

Subsemnatul/subsemnata Badea Silviu-laurentiu candidat/candidată la concursul pentru

ocuparea postului de Asistent Universitar poziția 29, Departamentul de Departamentul de Chimie Organica „Costin Nenitescu”, Facultatea de Facultatea de Inginerie Chmica si Biotehnologii, din Domeniul de Studii Universitare Inginerie Chimica, declar pe propria răspundere, cunoscând prevederile art. 326 Cod Penal privind falsul în declarații, că sunt îndeplinite toate Standardele minimale prevăzute de Metodologia POLITEHNICA București pentru înscrierea la concurs, în momentul înscrierii la concurs și susțin veridicitatea informațiilor prezentate în dosar și în materialul de mai sus. Lucrările considerate a fi indexate WoS [ISI] sau în alte Baze de Date Internaționale [BDI] sunt vizibile în aceste baze, în dreptul numelui candidatului, la această dată.

Candidat,

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Semnătura:

.....

Data

11.06.2026

ÎN CONTINUARE: Lista lucrărilor / participărilor menționate la punctul B

Lista lucrărilor / participărilor menționate la punctul B

1. Articole publicate:

Articole ISI

- [1] Badea, S.L., Vogt, C., Weber, S., Danet, A.F. and Richnow, H.H. (2009). Stable Isotope Fractionation of gamma-Hexachlorocyclohexane (Lindane) during Reductive Dechlorination by Two Strains of Sulfate-Reducing Bacteria. *Environmental Science & Technology* 43(9): 3155-3161. (IF of 7.149 (2018), 55 citations on Web of Science).
- [2] Badea, S.L., Vogt, C., Gehre, M., Fischer, A., Danet, A.F. and Richnow, H.H. (2011). Development of an enantiomer-specific stable carbon isotope analysis (ESIA) method for assessing the fate of alpha-hexachlorocyclohexane in the environment. *Rapid Communications in Mass Spectrometry* 25(10): 1363-1372. (IF of 2.045 (2018), 35 citations on Web of Science).
- [3] Badea, S.L., Lundstedt, S., Liljelind, P. and Tysklind, M. (2013). The influence of soil composition on the leachability of selected hydrophobic organic compounds (HOCs) from soils using a batch leaching test. *Journal of Hazardous Materials* 254–255: 26-35. (IF of 7.650 (2018), 17 citations on Web of Science)
- [4] Badea, S.L., Mustafa, M., Lundstedt, S. and Tysklind, M. (2014). Leachability and desorption of PCBs in soil and their dependency on pH and dissolved organic matter, *Science of the Total Environment* 499: 220–227 (IF of 5.589 (2018), 10 citations on Web of Science)
- [5] Badea, S.L., Danet, A.F. (2015). Enantioselective stable isotope analysis (ESIA) -A new concept to evaluate the environmental fate of chiral organic contaminants, *Science of the Total Environment*, 514: 459–466, (IF of 5.589 (2018), 12 citations on Web of Science)
- [6] Badea, S.L., Niculescu, V., Ionete R.E., Eljarrat, E. (2016). Advances in enantioselective analysis of chiral brominated flame retardants. Current Status, Limitations and Future Perspectives, *Science of the Total Environment*, 566: 1120-1130, (IF of 5.589 (2018), 4 citations on Web of Science)
- [7] Buga, M., Rizoiu, A., Bubulinca, C., Badea, S.L., Ciocan, A., Chitu, A., (2018) Study of LiFePO₄ Electrode Morphology for Li-Ion Battery Performance, *Revista de Chimie* 69 (3): 549-552, (IF of 1.605 (2018), 1 citation on Web of Science)
- [8] Badea, S.L., Enache, S., Tamaian, R., Niculescu, V., Varlam, M., Pirvu, C. (2019) Enhanced open circuit voltage and power for two types of microbial fuel cells in batch experiments using *Saccharomyces cerevisiae* as biocatalyst, *Journal of Applied Electrochemistry*, 49 (1): 17-26, (IF 2.366 (2018), 1 citation on Web of Science)\
- [9] Badea, S.L., Geana, E.I., Niculescu, V., Ionete R.E. (2020) Recent progresses in analytical GC and LC mass spectrometric based-methods for the detection of emerging chlorinated and brominated contaminants and their transformation products in aquatic environment, *Science of the Total Environment* 722: 137914, (Impact factor of 7.963 (2020))\
- [10] Badea, S.L., Ionete, R.E., Costinel, D., Nechita, C., Botu, M., Botoran, O.R. (2020) Changes of carbon-isotope ratios in soil organic matter relative to parent vegetation and site specificity. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* 48: 2085-2094, (Impact factor of 1.444 (2020))
- [11] Badea, S.L., Stegarus, D.I., Niculescu, V.C., Enache, S., Soare, A., Ionete, R.E., Gori, D., Höhener, P., (2021). Dehalogenation of α -hexachlorocyclohexane by iron sulfide

- nanoparticles: Study of reaction mechanism with stable carbon isotopes and pH variations. *Science of the Total Environment* 801: 149672, (Impact factor of 7.963 (2020))
- [12] Badea, S. L.; Botoran, O. R.; Ionete, R. E., Recent Progresses in Stable Isotope Analysis of Cellulose Extracted from Tree Rings. *Plants-Basel* **2021**, *10* (12). (Impact factor of 4.6581 (2021), 1 citation on Web of Science)
- [13] Badea, S. L.; Niculescu, V. C., Recent Progress in the Removal of Legacy and Emerging Organic Contaminants from Wastewater Using Metal-Organic Frameworks: An Overview on Adsorption and Catalysis Processes. *Materials* **2022**, *15* (11). (Impact factor of 3.748 (2021), 1 citation on Web of Science)
- [14] Ciucure, C. T.; Geana, E. I.; Chitescu, C. L.; Badea, S. L.; Ionete, R. E., Distribution, sources and ecological risk assessment of polycyclic aromatic hydrocarbons in waters and sediments from Olt River dam reservoirs in Romania. *Chemosphere* **2023**, *311*. (Impact factor of 8.943 (2021))
- [15] Badea, S.-L.; Niculescu, V.-C.; Iordache, A.-M., New Trends in Separation Techniques of Lithium Isotopes: A Review of Chemical Separation Methods. *Materials* **2023**, *16* (10), 3817. (Impact factor of 3.748 (2021)).
- [16] Badea, S. L.; Niculescu, V. C.; Popescu, D. I.; Geana, E. I.; Ciucure, C. T.; Botoran, O. R.; Ionete, R. E., Recent progresses in compound specific isotope analysis of halogenated persistent organic pollutants. Assessing the transformation of halogenated persistent organic pollutants at contaminated sites. *Science of the Total Environment* **2023**, *899*.
- [17] Bucura, F.; Spiridon, S. I.; Ionete, R. E.; Marin, F.; Zaharioiu, A. M.; Armeanu, A.; Badea, S. L.; Botoran, O. R.; Ionete, E. I.; Niculescu, V. C.; Constantinescu, M., Selectivity of MOFs and Silica Nanoparticles in CO₂ Capture from Flue Gases. *Nanomaterials* **2023**, *13* (19).
- [18] Constantinescu, M.; Bucura, F.; Roman, A.; Botoran, O. R.; Ionete, R. E.; Spiridon, S. I.; Ionete, E. I.; Zaharioiu, A. M.; Marin, F.; Badea, S. L.; Niculescu, V. C., A Study on the Ability of Nanomaterials to Adsorb NO and SO₂ from Combustion Gases and the Effectiveness of Their Separation. *Nanomaterials* **2024**, *14* (10).
- [19] Badea, S. L.; Cristea, N. I.; Niculescu, V. C.; Korolova, Y.; Enache, S.; Soare, A.; Tiliakos, A.; Botoran, O. R.; Ionete, R. E.; Hohener, P., Degradation study of δ -hexachlorocyclohexane by iron sulfide nanoparticles: Elucidation of reaction pathway using compound specific isotope analysis and pH variation. *Environmental Pollution* **2025**, *364*. (Impact factor of 7.3 (2024), 2 citari).
- [20] Badea, S.-L., Constantin, C., Badulescu, L., Development and validation of a GC-MS-MS Methods for the Detection of Organochlorine and Organophosphate Pesticides in Compost and Soil, *Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering*, 2025, XIV, 52-57, factor de impact 0.6 (2024), <https://landreclamationjournal.usamv.ro/index.php/scientific-papers/current?id=760>

Lucrari publicate in reviste si volume de specialitate BDI :

1. SL Badea, DI Popescu, VC Niculescu, S Enache, A Soare, RE Ionete, REDUCTIVE DECHLORINATION OF α -HEXACHLOROCYCLOHEXANE BY IRON SULFIDE NANOPARTICLES IN BATCH EXPERIMENTS MIMICS ITS ANAEROBIC BIODEGRADATION IN ENVIRONMENT-PRELIMINARY RESULTS. Progress of Cryogenics & Isotopes Separation 2019, 22 (2).
2. Nadia Paun, Violeta-Carolina Niculescu, Ionela Ramona Zgavarogea, Silviu Laurentiu Badea, Andreea-Maria Iordache, AN OVERVIEW OF METHODS FOR LITHIUM SEPARATION , Smart Energy and Sustainable Environment 2024, 27(2): 73-84, <https://doi.org/10.46390/j.smensuen.27224.461>