

Anexa 2a

Titlu proiect: Evaluation of Volatile Organics in the Lower/Upper Troposphere - their Impact on the Oxidizing, Noxious and Aerosol Influx Capacity in Romania

Categorie de proiect: PCE (PN-II-PCE-2011-3-0471)

Contractul de finanțare: Nr. 200/05.10.2011

Manager proiect: Prof. univ. dr. habil. Cecilia ARSENE

Lista rezultate

| Nr. crt. | NUME AUTORI | TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE | REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINTA LA CARE S-A COMUNICAT | ANUL PUBLICARII/ COMUNICARII |
|---------------------|---|--|---|------------------------------------|
| ARTICOLE ISI | | | | |
| 1 | Sandu, I., Olariu, R.I., Sandu, I.G., Stirbu, C., Pascu, C., Vasilache, V., Vione, D., Arsene, C. | Investigation of the dynamics and kinetics involved in saline aerosol generation under air erosion of pure and contaminated halide salts | Journal of Aerosol Sciences, 81, 100-109 | 2015 |
| 2 | Braure, T., Riffault, V., Tomas, A., Olariu, R.I., Arsene, C., Bedjanian, Y., Coddeville, P. | Ozonolysis of a series of methylated alkenes. Reaction rate coefficients and gas-phase products | International Journal of Chemical Kinetics, 47, 596-605 | 2015 |
| 3 | Olariu, R.I., Vione, D., Grinberg, N., Arsene C. | Applications of liquid chromatographic techniques in the chemical characterization of atmospheric aerosols | Journal of Liquid Chromatography and Related Technologies, 38, 322-348 | 2015 |
| 4 | Bejan, I., Duncianu, M., Olariu, R., Barnes, I., Seakins, P.W., Wiesen, P. | Kinetic study of the gas-phase reactions of chlorine atoms with 2-chlorophenol, 2-nitrophenol, and methyl-2-nitrophenol isomers | Journal of Physical Chemistry A, 119, 4735-4745 | 2015 |
| 5 | Negru, A.G., Arsene, C., Zbancioc, A.M., Mangalagiu, I.I., Olariu, R.I. | Physico-chemical behaviour of newly synthesised macrocyclic compounds. A reality between expectations and experimental evidences | Revista de Chimie Bucharest, 66, 1339-1342 | 2015 |
| 6 | Olariu, R.I., Barnes, I., Bejan, I., Arsene, C., Vione, D., Klotz, B., Becker, K.H. | FTIR product study of the reactions of NO ₃ radicals with ortho-, meta-, and para-cresol | Environmental Science and Technology, 47, 7729-7738 | 2013 |
| 7 | Pindaru, D.M., Tanase, C., Olariu, R.I., Arsene, C. | Chemical composition and ions concentrations in Xanthoria Parietina and Phaeophyscia orbicularis lichenised fungi species from Iasi, north-eastern Romania | Revista de Chimie, Bucharest, 64, 808-814 | 2013 |
| 8 | Pindaru, D.M., Tanase, C., Olariu, R.I., Arsene, C. | Extra and intercellular concentrations of water soluble cations from Xanthoria Parietina | Revista de Chimie, Bucharest, 64, 715-719 | 2013 |

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| | | and Phaeophyscia orbicularis lichenised fungi species | | |
| 9 | Cucu-Man, Steinnes, E. | S.M., | Analysis of selected biomonitoring to evaluate the suitability for their complementary use in monitoring trace element atmospheric deposition | Environmental Monitoring Assessment, DOI 10.1007/s10661-013-3135-1 2013 |
| ARTICOLE ALTE BAZE DE DATE | | | | |
| 1 | Arsene, C | | Chemical composition of aerosols, a fragile barrier between healing and wounding, keynote within the International Conference on Medical Physics August 03-05, 2015, Birmingham, UK | Journal of Nuclear Medicine and Radiation Therapy, 6:4 2015 |
| 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 | 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 |
| 4 | Arsene, C., Olariu, R.I., Duncianu, M., Riffault, V., Tomas, A., | | Flow reactor ozonolysis studies of selected dimethyl hexenes in the gas phase | Supplement of the Acta Chimica Iasi journal, ISSN 2067-2438, ISSN (online): 2067 – 2446, pp. 24 2013 |
| 5 | 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 | Supplement of the Acta Chimica Iasi journal, ISSN 2067-2438, ISSN (online): 2067 – 2446, pp. 18 2013 |
| CARTI | | | | |
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| DOCUMENTATIE TEHNICA, BREVETE | | | | |
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| COMUNICARI STIINTIFICE NATIONALE | | | | |
| 1 | Bejan, I., Arsene, C., Olariu, R.I. | | Atmospheric chemistry investigations in a newly designed gas phase simulation chamber (ESC-Q-UAIC) | 3rd International Conference on Analytical Chemistry (ROICAC), Iasi, Romania, 28-31 August 2016 |
| 2 | Galon (Negru), G.A., Olariu, R.I., Arsene, C. | | Atmospheric behavior and size distribution of water soluble acetate, formate and oxalate ions in urban aerosols from Iasi, Romania | The International Conference CHIMIA 2016 "New Trends in Applied Chemistry", Constanta, Romania, May 2016 |
| 3 | Galon (Negru), G.A., Pruna, I., Olariu, R.I., Arsene, C. | | Mono- and multimodal distributions of water soluble ionic species in urban particulate matter from Iasi, Romania | Sesiunea de comunicari stiintifice a studentilor, masteranzilor și doctoranzilor (SCSSMD), Chimia - frontieră deschisă spre cunoaștere, editia VII, pp. 4, Iasi, Romania, 24 2016 |

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| | | | Iunie | |
| 4 | Galon (Negru), G.A., Olariu, R.I., Arsene, C. | Trace Water Soluble Ions in Fine Atmospheric Particles from Iasi, North-Eastern Romania | Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2016, Florescu, M., Raicu, V., LeGac, S., Turcu, I., Maerty, J.L., Eds., pp. 116, Transilvania University Press, ISSN 2360-3461 | 2016 |
| 5 | Galon (Negru), G.A., Olariu, R.I., Arsene, C. | Particulate matter and gaseous pollutants variability in Iasi urban area, north-eastern Romania | 12 th International Conference on Colloid and Surface-Chemistry, ICCSC-2016, pp. 53, Iasi, Romania, 16-18 May | 2016 |
| 6 | Galon (Negru), G.A., Olariu, R.I., Arsene, C. | Mass concentrations and chemical composition of size resolved atmospheric aerosols in the north-eastern Romania, Iasi region | Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), pp. 35, Cluj-Napoca, Romania, 12-14 May | 2016 |
| 7 | Mardare (Balusescu), G., Olariu, R.I., Arsene, C. | Methoxy phenols and other structural constituents in <i>Datura inoxia</i> seeds. Mechanistic approaches | The International Conference CHIMIA 2016 "New Trends in Applied Chemistry", Constanta, Romania, May | 2016 |
| 8 | Mardare (Balusescu), G., Olariu, R.I., Arsene, C. | Gas Chromatography/Mass Spectrometry (GC/MS) as Challenging Problems Solving Microanalytical Tools | Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2016, Florescu, M., Raicu, V., LeGac, S., Turcu, I., Maerty, J.L., Eds., pp. 121, Transilvania University Press, ISSN 2360-3461 | 2016 |
| 9 | Mardare (Balusescu), G., Olariu, R.I., Arsene, C. | Sterols in <i>Datura inoxia</i> as potential key source specific tracers for organic components in ambient atmospheric aerosol particles | 12 th International Conference on Colloid and Surface-Chemistry, ICCSC-2016, pp. 68, Iasi, Romania, 16-18 May | 2016 |
| 10 | Mardare (Balusescu), G., Olariu, R.I., Arsene, C. | Gas chromatography-mass spectrometry analysis of a lignin marker and an indirect contributor to secondary organic aerosols in the atmosphere: p-vinylguaiacol in <i>Datura inoxia</i> | Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), pp. 33, Cluj-Napoca, Romania, 12-14 May | 2016 |
| 11 | Marin, S.L., Galon (Negru), A.G., Mardare (Balusescu), G., Bejan, I., Olariu, R.I., Arsene, C. | Gas-phase kinetic study of OH radical reactions with mesitylene in the newly designed ESCQ-UAIC chamber | Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), pp. 34, | 2016 |

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|--|---|--|--|------|
| | | | Cluj-Napoca, Romania, 12-14 May | |
| 12 | Soroaga, L.V., Olariu, R.I., Galon (Negru), A.G., Arsene, C. | Elemental and morphological analysis of airborne particulate matter collected in Iasi, north-eastern Romania | Sesiunea de comunicari stiintifice a studentilor, masteranzilor și doctoranzilor (SCSSMD), Chimia - frontiera deschisa spre cunoastere, editia VII, pp. 6, Iasi, Romania, 24 Iunie | 2016 |
| 13 | Olariu, R.I., Arsene, C., Barnes, I., Klotz, B., Becker, K.H. | Gas-phase absorption cross sections of selected aromatic hydrocarbons in the IR spectral ranges | “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, Book of Abstracts, pp. 7, oral communication | 2014 |
| 14 | Petrea-Ioneasa, M., Olariu, R.I., Arsene, C. | Water soluble organic carbon in aerosols from Iasi, north-eastern Romania | “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, Book of Abstracts, pp. 31, poster | 2014 |
| 15 | 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 | 3rd French-Romanian Colloquim on Medicinal Chemistry, pp. 51, poster | 2014 |
| 16 | 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, Supplement of the Acta Chimica Iasi journal, ISSN 2067-2438, ISSN (online): 2067 – 2446, pp. 24 | 2013 |
| 17 | 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, ISSN 2067-2438, ISSN (online): 2067 – 2446, pp. 18 | 2013 |
| COMUNICARI STIINTIFICE INTERNATIONALE | | | | |
| 1 | Arsene, C. | Chemical composition of aerosols, a fragile barrier between healing and wounding | keynote within the International Conference on Medical Physics, August 03-05, 2015, Birmingham, UK, in Journal of Nuclear | 2015 |

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| | | | Medicine and Radiation Therapy, 6:4 | |
| 2 | Bejan, I., Marin, S.L., Duncianu, M., Arsene, C., Olariu, R.I. | Validation of a newly designed simulation chamber (ESCO-UAIC) using gas phase investigations on aromatic compounds | 24 th International Symposium on Gas Kinetics and Related Phenomena, York, UK, 17 th -21 st July | 2016 |
| | ATLASE, DICTIONARE DE SPECIALITATE | | | |
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Lista achizițiilor realizate în cadrul proiectului

| Denumire echipament | Categorie de achiziții*: (numai mijloace fixe) | Valoarea (lei) | Locație |
|--|--|----------------|---------------|
| Upgrade la Ion cromatograf Dionex ICS3000 Nr.inv.225243 | 1 | 116556.89 | CERNESIM/UAIC |
| Anexa la spectrofotometrul VCD Chiral IR – 2X Nr.inv.335982 | 1 | 28879.60 | CERNESIM/UAIC |

Categorie de achiziții*:

1. Echipamente și aparatură de cercetare
2. Rețele de comunicații specializate
3. Baze de date și informații de specialitate
4. Echipamente și mijloace moderne de documentare și comunicare
5. Alte categorii

**Director proiect,
Prof. univ. dr. habil. Cecilia Arsene**

