

Research group

Environmental Analytical Chemistry

Publications

1. Pinto, R.M., Guerra, M., Copeland, G., Olariu, R.I., Rodrigues, P., Teresa Barros, M., Lourdes Costa, M., Dias, A.A., The mechanism of pyrolysis of benzyl azide: Spectroscopic evidence for benzenemethanimine formation, *Journal of Physical Chemistry A*, 119, 4118-4126, **2015**.
2. 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 four methyl-2-nitrophenol isomers, *Journal of Physical Chemistry A*, 119, 4735-4745, **2015**.
3. 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, *Journal of Chemical Kinetics*, 47 (9), 596-605, **2015**.
4. 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 Science*, 81, 100-109, **2015**.
5. 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 (3), 322-348, **2015**.
6. Alina-Giorgiana Negru, Cecilia Arsene, Ana-Maria Zbancio, Ionel I. Mangalagiu, Romeo Iulian Olariu, Physico-chemical Behaviour of Newly Synthesized Macrocyclic Compounds. A reality between expectations and experimental evidences, *Revista de Chimie*, 66(9), 1339-1342, **2015**.
7. Pindaru D.M., Tanase C., Olariu R.I., Arsene C., Chemical composition and ions concentration in *Xanthoria parietina* and *Phaeophyscia orbicularis* lichenised fungi species from Iasi, North-Eastern Romania, *Revista de Chimie*, 64(8), 807-814, **2013**.
8. Pindaru D.M., Tanase C., Olariu R.I., Arsene C., Extra and intercellular concentrations of water soluble cations from *Xanthoria parietina* and *Phaeophyscia orbicularis* lichenized fungi species, *Revista de Chimie*, 64(7), 715-719, **2013**.
9. Olariu, R.I., Barnes, I., Bejan, I., Arsene, C., Vione, D., Klotz, B., Becker, K.H., FTIR product study of the reactions of NO₃ radicals with ortho-, meta-, and para-cresol, *Environmental Science and Technology*, 47, 7729-7738, **2013**.
10. Duncianu M., Olariu R.I., Riffault V., Visez N., Tomas A., Coddeville P. Development of a new flow reactor for kinetic studies. Application to the ozonolysis of a series of alkenes, *Journal of Physical Chemistry A*, 116, 6169-6179, **2012**.
11. Dirtu AC, Ali N, Van den Eede N, Neels H, Covaci A. Country specific comparison for profile of chlorinated, brominated and phosphate organic contaminants in indoor dust. Case study for Eastern Romania, 2010. *Environment International*, 49, 1-8, **2012**.
12. Arsene, C., Vione, D., Grinberg, N., Olariu, R.I., GCxGC-MS hyphenated techniques for the analysis, of volatile organic compounds in air, *Journal of Liquid Chromatography & Related Technologies*, 34, 1077-1111, **2011**.
13. Cernat, R.I., Mihaescu, T., Vornicu, M. Vione, D., Olariu, R.I., Arsene, C.*, Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis, *International Journal of Tuberculosis and Lung Diseases*, 15, 1239-1245, **2011**

14. Arsene, C.^{*}, Olariu, R.I., Zampas, P., Kanakidou, M., Mihalopoulos, N., Ion composition of coarse and fine particles in Iasi, north-eastern Romania. Implications for aerosols chemistry in the area, *Atmospheric Environment*, 45, 906-916, **2011**.
15. Olariu, R.I., Vione, D., Grinberg, N., Arsene, C.^{*}, Sample preparation for trace analysis by chromatographic methods, *Journal of Liquid Chromatography & Related Technologies*, 33, 1174-1207, **2010**.
16. Dirtu AC, Covaci A. Estimation of daily intake of organohalogenated contaminants from food consumption and indoor dust ingestion in Romania. *Environmental Science & Technology*, 44 (16), 6297-6304, **2010**.
17. Dirtu AC, Jaspers VLB, Cernat R, Neels H, Covaci A. Distribution of PCBs and their HO-PCB metabolites in human serum from two European countries. *Environmental Science & Technology*, 44 (8), 2876-2883, **2010**.
18. Arsene, C.^{*}, Bougiatioti, A., Mihalopoulos, N., Sources and variability of non-methane hydrocarbons in the Eastern Mediterranean, *Global NEST Journal*, 11, 333-340, **2009**.
19. Vione, D., Khanra, S., Cucu Man, S., Maddigapu, P.R., Das, R., Arsene, C., Olariu, R.I., Maurino, V., Minero, C., Inhibition vs. enhancement of the nitrate-induced phototransformation of organic substrates by the OH scavengers bicarbonate and carbonate, *Water Research*, 43, 4718 – 4728, **2009**.
20. Vione, D., Maurino, V., Minero, C., Duncianu, M., Olariu, R.I., Arsene, C., Sarakha, M., Mailhot, G., Assessing the transformation kinetics of 2- and 4-nitrophenol in the atmospheric aqueous phase. Implications for the distribution of both nitroisomers in the atmosphere, *Atmospheric Environment*, 43, 2321-2327, **2009**.
21. Vione, D., Lauri, V., Minero, C., Maurino, V., Malandrino, M., Carlotti, M.E., Olariu, R.I., Arsene, C., Photostability and photolability of dissolved organic matter upon irradiation of natural water samples under simulated sunlight, *Aquatic Sciences*, 71, 34-45, **2009**.
22. Vione, D., Maurino, V., Cucu-Man, S., Khanra, S., Arsene, C., Olariu, R., Minero, C., Formation of organobrominated compounds in the presence of bromide under simulated atmospheric aerosol conditions, *Chemistry Sustainable Chemistry*, 1, 197–204, **2008**.
23. 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**.
24. 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**.
25. Arsene, C.^{*}, Bougiatioti, A., Mihalopoulos, N., Non-methane hydrocarbons variability in the Eastern Mediterranean, pp. 197-206, in *Regional Climate Variability and its Impacts in the Mediterranean Area*, Mellouki, A., Ravishankara, A.R., eds, NATO Science Series, IV. Earth and Environmental Sciences, 79, 197-206, **2007**.
26. Vione, D., Maurino, V., Minero, C., Pelizzetti, E., Harrison, M.A.J., Olariu, R.I., Arsene, C., Photochemical reactions in the tropospheric aqueous phase and on particulate matter, *Chemical Society Reviews*, 35, 441-453, **2006**.
27. Vione, D., Falletti, G., Maurino, V., Minero, C., Pelizzetti, E., Malandrino, M., Ajassa, R., Olariu, R.I., Arsene, C., Sources and sinks of hydroxyl radical upon irradiation of natural water samples, *Environmental Science and Technology*, 40, 3775-3781, **2006**.