sandu, I., Humelnicu, I., Sandu, A.V., <a href="#">Arsene, C.</a> , Studies on chemical interferences on uranium (VI) and thorium (IV) reaction with (iso)polyoxometalates, Revista de Chimie, 60, 1264-1269, <b>2009</b> .  | <b>0.538</b> |
| 37. | Olariu, R.I., Humelnicu, D., Sandu, I., Humelnicu, I., <a href="#">Arsene, C.*</a> , Physico-chemical characterization of a new silica-polyoxometalate thermally modified unit, Revista de Chimie, 60, 1216-1219, <b>2009</b> .   | <b>0.538</b> |
| 38. | Vione, D., Rinaldi, E., Minero, C., Maurino, V., Olariu, R.I., <a href="#">Arsene, C.*</a> , Studies regarding groundwater quality at rural bites. 2. Photochemical generation of OH and NO <sub>2</sub> radicals upon UV-A irradiation of nitrate-rich groundwater, Revista de Chimie, 60, 551-554, <b>2009</b> .              | <b>0.538</b> |
| 39. | Vione, D., Ravizzoli, B., Rinaldi, E., Pettinato, F., <a href="#">Arsene, C.</a> , 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, <b>2009</b>  | <b>0.538</b> |
| 40. | Vione, D., Casanova, I., Minero, C., Duncianu, M., Olariu, R. I., <a href="#">Arsene, C.*</a> , Assessing the potentiality of Romanian surface waters to produce hydroxyl and nitrite radicals, Revista de Chimie, 60, 123-126, <b>2009</b> .   | <b>0.538</b> |
| 41. | Olariu, R.I., Humelnicu, D., <a href="#">Arsene, C.</a> , Sandu, I., Carja, G., Synthesis and chemical characterisation of new derivative complexes from UO <sub>2</sub> <sup>2+</sup> and Th <sup>4+</sup> ions with (iso)polyoxomolybdate and (iso)polyoxotungstate clusters, Revista de Chimie, 59, 1052-1056, <b>2008</b> . | <b>0.538</b> |
| 42. | Humelnicu, D., Olariu, R.I., Sandu, I., Apostolescu, N., Sandu, A.V., <a href="#">Arsene, C.*</a> , New heteropolyoxotungstates and heteropolyoxomolybdates containing radioactive ions (uranyl and thorium) in their structure, Revista de Chimie, 59, 920-925, <b>2008</b> .  | <b>0.538</b> |
| 43. | <a href="#">Arsene, C.*</a> , Olariu, R.I., Barnes, I., Dimethyl sulphide photo-oxidation at various NO <sub>2</sub> concentrations. 2. Investigation on particle formation, Revue Roumanie de Chimie, 50, 485-490, <b>2005</b> .   | <b>0.331</b> |
| 44. | <a href="#">Arsene, C.*</a> , Barnes, I., Olariu, R.I., Becker, K.H., Dimethyl sulphide photo-oxidation at various NO <sub>2</sub> concentrations. 1. Product study and mechanistic investigations, Revue Roumanie de Chimie, 50, 359-369, <b>2005</b> .  | <b>0.331</b> |
| 45. | Onofrei, T., <a href="#">Arsene, C.</a> , Hurduc, N., A non-isothermal kinetic study upon the Pb(II) sorption on chemically-modified celluloses, Cellulose Chemistry and Technology, 36, 507-514, <b>2002</b> .   | <b>0.825</b> |
| 46. | Onofrei, T., Hurduc, N., <a href="#">Arsene, C.</a> , 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, <b>2001</b> .   | <b>0.825</b> |
| 47. | Onofrei, T., <a href="#">Arsene, C.</a> , Mita, C., Agache, C., Sorption of elements from group IIA on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, Cellulose Chemistry and Technology, 35, 15-23, <b>2001</b> .   | <b>0.825</b> |
| 48. | Onofrei, T., Hurduc, N., <a href="#">Arsene, C.</a> , 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, <b>2000</b> .   | <b>0.825</b> |

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**2. Articole științifice publicate în extenso în reviste indexate fără factor de impact**

**Total: 54.571 puncte**

**Peer-reviewed, necotate ISI, indexate și recunoscute BDI**

1. Petrea-Ioneasa, G., Petrea-Ioneasa, M., Rusu, A.M., Gitman, A., Bibire, N., Olariu, R.I., [Arsene, C.](#), Reversed-phase high performance liquid chromatographic assay method of active pharmaceutical ingredients in anti-tuberculosis 2-fixed dose combination tablets, Acta Chimica Iasi, 22(2), DOI: 102478/achi-2014-0014, **2014**.
2. Negru, A.G., Zbancioc, G., Mangalagiu, I., [Arsene, C.](#), Olariu, R.I., Physico-chemical behaviour of newly synthesized organic compounds. A reality between expectations and experimental evidences, Acta Chimica Iasi, 22(2), DOI: 102478/achi-2014-0014, **2014**.
3. Mardare-Balutescu, G., Soroaga, L.V., Marin, L.S., Agafitei, M.C., [Arsene, C.](#), Olariu, R.I., Physico-chemical forensic expertise in the analysis of soil samples by graphite furnace atomic absorption spectrometry, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 30 October-01 November, Acta Chimica Iasi, 22(2), pp. 255, DOI: 102478/achi-2014-0014, **2014**.
4. Petrea-Ioneasa, M., Olariu, R.I., [Arsene, C.](#), Water soluble organic carbon in aerosols from Iasi, north-eastern Romania, Acta Chimica Iasi, 22(2), pp. 256, DOI: 102478/achi-2014-0014, **2014**.
5. [Arsene, C.](#), Olariu, R.I., Duncianu, M., Riffault, V., Tomas, A., Flow reactor ozonolysis studies of selected dimethyl hexenes in the gas phase, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „Recent Achievements in Organic and Supramolecular Chemistry„ Book of Abstract, Acta Chimica Iasi, 21(2), pp. 26, **2013**.
6. Olariu, R.I., Barnes, I., Bejan, I., [Arsene, C.](#), Vione, D., Klotz, B., Becker, K.H., Night chemistry of hydroxyl(methyl)benzenes: New directions in atmospheric chemistry at the Al.I.Cuza University of Iasi, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „Recent Achievements in Organic and Supramolecular Chemistry„ Book of Abstract, Supplement of the Acta Chimica Iasi journal, Acta Chimica Iasi, 21(2), pp. 20, **2013**.
7. Pindaru, D., Tanase, C., Iftime, C.M., Olariu, R.I., [Arsene, C.](#), Studies on water soluble ionic species of atmospheric particulate matter and lichenised fungi populations of Xanthoria Parietina and Phaeophyscia orbicularis in Iasi urban area, Acta Chimica Iasi, 20(2), pp.64, **2012**.
8. Costica, N., Olariu, R.I., Mihai, C., Breaban, I.G., Rusu, A.I., [Arsene, C.](#), Ciomasu, I.M., Update environmental research infrastructure at „Alexandru Ioan Cuza” University of Iasi. The CERNESIM project, Analele Stiintifice ale Universitatii „Al. I. Cuza” Iasi, Biologie, LVI, Fasc. 2, 85-89, **2010**.
9. Humelnicu, D., Olariu, R.I., [Arsene, C.](#), Bertescu, M., Burgele, 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**.
10. Humelnicu, D., Olariu, R.I., [Arsene, C.](#), Humelnicu, I., New isopolyoxomolybdates derived from heptamolybdate with  $\text{UO}_2^{2+}$  and  $\text{Th}^{4+}$  ions, Ovidius University Annals of Chemistry, 20(2), 227-231, **2009**.
11. Duncianu, M., Olariu, R.I., [Arsene, C.](#), Mocanu, R., Wirtz, K., Reviejo, M.M., Spectro-radiometric determination of the photolysis frequency of  $\text{NO}_2$  in Euphore chamber, ISSN 1221-5341, Analele Stiintifice ale Universitatii „Al.I.Cuza” Iasi, Chimie, 12, 17-24, **2004**.
12. Onofrei, T., [Arsene, C.](#), Agache, C., Sorption of  $\text{Cu(II)}$ ,  $\text{Cd(II)}$  and  $\text{Zn(II)}$  on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, ISSN 1221-5341, Analele Stiintifice ale Universitatii „Al.I.Cuza” Iasi, Chimie, 11, 69-74, **2003**.
13. Onofrei, T., [Arsene, C.](#), Albu, M., Mita, C., Sorption of  $\text{Pb(II)}$  on chemically modified celluloses, Analele Stiintifice ale Universitatii „Al.I.Cuza” Iasi, Chimie, VIII, 275-280, **2000**.

**3. Articole științifice publicate în extenso în reviste indexate BDI**

**Total: 28.643 puncte**

**BDI**

14. 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**.
15. 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**.
16. 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. ISSN 1841-6624. Revista Romana de Medicina de Laborator 2010/ Romanian Review of Laboratory Medicine, 18,13-14, **2010**.

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**EUPHORE**

17. [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, 4<sup>TH</sup> 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**.
18. Bossoutrot, V., LeBras, G., [Arsene, C.](#), Albu, M., Barnes, I., OH-initiated oxidation of dimethyl sulphoxide, in The European Photoreactor EUPHORE 4<sup>th</sup> 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. 171-174, **2004**.
19. [Arsene, C.](#), Barnes, I., Olariu, I., Becker, K.H., Wirtz, K., Maldonado, C., OH-radical initiated oxidation of dimetil sulphide and its impact on particle formation, in The European Photoreactor EUPHORE, 3<sup>RD</sup> REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 82-98, **2001**.
20. Olariu, R.I., Barnes, I., [Arsene, C.](#), Becker, K.H., Wirtz, K., Studies on the atmospheric oxidation of phenol: II. Secondary organic aerosol formation, in The European Photoreactor EUPHORE, 3<sup>RD</sup> REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 27-38, **2001**.
21. 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, in The European Photoreactor EUPHORE, 3<sup>RD</sup> REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 16-26, **2001**.
22. [Arsene, C.](#), Barnes, I., Becker, K.H., Studies on the atmospheric oxidation of dimethyl sulphide and dimethyl sulphoxide, in The European Photoreactor EUPHORE, 2<sup>ND</sup> REPORT 1998 - 1999, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 225-236, **2000**.

**4. Articole științifice publicate în extenso în volumele conferințelor**

**Total: 16.250 puncte**

1. [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**.
2. 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, Contribution to Project ENV 4 - CT97 – 0410. 1998-1999, DOMAC, EUR 19569 EN, European Communities, **2000**.
3. [Arsene, C.](#), Barnes, I., Becker, K.H., Mocanu, R., Product studies on the photo-oxidation of dimethyl sulphoxide (DMSO:CH<sub>3</sub>S(O)CH<sub>3</sub>), pp. 17-20, in EC Cluster, Chemical Processes and Mechanisms and EUROTRAC-2, Chemical Mechanism Development, Rossi, M.J., Rossi, E.M., eds., Lausanne, Switzerland, 11-13 September, **2000**.
4. [Arsene, C.](#), Barnes, I., Becker, K.H., New product studies on the photo-oxidation of dimethyl sulphide, pp. 117-121, in EC Cluster, Chemical Processes and Mechanisms and EUROTRAC-2, Chemical Mechanism Development, Vogt, R., Axelsdottir, G., eds., ISBN 3-00-005414-6, Germany, 20-22 September, **1999**.

**5. Cărți științifice publicate (doar prima ediție)**

**Total: 110.750 puncte**

**Cărți**

**Nr. crt.**

**Titlu**

1. [Cecilia Arsene](#), Romeo Iulian Olariu, Sulfur in atmosfera, ISBN: 973-8188-87-3, Editura Tehnica, Stiintifica si Didactica CERMI, Iasi, **2003**.
2. Romeo Iulian Olariu, [Cecilia Arsene](#), Degradarea atmosferica a hidrocarburilor aromatice, ISBN 973-8490-25-1, Ed. PIM, Iasi, **2002**.
3. [Cecilia Arsene](#), Thorsten Benter, Atmospheric degradation mechanism of organic sulphur compounds, ISSN 1436-2198, Berich Nr. 57, **2002**.

**Capitole de cărți**

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4. Vione, D., Minero, C., Maurino, V., Olariu, R.I., [Arsene, C.](#), Mostofa, K.M.G., Photoinduced Transformation Processes in Surface Waters, pp. 309-332, Chapter 9, in Photochemistry: UV/VIS Spectroscopy, Photochemical Reactions and Photosynthesis, Maes, K.J., Willems, J.M., Eds., Series Chemical Engineering Methods and Technology, ISBN: 978-1-61209-506-6, Imprint: Nova Press, **2011** (book chapter).

**6. Cărți științifice traduse și publicate în edituri din străinătate**

**7. Coordonarea și editarea de volume, traduceri și antologii**

**Total: 3.750 puncte**

Editor, Versita, Book of Abstracts, Faculty of Chemistry Conference, 2013.

**8. Articole publicate în dicționare și enciclopedii**

**9. Contracte de cercetare științifică în instituții academice (universități, institute ale Academiei Române, institute naționale de cercetare, institute de cercetare din străinătate, alte categorii de institute academice)**

**Total: 722.358 puncte**

**contracte internaționale – director: 100 puncte pentru fiecare 100000 EUR**

**228.800 puncte**

**contracte naționale – director: 50 puncte pentru fiecare 500.000 lei**

**105.000 puncte**

**contracte naționale – membru: 50 puncte pentru fiecare 500.000 lei/nr. membri echipa**

**388.558 puncte**

**Director proiecte internaționale/naționale**

**Număr      Proiect**

1. PN-II-ID-PCE-2011-3-0471, 2011-2014, Evaluation of Volatile Organics in the Lower/Upper Troposphere - their Impact on the Oxidizing, Noxious and Aerosol Influx Capacity in Romania (EVOLUTION-AIR), UEFISCDI. 1050000 RON.(241000,00 EUR)
2. FP-7/PEOPLE-MERG-CT-2007-203934. 2007-2010. Intensive Characterisation of Atmospheric Aerosols in the north-eastern Romania at various Urban Sites (ICAARUS). Environment and Sustainable Development. Global Change, Climate and Biodiversity. 45000,00 EUR
3. NATO ESP.EAP.CLG.98258/2007. 2007-2009. Chemical Composition of Atmospheric Aerosols in the North-Eastern Romania. Environmental Security Through Science. 20000,00 EUR
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6. Marie-Curie: FP-6/MEIF-CT-2005-009578. 2005-2007. Evaluation of the Climatic Impact of the Tropospheric Aerosols in the Mediterranean Area (ECITAMA). Environment and Sustainable Development. Global Change, Climate and Biodeversity. 136834,50 EUR

**Membru în echipe internaționale/naționale**

7. POSCCE-A2-O2.2.1-2009-4, ID 901, SMIS 13984, Contract no.: 257/28.09.2010; Subject: Centru integrat de studii in stiinta mediului pentru regiunea de dezvoltare nord-est/CERNESIM. 32009409,00 RON
8. POSDRU/86/1.2/S/62307, Fondul Social European prin Programul Operational Sectorial Dezvoltarea Resurselor Umane, Axa prioritară 1, Educatia si formarea profesionala in sprijinul cresterii economice si dezvoltarii societatii bazate pe cunoastere, Domeniul major de interventie 1.2 Calitate in invatamantul superior, Promovarea cercetării științifice din domeniul criminalisticii în activitatea judiciară, 8457976,00 RON

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9. Bilateral România-Austria, Capacități, Modul III, 304/27.04.2009, 01.05.2009-30.11.2010, Sources and physico-chemical characteristics of atmospheric aerosols at central and east European sites, ARCEE, 52600 RON.  
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14. Projekt No.: 07 AF 22. 1998-2001. Yields of Aerosol Precursors Substances Formed by DMS-Oxidation as a Function of Atmospheric Conditions, GSF-Forschungszentrum für Umwelt und Gesundheit, Projektträger des BMBF für Umwelt und Klimaforschung, Germany.
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**10. Contracte de cercetare în mediul de afaceri și sectorul public**

**11. Brevete**

**12. Citări și recenzii ale creației de autor**

**Total: 5928.705 puncte**

**din care**

**5855.432 puncte citări reviste din străinătate**

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Publicația care se citează	Referința bibliografică a publicației care citează
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Bioremediation perspective of *Bacillus megaterium* towards heavy metals in environments enriched with phosphogypsum

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Sources and sinks of hydroxyl radicals upon irradiation of natural water samples

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**Total: 1375.000 puncte**

**Lucrări sustinute la manifestari stiintifice (conferinte, congrese, simpozioane, seminarii si ateliere de lucru), străinătate**

- 1) Arsene, C., Chemical characterization of atmospheric aerosols from local to long range transboundary pollution. ICAARUS project at the final phase and beyond, Science. Passion, Mission, Responsibilities, Marie Curie Researchers Symposium, Warsaw, Poland, 25-27 September **2011**.
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- 4) Arsene, C., Olariu, R.I., Riffault, V., Tomas, A., Flow reactor ozonolysis studies of selected dimethyl hexenes in the gas phase, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „Recent Achievements in Organic and Supramolecular Chemistry”, Iasi, Romania, 31 October-02 November, **2013**.
- 5) Arsene, C., Olariu, R.I., Duncianu, M., Chemical composition of tropospheric aerosols in Iasi, north-eastern Romania, A XXXI- a Conferinta Nationala de Chimie, Valcea, 05-07 Octombrie **2010**.
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**14. Profesor/cercetător invitat la universități/institute de cercetare**

**Total: 25.000 puncte**

Străinătate: The Ecole Nationale Supérieure des Techniques Industrielles et des Mines de Douai, 02 September 2011.

**15. Editor, membru în Editorial Board la reviste și edituri recunoscute**

**Total: 505.000 puncte**

Acta Chimica Iasi (2013-prezent)

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**Referent de specialitate - evaluare articole trimise spre publicare în:** Atmospheric Environment, Chemosphere, Environmental Science and Pollution Research, International Journal of Environmental Analytical Chemistry, Referent Journal of Membrane Science, Malaysian Journal of Medical Science, Science of the Total Environment, Environmental Monitoring and Assessment, CLEAN - Soil, Air, Water, Atmospheric Research, Environmental Chemistry Letters, Atmospheric Chemistry and Physics, International Journal of Conservation Science, Acta Chimica Iasi; **Referent de specialitate - evaluarea de propuneri competitive proiecte parteneriate (2013) și a propunerilor pentru tinere echipe de cercetători**

**16. Premii internaționale obținute printr-un proces de selecție**

**17. Premii ale Academiei Române**

**18. Alte premii naționale ale instituțiilor culturale**

**19. Participări la manifestări științifice**

**Total: 30.000 puncte**

1. Naționale: Membru Comitet Stiintific, Sesiunea de Comunicari Stiintifice a Studentilor, Masteranzilor si Doctoranzilor, Iasi, Mai 2014
2. Naționale: Membru Comitet Membru Comitete Organizare Conferinta Facultatii de Chimie, Iasi, Octombrie 2014
3. Naționale: Membru Comitet Stiintific, Sesiunea de Comunicari Stiintifice a Studentilor, Masteranzilor si Doctoranzilor, Iasi, Mai 2013
4. Naționale: Membru Comitet Membru Comitete Organizare Conferinta Facultatii de Chimie, Iasi, Octombrie 2013
5. Naționale: Membru Comitet Stiintific, Sesiunea de Comunicari Stiintifice a Studentilor, Masteranzilor si Doctoranzilor, Iasi, Mai 2012
6. Naționale: Membru Comitet Membru Comitete Organizare Conferinta Facultatii de Chimie, Iasi, Octombrie 2012

**ACTIVITATE DIDACTICĂ**

**Didactic: 1270.150 puncte**

**1. Tratatate și manuale universitare**

**Total: 90.150 puncte**

1. Cecilia Arsene și Romeo Iulian Olariu, Cercetarea criminalistica a microurmelor, AIT Laboratories, 978-606-8363-09-7x1, 185 pp, **2011**.
2. Cecilia Arsene and Romeo Iulian Olariu, Understanding atmospheric chemistry of hydrocarbons. An introductory approach, 177 p., ISBN: 978-973-702-657-6, TEHNOPRESS, Iasi, **2009**.
3. Cecilia Arsene si Romeo Iulian Olariu, Metode analitico-statistice in investigarea sistemelor chimice, 241 p., ISBN: 978-973-730-606-7, PERFORMANTICA, Iasi, **2009**.

**2. Proiecte didactice (înfăințare/dotare laboratoare licență, master, săli workshop, biblioteci proprii facultăților, departamentelor, laboratoarelor și grupurilor de cercetare)**

**Total: 200.000 puncte**

Realizare/amenajare laborator de cromatografie, Laborator de Chimie Analitică, Facultatea de Chimie, Universitatea „Al.I. Cuza” Iasi/Realizare Laborator CERNESIM

**3. Materiale suport curs, seminar, lucrări practice și programe analitice detaliate**

**Total: 980.000 puncte**

- 1) Metode de separare și analiză de urme (CH III, 2014) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 2) Managementul calității în analiza chimică. Reglementări ISO (Master CBH, CMSA, 2014) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 3) Chimia Mediului (Master CMSA, 2014) - suport lucrări practice (SLP)
- 4) Metode de separare și analiză de urme (CH III, 2013) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 5) Managementul calității în analiza chimică. Reglementări ISO (Master CMSA, 2013) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 6) Metode de chimie analitica aplicate in cercetarea criminalistica (Master Facultatea de Drept UAIC, 2013) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)

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- 7) Senzori chimici si biochimici (Master CBH, 2013) - suport lucrări practice (SLP)
- 8) Metode de separare și analiză de urme (CH III, 2012) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 9) Tehnici cromatografice în analiza medicamentelor și produselor cosmetice (Master I CPCF, 2012) – suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 10) Metode de chimie analitica aplicate in cercetarea criminalistica (Master Facultatea de Drept UAIC, 2012) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 11) Analiză urme (CH III, 2011) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 12) Metode de separare (CH III, 2011) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
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- 14) Cercetarea criminalistica a microurmelor (Master Proiect coordonat de Academia de politie Bucuresti, 2011) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 15) Metode de chimie analitica aplicate in cercetarea criminalistica (Master Facultatea de Drept UAIC, 2011) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 16) Analiză urme (CH III, 2010) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 17) Metode de separare (CH III, 2010) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 18) Tehnici cromatografice în analiza medicamentelor și produselor cosmetice (Master I CPCF, 2010) – suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
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- 20) Tehnici cromatografice în analiza medicamentelor și produselor cosmetice (Master I CPCF, 2009) – suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 21) Chemometrie si procesarea semnalelor analitice (Master, 2009) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 22) Sampling si metodologii analitice in investigarea mediului (Master, 2008) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 23) Practici instrumentale aplicate in analiza sistemelor chimice (Master, 2008) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 24) Controlul calitatii in analiza chimica (CH III, 2008) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 25) Environmetrie si investigarea proceselor de electrod (Master, 2008) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 26) Sampling si metodologii analitice in investigarea mediului (Master, 2007) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 27) Controlul calitatii in analiza chimica (CH III, 2007) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 28) Environmetrie si investigarea proceselor de electrod (Master, 2007) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 29) Sampling si strategii de monitorizare a mediului (Master, 2004) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 30) Controlul analitic al materialelor (CH IV, 2004) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 31) Metode spectroanalitice Master, 2003) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 32) Controlul analitic al materialelor (CH IV, 2003) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 33) Environmetry-Chemometry applied in environmental investigation (Master, modul in engleza 2002) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)
- 34) Sampling and strategies of environment monitoring (Master, modul in engleza 2001) - suport curs (SC) + suport lucrări practice (SLP) + programa analitică detaliată (PAD)

**4. Organizare de aplicații și practică de specialitate**

**Conf. dr. habil. Cecilia ARSENE**