

**FIȘA DE VERIFICARE A ÎNDEPLINIRII STANDARDELOR MINIMALE ÎN VEDEREA OBȚINERII  
ATESTATULUI DE ABILITARE PENTRU DOMENIUL FUNDAMENTAL MATEMATICĂ ȘI  
ȘTIINȚE ALE NATURII, DOMENIUL ȘTIINȚIFIC CHIMIE**

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(în conformitate cu ORDINUL nr. 4478 publicat în Monitorul Oficial 448/27.06.2011)

(abilitare)

| Nr. crt. | Criteriul                                                                 | Standard minim | Valoare obținută | Observație                |
|----------|---------------------------------------------------------------------------|----------------|------------------|---------------------------|
| 1        | $S_{med} = \frac{1}{\max(N_s, N_{Ref})} \sum_{i=1}^{N_s} \frac{s_i}{n_i}$ | $\geq 0,4$     | 0,55587          | Criteriul este îndeplinit |
| 2        | $C_{med} = \frac{1}{\max(N_c, N_{Ref})} \sum_{i=1}^{N_c} c_i$             | $\geq 5$       | 14.85000         | Criteriul este îndeplinit |
| 3        | $P = \sum_i \frac{s_i}{p_i}$                                              | $\geq 12$      | 13,73623         | Criteriul este îndeplinit |

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**1. Lista de verificare a îndeplinirii standardului S<sub>med</sub>**

| Numar<br>publicatie | Referinta bibliografica                                                                                                                                                                                                                                                                                                                       | s <sub>i</sub> | n <sub>i</sub> | s <sub>i</sub> /n <sub>i</sub> |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|--------------------------------|
| 1.                  | Olariu, R.I., Barnes, I., Bejan, I., Arsene, C., 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>3.02231</b> | <b>7</b>       | <b>0.431759</b>                |
| 2.                  | Gherasim, C.V., Bourceanu, G., Olariu, R.I., <u>Arsene, C.</u> , A novel polymer inclusion membrane applied in chromium (VI) separation from aqueous solutions, Journal of Hazardous Materials, 197, 244-253, <b>2011</b> .                                                                                                                   | <b>2.24377</b> | <b>4</b>       | <b>0.560943</b>                |
| 3.                  | Cernat, R.I., Mihaescu, T., Vornicu, M. Vione, D., Olariu, R.I., <u>Arsene, C.*</u> , Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis, International Journal of Tuberculosis and Lung Diseases, 15, 1239-1245, 2011.                                                                        | <b>1.165</b>   | <b>6</b>       | <b>0.194167</b>                |
| 4.                  | Gherasim, C.V.I., Bourceanu, G., Olariu, R.I., <u>Arsene, C.</u> , 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>2.74214</b> | <b>4</b>       | <b>0.685535</b>                |
| 5.                  | <u>Arsene, C.*</u> , Olariu, R.I., Zarpas, 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>1.68395</b> | <b>5</b>       | <b>0.33679</b>                 |
| 6.                  | <u>Arsene, C.</u> , 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.                                                                                                                | <b>0.48183</b> | <b>4</b>       | <b>0.120458</b>                |
| 7.                  | Vione, D., Khanra, S., Cucu Man, S., Maddigapu, P.R., Das, R., <u>Arsene, C.</u> , 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>2.70499</b> | <b>9</b>       | <b>0.300554</b>                |
| 8.                  | Vione, D., Maurino, V., Minero, C., Duncianu, M., Olariu, R.I., <u>Arsene, C.</u> , 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>1.68395</b> | <b>8</b>       | <b>0.210494</b>                |
| 9.                  | Vione, D., Lauri, V., Minero, C., Maurino, V., Malandrino, M., Carlotti, M.E., Olariu, R.I., <u>Arsene, C.</u> , 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>1.52443</b> | <b>8</b>       | <b>0.190554</b>                |
| 10.                 | Drochioiu, G., <u>Arsene, C.</u> , Murariu, M., Oniscu, C., Analysis of cyanogens with resorcinol and picrate, Food and Chemical Toxicology, 46, 3540-3545, <b>2008</b> .                                                                                                                                                                     | <b>1.95098</b> | <b>4</b>       | <b>0.487745</b>                |
| 11.                 | Vione, D., Maurino, V., Cucu-Man, S., Khanra, S., <u>Arsene, C.</u> , 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>5.80539</b> | <b>7</b>       | <b>0.829341</b>                |

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|     |                                                                                                                                                                                                                                                                                            |          |   |          |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|----------|
| 12. | 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.                                                                                                        | 1.68395  | 3 | 0.561317 |
| 13. | 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.                                                       | 2.26832  | 5 | 0.453664 |
| 14. | Vione, D., Maurino, V., Minero, C., Pelizzetti, E., Harrison, M.A.J., Olariu, R.I., <u>Arsene, C.</u> , Photochemical reactions in the tropospheric aqueous phase and on particulate matter, Chemical Society Reviews, 35, 441-453, 2006.                                                  | 23.92216 | 7 | 3.417451 |
| 15. | Vione, D., Falletti, G., Maurino, V., Minero, C., Pelizzetti, E., Malandrino, M., Ajassa, R., Olariu, R.I., <u>Arsene, C.</u> , Sources and sinks of hydroxyl radical upon irradiation of natural water samples, Environmental Science and Technology, 40, 3775-3781, 2006.                | 3.02231  | 9 | 0.335812 |
| 16. | <u>Arsene, C.</u> , 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.                                          | 0.49927  | 4 | 0.124818 |
| 17. | Harrison, M.A.J., Barra, S., Borghesi, D., Vione, D., <u>Arsene, C.</u> , Olariu, R.I., Nitrated phenols in the atmosphere. A review, Atmospheric Environment, 39, 231-248, 2005.                                                                                                          | 1.68395  | 6 | 0.280658 |
| 18. | <u>Arsene, C.</u> , Barnes, I., Becker, K.H., Schneider, W., Wallington, T., Mihalopoulos, N., Patroescu-Klotz, I., Formation of methane sulphonic acid in the gas phase OH-radical initiated oxidation of dimethyl sulphoxide, Environmental Science and Technology, 36, 5155-5163, 2002. | 3.02231  | 7 | 0.431759 |
| 19. | <u>Arsene, C.</u> , Barnes, I., Becker, K.H., Mocanu, R., FT-IR product study in the photo-oxidation of dimethyl sulphide in the presence of NOx. Temperature dependence, Atmospheric Environment, 35, 3769-3780, 2001.                                                                    | 1.68395  | 4 | 0.420988 |
| 20. | <u>Arsene, C.</u> , Barnes, I., Becker, K.H., FT-IR product study of the photo-oxidation of dimethyl sulphide. Temperature and O2 partial pressure dependence, Physical Chemistry Chemical Physics, 1, 5463-5470, 1999.                                                                    | 2.22800  | 3 | 0.742667 |

$$\sum_{i=1}^{N_s} \frac{S_i}{n_i} = 11.11747$$

$$N_s = 20$$

$$S_{med} = \frac{1}{\max(N_s, N_{Ref})} \sum_{i=1}^{N_s} \frac{S_i}{n_i}$$

$$S_{med} = 0.55587$$

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ȘTIINȚE ALE NATURII, DOMENIUL ȘTIINȚIFIC CHIMIE**

**2. Lista de verificare a îndeplinirii standardului C<sub>med</sub>**

| Numarul publicatiei care se citeaza                                                                                                                                                                                                                                           | Referinta bibliografica a publicatiei k care citeaza                                                                                                                                                                                                                                                | S <sub>k</sub> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1) A novel polymer inclusion membrane applied in chromium (VI) separation from aqueous solutions<br>Gherasim, C.V., Bourceanu, G., Olariu, R.I., <u>Arsene, C.</u><br>JOURNAL OF HAZARDOUS MATERIALS<br>197, 244-253, 2011                                                    |                                                                                                                                                                                                                                                                                                     |                |
| 1.                                                                                                                                                                                                                                                                            | Kagaya, S., Ryokan, Y., Cattrall, R.W., Kolev, S.D., Stability studies of poly(vinyl chloride)-based polymer inclusion membranes containing Aliquat 336 as a carrier, Separation and Purification Technology, 101, 69-75, 2012                                                                      | 2.53774        |
| 2.                                                                                                                                                                                                                                                                            | Almeida, M.I.G.S., Cattrall, R.W., Kolev, S.D., Recent trends in extraction and transport of metal ions using polymer inclusion membranes (PIMs), Journal of Membrane Science, 415-4169-2, 2012                                                                                                     | 2.74214        |
| 3.                                                                                                                                                                                                                                                                            | Gizli, N., Cinarli, S., Demircioglu, M., Characterization of poly(vinylchloride) (PVC) based cation exchange membranes prepared with ionic liquid, Separation and Purification Technology, 97, 96-107, 2012                                                                                         | 2.53774        |
| 2) Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis<br>Cernat, R.I., Mihaescu, T., Vornicu, M. Vione, D., Olariu, R.I., <u>Arsene, C.*</u><br>INTERNATIONAL JOURNAL OF TUBERCULOSIS AND LUNG DISEASES<br>15, 1239-1245, 2011 |                                                                                                                                                                                                                                                                                                     |                |
| 4.                                                                                                                                                                                                                                                                            | Haddad, M.R., Macri, C.J., Holmes, C.S., Goldstein, D.S., Jacobson, B.E., Centeno, J.A., Popek, E.J., (...), Kaler, S.G., In utero copper treatment for Menkes disease associated with a severe ATP7A mutation, Molecular Genetics and Metabolism 107(1-2), 222-228, 2012                           | 1.48952        |
| 3) Removal of lead(II) from aqueous solutions by a polyvinyl-chloride inclusion membrane without added plasticizer<br>Gherasim, C.V.I., Bourceanu, G., Olariu, R.I., <u>Arsene, C.</u><br>JOURNAL OF MEMBRANE SCIENCE<br>377(1-2), pp. 167-174, 2011                          |                                                                                                                                                                                                                                                                                                     |                |
| 5.                                                                                                                                                                                                                                                                            | Suren, S., Pancharoen, U., Thamphiphit, N., Leepipatpiboon, N., A Generating Function applied on a reaction model for the selective separation of Pb(II) and Hg(II) via HFSLM, Journal of Membrane Science, 448, 23-33, 2013                                                                        | 2.74214        |
| 6.                                                                                                                                                                                                                                                                            | Luo, X., Liu, L., Deng, F., Luo, S., Novel ion-imprinted polymer using crown ether as a functional monomer for selective removal of Pb(II) ions in real environmental water samples, Journal of Materials Chemistry A, 1(28), 8280-8286, 2013                                                       | 3.41505        |
| 7.                                                                                                                                                                                                                                                                            | Almeida, M.I.G.S., Cattrall, R.W., Kolev, S.D., Recent trends in extraction and transport of metal ions using polymer inclusion membranes (PIMs), Journal of Membrane Science, 415-416, 9-23, 2012                                                                                                  | 2.74214        |
| 8.                                                                                                                                                                                                                                                                            | Kavitha, N., Palanivelu, K., Recovery of copper(II) through polymer inclusion membrane with di (2-ethylhexyl) phosphoric acid as carrier from e-waste, Journal of Membrane Science, 415-416, 663-669, 2012                                                                                          | 2.74214        |
| 9.                                                                                                                                                                                                                                                                            | Suren, S., Wongsawa, T., Pancharoen, U., Prapasawat, T., Lothongkum, A.W., Uphill transport and mathematical model of Pb(II) from dilute synthetic lead-containing solutions across hollow fiber supported liquid membrane, Chemical Engineering Journal, 191, 503-511, 2012                        | 2.45283        |
| 10.                                                                                                                                                                                                                                                                           | Guo, L., Zhang, J., Zhang, D., Liu, Y., Deng, Y., Chen, J., Preparation of poly(vinylidene fluoride-co-tetrafluoroethylene)-based polymer inclusion membrane using bifunctional ionic liquid extractant for Cr(VI) transport, Industrial and Engineering Chemistry Research, 51(6), 2714-2722, 2012 | 1.91195        |
| 4) Ion composition of coarse and fine particles in Iasi, north-eastern Romania: Implications for aerosols chemistry in the area<br><u>Arsene C.*</u> , Olariu R.I., Zampas P., Kanakidou M., Mihalopoulos N.                                                                  |                                                                                                                                                                                                                                                                                                     |                |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| ATMOSPHERIC ENVIRONMENT<br>45 (4), pp. 906-916, 2011                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                              |         |
| 11.                                                                                                                                                                                                                                                                                                                  | Laongsri, B., Harrison, R.M., Atmospheric behaviour of particulate oxalate at UK urban background and rural sites, Atmospheric Environment, 71, 319-326, 2013                                                                                                                | 1.68395 |
| 12.                                                                                                                                                                                                                                                                                                                  | Squizzato, S., Masiol, M., Brunelli, A., Pistollato, S., Tarabotti, E., Rampazzo, G., Pavoni, B., Factors determining the formation of secondary inorganic aerosol: A case study in the Po Valley (Italy), Atmospheric Chemistry and Physics, 13(4), 1927-1939, 2013         | 2.26832 |
| 5) GCxGC-MS hyphenated techniques for the analysis, of volatile organic compounds in air<br><u>Arsene, C.</u> , Vione, D., Grinberg, N., Olariu, R.I.<br>JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES<br>34, 1077-1111, 2011                                                                              |                                                                                                                                                                                                                                                                              |         |
| 13.                                                                                                                                                                                                                                                                                                                  | Alam, M.S., West, C.E., Scarlett, A.G., Rowland, S.J., Harrison, R.M., Application of 2D-GCMS reveals many industrial chemicals in airborne particulate matter, Atmospheric Environment, 65, 101-111, 2013                                                                   | 1.68395 |
| 14.                                                                                                                                                                                                                                                                                                                  | Laskin, A., Laskin, J., Nizkorodov, S.A., Mass spectrometric approaches for chemical sulfidation of atmospheric aerosols: Critical review of the most recent advances, Environmental Chemistry, 9(3), 163-189, 2012                                                          | 1.59294 |
| 6) Sample preparation for trace analysis by chromatographic methods<br>Olariu R.I., Vione D., Grinberg N., <u>Arsene C.*</u><br>JOURNAL OF LIQUID CHROMATOGRAPHY & RELATED TECHNOLOGIES<br>33(9-12), 1174-1207, 2010                                                                                                 |                                                                                                                                                                                                                                                                              |         |
| 15.                                                                                                                                                                                                                                                                                                                  | Nogueira, J.M.F., Novel sorption-based methodologies for static microextraction analysis: A review on SBSE and related techniques, Analytica Chimica Acta, 757, 1-10, 2012                                                                                                   | 1.86293 |
| 16.                                                                                                                                                                                                                                                                                                                  | Nogueira, J.M.F., Novel sorption-based methodologies for static microextraction analysis: A review on SBSE and related techniques, Analytica Chimica Acta, 757, 1-10, 2012                                                                                                   | 1.86293 |
| 17.                                                                                                                                                                                                                                                                                                                  | Park, S.T., Kim, J., Choi, K., Lee, H.R., Chung, D.S., Headspace-single drop microextraction with a commercial capillary electrophoresis instrument, Electrophoresis, 33(19-20), 2961-2968, 2012                                                                             | 1.35618 |
| 18.                                                                                                                                                                                                                                                                                                                  | Groskreutz, S.R., Swenson, M.M., Secor, L.B., Stoll, D.R., Selective comprehensive multi-dimensional separation for resolution enhancement in high performance liquid chromatography. Part I: Principles and instrumentation, Journal of Chromatography A, 1228, 31-40, 2012 | 1.81101 |
| 19.                                                                                                                                                                                                                                                                                                                  | Martín, J., Buchberger, W., Alonso, E., Himmelsbach, M., Aparicio, I., Comparison of different extraction methods for the determination of statin drugs in wastewater and river water by HPLC/Q-TOF-MS, Talanta, 85(1), 607-615, 2011                                        | 1.69886 |
| 7) Sources and variability of non-methane hydrocarbons in the eastern mediterranean<br><u>Arsene, C.*</u> , Bougiatioti, A., Mihalopoulos, N.<br>GLOBAL NEST JOURNAL<br>11(3), 333-340, 2009                                                                                                                         |                                                                                                                                                                                                                                                                              |         |
| 20.                                                                                                                                                                                                                                                                                                                  | Koigoora, S., Ahmad, I., Pallela, R., Janapala, V.R., Spatial variation of potentially toxic elements in different grain size fractions of marine sediments from Gulf of Mannar, India, Environmental Monitoring and Assessment, 185(9), 7581-7589, 2013                     | 0.61371 |
| 8) Inhibition vs. enhancement of the nitrate-induced phototransformation of organic substrates by the OH scavengers bicarbonate and carbonate<br>Vione, D., Khanra, S., Cucu Man, S., Maddigapu, P.R., Das, R., <u>Arsene, C.</u> , Olariu, R.I., Maurino, V., Minero, C.<br>WATER RESEARCH<br>43, 4718 – 4728, 2009 |                                                                                                                                                                                                                                                                              |         |

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| 21.                                                                                                                                                                                                                                                                                            | El Hachemi, M.E., Naffrechoux, E., Suptil, J., Hausler, R., Bicarbonate Effect in the Ozone-UV Process in the Presence of Nitrate, <i>Ozone: Science and Engineering</i> , 35(4), 302-307, 2013                                                                                    | 0.69574 |
| 22.                                                                                                                                                                                                                                                                                            | Lin, A.Y.C., Wang, X.H., Lee, W.N., Phototransformation determines the fate of 5-fluorouracil and cyclophosphamide in natural surface waters, <i>Environmental Science and Technology</i> , 47(9), 4104-4112, 2013                                                                 | 3.02231 |
| 23.                                                                                                                                                                                                                                                                                            | Wang, X.H., Lin, A.Y.C., Phototransformation of cephalosporin antibiotics in an aqueous environment results in higher toxicity, <i>Environmental Science and Technology</i> , 46(22), 12417-12426, 2012                                                                            | 3.02231 |
| 24.                                                                                                                                                                                                                                                                                            | Franke, D., Hamilton, M.W., Ziegler, S.E., Variation in the photochemical lability of dissolved organic matter in a large boreal watershed, <i>Aquatic Sciences</i> , 74(4), 751-768, 2012                                                                                         | 1.52443 |
| 25.                                                                                                                                                                                                                                                                                            | Ji, Y., Zeng, C., Ferronato, C., Chovelon, J.M., Yang, X., Nitrate-induced photodegradation of atenolol in aqueous solution: Kinetics, toxicity and degradation pathways, <i>Chemosphere</i> , 88(5), 644-649, 2012                                                                | 1.48495 |
| 26.                                                                                                                                                                                                                                                                                            | Despotovic, V.N., Abramovic, B.F., Šojic, D.V., Kler, S.J., Dalmacija, M.B., Bjelica, L.J., Orcic, D.Z., Photocatalytic degradation of herbicide quinmerac in various types of natural water, <i>Water, Air, and Soil Pollution</i> , 223(6), 3009-3020, 2012                      | 1.14751 |
| 27.                                                                                                                                                                                                                                                                                            | Dell'Arciprete, M.L., Soler, J.M., Santos-Juanes, L., Arques, A., Mártire, D.O., Furlong, J.P., Gonzalez, M.C., Reactivity of neonicotinoid insecticides with carbonate radicals, <i>Water Research</i> , 46(11), 3479-3489, 2012                                                  | 2.70499 |
| 28.                                                                                                                                                                                                                                                                                            | Mao, L., Meng, C., Zeng, C., Ji, Y., Yang, X., Gao, S., The effect of nitrate, bicarbonate and natural organic matter on the degradation of sunscreen agent p-aminobenzoic acid by simulated solar irradiation, <i>Science of the Total Environment</i> , 409(24), 5376-5381, 2011 | 1.61037 |
| 29.                                                                                                                                                                                                                                                                                            | Klamerth, N., Malato, S., Maldonado, M.I., Ageera, A., Fernandez-Alba, A., Modified photo-Fenton for degradation of emerging contaminants in municipal wastewater effluents, <i>Catalysis Today</i> , 161(1), 241-246, 2011                                                        | 3.06604 |
| 9) Photostability and photolability of dissolved organic matter upon irradiation of natural water samples under simulated sunlight<br>Vione, D., Lauri, V., Minero, C., Maurino, V., Malandrino, M., Carlotti, M.E., Olariu, R.I., <u>Arsene, C.</u><br>AQUATIC SCIENCES<br>71(1), 34-45, 2009 |                                                                                                                                                                                                                                                                                    |         |
| 30.                                                                                                                                                                                                                                                                                            | Zepp, R.G., Erickson Iii, D.J., Paul, N.D., Sulzberger, B., Effects of solar UV radiation and climate change on biogeochemical cycling: interactions and feedbacks, <i>Photochemical &amp; Photobiological Sciences</i> , 10(2), 261-279, 2011                                     | 1.14097 |
| 31.                                                                                                                                                                                                                                                                                            | Andrady A, Aucamp PJ, Bais AF, Environmental effects of ozone depletion and its interactions with climate change: progress report, 2009, <i>Photochemical &amp; Photobiological Sciences</i> , 9(3), 275-294, 2010                                                                 | 1.14097 |
| 32.                                                                                                                                                                                                                                                                                            | Camp, J.V., George, D.B., Wells, M.J.M., Arce, P.E., Monitoring advanced oxidation of Suwannee River fulvic acid, <i>Environmental Chemistry</i> , 7(3), 225-231, 2010                                                                                                             | 1.59294 |
| 10) Analysis of cyanogens with resorcinol and picrate<br>Drochioiu, G., <u>Arsene, C.</u> , Murariu, M., Oniscu, C.<br>FOOD AND CHEMICAL TOXICOLOGY<br>46, 3540-3545, 2008                                                                                                                     |                                                                                                                                                                                                                                                                                    |         |
| 33.                                                                                                                                                                                                                                                                                            | Hutanu, C.A.D., Zaharia, M., Pintilie, O., Quenching of tryptophan fluorescence in the presence of 2,4-DNP, 2,6-DNP, 2,4-DNA and DNOC and their mechanism of toxicity, <i>Molecules</i> , 18(2), 2266-2280, 2013                                                                   | 0.82167 |
| 34.                                                                                                                                                                                                                                                                                            | Fung, T.C., Grimwood, K., Shimmion, R., Spindler, X., Maynard, P., Lennard, C., Roux, C., Investigation of hydrogen cyanide generation from the cyanoacrylate fuming process used for latent fingerprint detection, <i>Forensic Science International</i> 212(1-3), 143-149, 2011  | 1.13850 |

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ȘTIINȚE ALE NATURII, DOMENIUL ȘTIINȚIFIC CHIMIE**

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|                                                              |     |
|--------------------------------------------------------------|-----|
| $\sum_{i=1}^{NC} C_i$                                        | 297 |
| $N_C = N_{Ref}$                                              | 20  |
| $C_{med} = \frac{1}{\max(N_C, N_{Ref})} \sum_{i=1}^{NC} C_i$ |     |
| $C_{med} = 14.850$                                           |     |

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**3. Lista de verificare a îndeplinirii standardului P**

| Numarul publicatiei          | Referinta bibliografica                                                                                                                                                                                                                                                                    | $s_i$          | $p_i$    | $s_i/p_i$      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------|----------------|
| 1.                           | Cernat, R.I., Mihaescu, T., Vornicu, M. Vione, D., Olariu, R.I., <u>Arsene, C.*</u> , Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis, International Journal of Tuberculosis and Lung Diseases, 15, 1239-1245, 2011.                     | <b>1.16575</b> | <b>1</b> | <b>1.16575</b> |
| 2.                           | <u>Arsene, C.*</u> , 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.                                  | <b>1.68395</b> | <b>1</b> | <b>1.68395</b> |
| 3.                           | <u>Arsene, C.*</u> , Olariu, R.I., Mihalopoulos, N., Chemical composition of rainwater in the north-eastern Romania, Iasi region (2003-2006), Atmospheric Environment, 41, 9452-9467, 2007.                                                                                                | <b>1.68395</b> | <b>1</b> | <b>1.68395</b> |
| 4.                           | <u>Arsene, C.*</u> , 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.                                               | <b>2.26832</b> | <b>1</b> | <b>2.26832</b> |
| 5.                           | <u>Arsene, C.</u> , 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. | <b>3.02231</b> | <b>1</b> | <b>3.02231</b> |
| 6.                           | <u>Arsene, C.</u> , Barnes, I., Becker, K.H., Mocanu, R., FT-IR product study in the photo-oxidation of dimethyl sulphide in the presence of NOx. Temperature dependence, Atmospheric Environment, 35, 3769-3780, 2001.                                                                    | <b>1.68395</b> | <b>1</b> | <b>1.68395</b> |
| 7.                           | <u>Arsene, C.</u> , 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, 1999.                                                        | <b>2.22800</b> | <b>1</b> | <b>2.22800</b> |
| $P = \sum_i \frac{s_i}{p_i}$ | <b>13.73623</b>                                                                                                                                                                                                                                                                            |                |          |                |

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