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WORK EXPERIENCE

Jan 2023– present

Senior Researcher (CSI)

National Institute for Research and Development in Forestry “Marin Drăcea”
Bdul. EROILOR 128, Voluntari, România

- Main research activity covers forest monitoring, assessing the impact of climate and air pollution on forest ecosystems.
- Develops experimental and theoretical research focused on chemical and physical characteristics of atmospheric pollutants and source profiling.
- Writes national and international project proposals.
- Responsible for air pollution reporting for forest ecosystems under National Emission reduction Commitments (NEC) European directive
- participation at scientific events; part of the organizing team for workshops and international conference "INTERNATIONAL SCIENTIFIC CONFERENCE Forest science for people and societal challenges".

WORK EXPERIENCE

Mar 2009 – Dec 2022

Senior Researcher (CSII)

National Institute of Research and Development for Optoelectronics INOE2000
str. Atomistilor 409, Măgurele, România

- Main research activity covers experimental and theoretical research focused on atmospheric aerosol chemical and physical characteristics, source profiling, and data analyses using spectrometry, spectroscopy and optical methods;
- led national and international projects as leader/responsible in the fields of atmospheric pollution; evaluation through new methods and modelling algorithms
- involved in more than 20 national and international projects focused on aerosols and gaseous assessment; member in implementation team of research infrastructure projects financed on structural funds;
- wrote national and international project proposals;
- participation at scientific events; part of the organizing team for workshops and several summer-schools in the framework of RADO (Romanian Atmospheric research 3D Observatory);
- principal investigator of the Măgurele ACTRIS Aerosol in situ station;
- ACTRIS (PN-III-P3-3.6-H2020-2016-0058) – The Research Infrastructure (RI) ACTRIS – Aerosols, Clouds and Trace Gases – is the pan-European RI that consolidates activities amongst European partners for observations of aerosols, clouds, and trace gases and for the understanding of the related atmospheric processes, to provide RI services to wide user groups.

Jan 2009 – Jun 2013

Freelancer (Self-employed Person-PFA)

Biodiversity expert- Natura 2000 projects, contracts with Alba and Buzău counties Administration

Main activity: Impact assessment of plans and projects implemented in the Natura 2000 sites (Siriu, Penteleu, Frumoasa)

March 2005 – March 2009 **Ministry of Environment and Sustainable Development**

Biological Diversity Conservation and Biosafety Directorate

Main activity:

- expertise of Natura 2000 program implementation and certificates;
- maintaining national secretariat for international conventions regarding biodiversity;
- organise and coordinates nature conservation activities and contribute to harmonise the national legislation with European Union legislation in nature protection field;
- analyze studies regarding evaluating impact assessment to authorize projects and plans that could affect the environment or biological diversity.

Jan 2001 – May 2005 **Environmental Education Coordinator**

“Information and Documentation Center on Environmental Issues”, Splaiul Independenței, Bucharest, Romania

Main activity: *Students adviser on environmental issues*

Dec 2000 – Dec 2002 **High school teacher**

Saint Pantelimon“ High-School, Hambarului Street, Bucharest, Romania

Main activity, *Teacher for Biology, Ecology and Microbiology, Rewards: For ecological activities from Mayor of sector 2, third place at national level contest for ecological projects*

EDUCATION

2012 **PhD - Thesis Title: “Contributions to Support System for the Environment Development Management: Public Environmental Awareness”**
supervisor Prof. Angheluță Vădineanu

Systemic Ecology and Sustainable Development, Faculty of Biology, University of Bucharest, București, România

2000–2002 **Master in Ecology**

Systemic Ecology and Sustainable Development, Faculty of Biology, University of Bucharest, București, România

1996–2000 **Bachelor in Environmental sciences**

Systemic Ecology and Sustainable Development, Faculty of Biology, București, România

PERSONAL SKILLS

Organisational/managerial skills – member of the Romanian Association of Meteorology and Education-ARMAE (2021 – Present)
– member in New Approaches in Detection of Pathogens and Aeroallergens-ADOPT, <https://www.cost.eu/actions/CA18226>) (2018 – Present)

Communication skills – Interviews: I have given radio (e.g., *Radio Romania Cultural*), television (e.g., *ARTE TV–France*, *Digi24–Romania*, *TVR2–Romania*, *EuroNews–Romania*), online news publications (e.g., *Știința și tehnica*), interviews about air pollution.

Reviewer/Member in Editorial Boards – Reviewer: I reviewed manuscripts for *Atmospheric Chemistry and Physics*, *Atmosphere*, *International Journal of Environmental Research and Public Health*, *Toxics*, *Sensors*, *Environmental Monitoring and Assessment*, *Urban climate*.

Mother tongue Romanian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Computer skills – R, IgorPro, Office , L^AT_EX, CorelDRAW, Adobe Illustrator

Driving licence B

RESEARCH PROJECTS

- Coordinator/Partner team leader
- *WASTE- Service contract for analyzing the effect of residential solid waste burning on ambient air quality in Central and Eastern Europe and potential mitigation measures* (euro 120,000) founded through DG Environment: 07.027737/2018/788206/SER/ENV.C.3 (2018 - 2021)-member in steering committee of the project.
 - *Development of quadrupole and multipole ion trap based mass spectrometers for optical characterization and chemical analysis of atmospheric aerosol particles* founded by STAR/Project No.136/2017, 2017 – 2019, (2017–2019)
 - *Aerosol properties retrieval from remote sensing spectroscopic measurements* founded by STAR/Project No.162/2017, (2017–2019)
 - *Model Computational pentru Predictia Emisiilor de "Biomass Burning" si impactul lor* founded by PN-II-PT-PCCA-2013-4-1798 No 309-01/07/2014-2016, (2014–2016)

PUBLICATIONS (SELECTED)

- [1] **L. Mărmureanu**, S. Leca, D.Pitar, Pascu I., A. De Marco, P. Sicard, S. Chivulescu, A. C. Dobre, and O. Badea. "Estimation of Plant Pollution Removal Capacity Based on Intensive Air Quality Measurements". In: *Environmental Research* in Press (2024).
- [2] A. Hoffer, A. Meiramova, A. Toth, B. Jancsek-Turoczi, G. Kiss, E. A. Levei, **L. Mărmureanu**, A. Machon, and A. Gelencser. "Assessment of the contribution of residential waste burning to ambient PM₁₀ concentrations in Hungary and Romania". In: *Atmos. Chem. Phys.* 24 (2024), pp. 1659–1671.
- [3] B. Antonescu, D. Ene, M. Boldeanu, S. Andrei, **L. Mărmureanu**, C. Marin, and R. Pirloaga. "Future changes in heatwaves characteristics in Romania". In: *Theoretical and Applied Climatology* 153.1 (2023).
- [4] Van Poppel M., J. Peters, EA. Levei, **L. Mărmureanu**, A. Moldovan, MA. Hoaghia, C. Varaticeanu, and J. Van Laer. "Mobile measurements of black carbon: Comparison of normal traffic with reduced traffic conditions during COVID-19 lock-down". In: *Atmospheric Environment* 297 (2023).
- [5] Gang Chen, Francesco Canonaco, Anna Tobler, Wenche Aas, Andres Alastuey, James Allan, Samira Atabakhsh, Minna Aurela, Urs Baltensperger, Aikaterini Bougiatioti, Joel F. De Brito, Darius Ceburnis, Benjamin Chazeau, Hasna Chebaicheb, Kaspar R. Daellenbach, Mikael Ehn, Imad El Haddad, Konstantinos Eleftheriadis, Olivier Favez, Harald Flentje, Anna Font, Kirsten Fossom, Evelyn Freney, Maria Gini, David C Green, Liine Heikkinen, Hartmut Herrmann, Athina-Cerise Kalogridis, Hannes Keernik, Radek Lhotka, Chunshui Lin, Chris Lunder, Marek Maasikmets, Manousos I. Manousakas, Nicolas Marchand, Cristina Marin, **L. Mărmureanu**, and et al. "European aerosol phenomenology 8: Harmonised source apportionment of organic aerosol using 22 Year-long ACSM/AMS datasets". In: *Environment International* 166 (2022), p. 107325.
- [6] M. Adam, K. Fragkos, S. Solomos, L. Belegante, S. Andrei, C. Talianu, **L. Mărmureanu**, B. Antonescu, D. Ene, V.Nicolae, and V. Amiridis. "Methodology for Lidar Monitoring of Biomass Burning Smoke in Connection with the Land Cover". In: *Remote Sensing* 14.19 (2022), p. 4734.

- [7] AM. Rosianu, PM. Leru, S. Stefan, G. Iorga, and **L. Mărmureanu**. “Six-Year Monitoring of Atmospheric Pollen and Major Air Pollutant Concentrations in Relation with Meteorological Factors in Bucharest, Romania”. In: *Rom. Rep. Phys* 74.703 (2022), p. 15.
- [8] B. Antonescu, **L. Mărmureanu**, J. Vasilescu, C.A. Marin, S. Andrei, M. Boldeanu, D. Ene, and A. Țilea. “A 41-years bioclimatology of thermal stress in Europe”. In: *Int. J. Climatol.* 41 (2021), pp. 3934–3952.
- [9] A. Hoffer, A. Toth, B. Jancsek-Turoczi, A. Machon, A. Meiramova, A. Nagy, **L. Mărmureanu**, and A. Gelencser. “Potential new tracers and their relative emission factors for burning household waste in stoves”. In: *Atmos. Chem. Phys.* 21 (2021), pp. 317855–17864.
- [10] A. Cuesta-Mosquera, G. Močnik, L. Drinovecand, T. Müller, S. Pfeifer, M. C. Minguilón, B. Briel, P. Buckleyand V. Dudoitis, J. Fernández-García, M. Fernández-Amado, J. Ferreira De Brito, V. Riffault, H. Flentje, E. Heffernan, N. Kalivitis, A.-C. Kalogridis, H. Keernik, **L. Mărmureanu**, and et al. “Intercomparison and characterization of 23 Aethalometers under laboratory and ambient air conditions: procedures and unit-to-unit variabilities”. In: *Atmos. Meas. Tech.* 14 (2021), pp. 3195–3216.
- [11] Boldeanu M. H. Cucu, C. Burileanu, and **L. Mărmureanu**. “Automatic Pollen Classification Using Convolutional Neural Network”. In: *44th International Conference on Telecommunications and Signal Processing* (2021).
- [12] **L. Mărmureanu**, J. Vasilescu, J. Slowik, A.S.H. Prévôt, C.A. Marin, B. Antonescu, A. Vlachou, A. Nemuc, A. Dandocsi, and S. Szidat. “Online Chemical Characterization and Source Identification of Summer and Winter Aerosols in Măgurele, Romania”. In: *Atmosphere* 11 (2020), p. 385.
- [13] A. Hoffer, B. Jancsek-Turoczi, Á. Toth, G. Kiss, A. Naghiu, E.A. Levei, **L. Mărmureanu**, A. Machon, and A. Gelencsér. “Emission factors for PM10 and polycyclic aromatic hydrocarbons (PAHs) from illegal burning of different types of municipal waste in households”. In: *Atmos. Chem. Phys.* 20 (2020), pp. 16135–16144.
- [14] Levei L., M-A. Hoaghia, M. Roman, **L. Mărmureanu**, C. Moisa, E. A. Levei, A. Ozunu, and O. Cadar. “Temporal Trend of PM10 and Associated Human Health Risk over the Past Decade in Cluj-Napoca City, Romania”. In: *Applied Sciences* 10.15 (2020).
- [15] **L. Mărmureanu**, C. A. Marin, S. Andrei, B. Antonescu, D. Ene, M. Boldeanu, J. Vasilescu, C. Vițelaru, O. Cadar, and E. Levei. “Orange Snow—A Saharan Dust Intrusion over Romania During Winter Conditions”. In: *Remote Sensing* 21 (2019), p. 805.
- [16] E. Freney, Y. Zhang, P. Croteau, T. Amodeo, L. Williams, F. Truong, J-E. Petit, J. Sciare, R. Sarda-Estève, N. Bonnaire, T. Arumae, M. Aurela, A. Bougiatioti, N. Michalopoulos, E. Coz, B. Artinano, V. Crenn, T. Elste, L. Heikkinen, L. Poulain, A. Wiedensohler, H. Herrmann, M. Priestman, A. Alastuey, I. Stavroulas, A. Tobler, J. Vasilescu, N. Zanca, M. Canagaratna, C. Carbone, H. Flentje, D. Green, **L. Mărmureanu**, and M. Maasikmets et al. “The second ACTRIS inter-comparison (2016) for Aerosol Chemical Speciation Monitors (ACSM): Calibration protocols and instrument performance evaluations”. In: *Aerosol Science And Technology* (2019), pp. 830–842.
- [17] C. Marin, **L. Mărmureanu**, C. Radu, A. Dandocsi, C. Stan, F. Țoancă, L. Preda, and B. Antonescu. “Wintertime Variations of Gaseous Atmospheric Constituents in Bucharest Peri-Urban Area”. In: *Atmosphere* 10.8 (2019). URL: <https://www.mdpi.com/2073-4433/10/8/478>.
- [18] S. Andrei, B. Antonescu, M. Boldeanu, **L. Mărmureanu**, C. Marin, J. Vasilescu, and D. Ene. “An Exceptional Case of Freezing Rain in Bucharest (Romania)”. In: *Atmosphere* 10.11 (2019). URL: <https://www.mdpi.com/2073-4433/10/11/673>.
- [19] C. Marin, C. Stan, L. Preda, **L. Mărmureanu**, L. Belegante, and C.P. Cristescu. “Multi-fractal cross correlation analysis between aerosols and meteorological data”. In: *Rom. J. Phys.* 63 (2018), p. 805.

- [20] **L. Mărmureanu**, J. Vasilescu, C. A. Marin, and D. Ene. “Aerosol source assessment based on organic chemical markers”. In: *Revista de Chimie* 68 (2017).
- [21] **L. Mărmureanu**, J. Vasilescu, A. Nemuc, and L. Belegante. “Aerosol Characterization Based on Chemical Composition and Optical Properties”. In: *Rom. J. Phys.* 61 (2016), pp. 1635–1650.

Citations – 44 Publications, 306 citations/ 271 without self-citations / *h*-index 9 according to Web of Science and 430 citations / *h*-index 11 according to Google Scholar.

Luminița Mărmureanu