

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) ANDRONIC LUMINITA CAMELIA

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Address(es) Eroilor, 29, 500036, BRASOV, ROMANIA

Telephone(s)

E-mail andronic-luminita@unitbv.ro

Nationality Romanian

Date of birth

Gender female

Desired employment /
Occupational field

Transilvania University of Brasov, Product Design and Environmental Faculty

Work experience

Dates **02.2019**

Occupation or position held Full Professor

Main activities and responsibilities Teaching courses: Chemistry and Wastewater treatment (Bachelor level), Emerging

Pollutants: source, advanced processes of depollution and Environmental Chemistry (Master level), Guidance for student thesis, practice guidance (tutoring); Mentoring

student scientific research.

Name and address of employer Transilvania University of Brasov, Product Design and Environment Faculty, Eroilor, 29,

500036, Brasov-Romania

Type of business or sector Education and Research

Dates 03.2013-02.2019

Occupation or position held Associate Professor

Main activities and responsibilities Teaching courses: Chemistry and Wastewater treatment (Bachelor level), Advanced

(Waste)Water Treatment and Environmental Chemistry (Master level), Guidance for

student thesis, practice guidance (tutoring); Mentoring student scientific research.

Name and address of employer Transilvania University of Brasov, Product Design and Environment Faculty

Type of business or sector Education and Research

Dates 03.2008-03.2013

Occupation or position held Lecturer

Main activities and responsibilities
Teaching courses, seminars and laboratories, and academic guidance works

Name and address of employer Transilvania University of Brasov, Product Design and Environmental Faculty,

Type of business or sector Education and Research

Dates 10.2003-03.2008

Occupation or position held Assistant Professor

Main activities and responsibilities Teaching seminars and laboratories

Name and address of employer Transilvania University of Brasov, Product Design and Environment Faculty, Eroilor, 29,

500036, Brasov-Romania

Type of business or sector Education and Research

Education and training

Dates 08.08.2018

Title of qualification awarded Habilitation in Environmental Engineering

Name and type of organisation Technical University of Cluj-Napoca-Romania

providing education and training

Dates 06.2010-05.2013

Title of qualification awarded Postdoctoral researcher

Main activities and responsibilities Research and reporting according to a set plan in national and international projects

(95%). The instruction associated with this research (5%).

Principal subjects/occupational Ceramic materials, Semiconductors, Materials synthesis (sol-gel, doctor blade,

skills covered photochemical deposition, spray pyrolysis deposition), Materials characterisation (XRD,

FT-IR, AFM, contact angle, UV-VIS, DSC, optoelectronic properties), Wastewater analysis

and treatment, Advanced Oxidation Process, Photocatalysis,

Name and type of organisation

providing education and training

Transilvania University of Brasov-Romania

Dates 10.2003-02.2010

Title of qualification awarded Doctor of Science (Material Science and Engineering)

Main activities and responsibilities Research and reporting according to a set plan in national and international projects.

Research according to a set plan for thesis. Instruction and thesis supervision.

Principal subjects/occupational Ceramic materials, Semiconductors, Materials synthesis (sol-gel, doctor blade,

skills covered photochemical deposition, spray pyrolysis deposition), Materials characterisation (XRD,

FT-IR, AFM, contact angle, UV-VIS, DSC, opto-electronic properties), Wastewater

analysis and treatment, Advanced Oxidation Process, Photocatalysis,

Name and type of organisation

providing education and training

Transilvania University of Brasov-Romania

Dates 10.2006-02.2008

Title of qualification awarded Master of Science

Principal subjects/occupational Nanomaterials in Environmental and Industry, Advanced Environmental Chemistry,

skills covered Metrology in Chemistry, Basic of RES, Advanced Polymers, Sustainable Development,

ECO Design, Environmental Impact Assessment, Project Development, Environmental

Biotechnology, Electrochemical and Mechanical Corrosion

Name and type of organisation Master: Applied Chemistry in Environment and Industry providing education and training Transilvania University of Brasov-Romania

Dates 10.1990-07.1995

Title of qualification awarded Bachelor in chemistry and physics

Principal subjects/occupational Inorganic Chemistry, Organic Chemistry, Analytical Chemistry, Catalysis and Catalyst,

skills covered Macromolecular Chemistry, Physical-Chemistry, Electrochemistry, Physics of solids,

Name and type of organisation Babes-Bolyai University, Faculty of Chemistry and Engineering Chemistry, Cluj-Napoca-providing education and training Romania

Training

- Advances in Nanocomposite materials: preparation and characterization, Bucharest, 2012-grant COST (COST-TS-ECOST-TRAINING_SCHOOL-MP0902-030912-020683).
- Eco-chemie SPR Electrochemistry and Corrosion Seminar and Training, Brasov, Romania, 2006.
- Atomic Force Microscopy (AFM) Training, Brasov, 2006.
- Conservation and Sustainable Development of River Mouth Ecosystems, Wetlands and Lagoons, NATO Science Programme, Advance Study Institute, Galati, Romania, 2004.

Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment	Understanding		Speaking		Writing
European level	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	B2	B2	B2	B2	B2

Social skills and competences

- Educational skills. Organization and participation in teamwork with young people.
- I adapt well to multicultural environments and to working in multi-language teams.
- I have a good communication capacity.

Technical skills and competences

- As a part of my research, I was responsible for setting up and maintaining our inhouse databases.
- Competences in advanced materials characterization (AFM, SEM, XRD, UV-VIS, FT-IR) and wastewater characterization (UV-VIS, TOC, AAS)

Organisational skills and competences

I was a member in the organizing committee of many international conferences: The International Conference on Trends in Environmental Education-EnvEdu Brasov, Romania, editions: 2005, 2006, The International Conference on Materials Science & Engineering-BRAMAT- Brasov, Romania, editions: 2005, 2007, The International Conference for Sustainable Energy-CSE-Brasov, Romania, edition 2005, 2008, 2011, 2011, 2014, 2017

- Able to contribute effectively to immediate and external teams.
- Able to lead small research teams and/or large fieldwork teams effectively.
- Able to establish and maintain effective communication with other team members.

Computer skills and competences

Membership in professional and scientific associates

Microsoft Office, Corel Draw, Origin, ChemOffice, and so on.

Romanian Society of Chemistry-since 2006

Scientific expert positions

Reviewer in scientific ISI journals: Thin Solid Film, Vacuum, Journal of Hazardous Materials, Chemical Engineering Journal, Materials Science and Engineering B, Materials Letter, Materials Chemistry and Physics, Central European Journal of Chemistry, Desalination, Journal of Catalysis, Applied Catalysis B: Environmental, Molecules.

Projects Projects coordinator

- ERANET-M. project, entitled "Multifunctional 3D photocatalytic systems for environmentally friendly sustainable technologies", Acronym: 3D-Photocat, 2020-2023.
- ERANET-M. project, entitled "Theoretical and Experimental Study of Transition Metal Oxyhydride Nanomaterials for superconductivity and photocatalysis", Acronym: TESTIMONIES, 2019-2022.
- EU-DG RTD project, entitled "Titanium dioxide visible-light driven composite materials for industrial wastewater photodegradation using the DETOX facilities solar photoreactors at PSA-CIEMAT", Acronym: PHOTOVISCAT, 2014

Other projects:

- 2014-2017 PNII 217/2014 "Innovative Integrated Materials Technology Equipment System for simultaneous photocatalysis and adsorption applied in sustainable wastewater treatment" Acronym: SimFotoAd, scientific responsible
- 2012-2016, Complex high surface area photoactive nanomaterials for environmentally-friendly energy production and organic pollutants degradation (NANOVISMAT)
- 2012-2016, Sisteme solar termice eficiente cu acceptanta ridicata pentru implementare in mediul urban (EST-IN-URBA)
- 2012-2016, Novel absorbers of ZEOLITe type obtained from Fly Ash collected from electro-thermal power plants in Romania
- 2014-2016, Sistem inovativ sustenabil pentru auto-decontaminarea fotocatalitica a echipamentelor de protectie CBRN (CB-PhotoDeg)
- 2017-2018, Continuous flow advanced wasterwater treatment demonstration technology based on thin film photocatalysis and adsorbtion reactor

Author and co-author of scientific and professional papers over 68 publications in peer-reviewed journals and conference proceedings, 62 publications indexed in ISI Thomson Journals, 4 chapters in the monograph, 2 books. More than 1100 citations, according to Scopus and WEB of Science, participation in many national and international conferences.

Articles in peer-review journals

- [1] C. Cazan, A. Enesca, L. Isac, L. Andronic, M. Cosnita, Accelerated Aging of Polymeric Composites Based on Waste with TiO₂ Fillers, ACS Appl. Polym. Mater. 5 (2023) 3958–3970. https://doi.org/10.1021/acsapm.3c00129
- [2] L. Andronic, D. Mamedov, C. Cazan, M. Popa, M.C. Chifiriuc, A. Allaniyazov, S. Palencsar, S.Z. Karazhanov, Cerium oxide thin films: synthesis, characterization, photocatalytic activity and influence on microbial growth, Biofouling. 38 (2022) 865–875. https://doi.org/10.1080/08927014.2022.2144264.
- [3] L. Andronic, D. Ghica, M. Stefan, C.G. Mihalcea, A.-M. Vlaicu, S. Karazhanov, Visible-Light-Active Black TiO₂ Nanoparticles with Efficient Photocatalytic Performance for Degradation of Pharmaceuticals, Nanomaterials. 12 (2022) 2563. https://doi.org/10.3390/nano12152563.
- [4] L. Andronic, D. Moldarev, D. Deribew, E. Moons, S.Z. Karazhanov, Photocatalytic self-cleaning properties of thin films of photochromic yttrium oxyhydride, J. Solid State Chem. 316 (2022) 123599. https://doi.org/10.1016/j.jssc.2022.123599.
- [5] L. Isac, C. Cazan, L. Andronic, A. Enesca, CuS-Based Nanostructures as Catalysts for Organic Pollutants Photodegradation, Catalysts. 12 (2022). https://doi.org/10.3390/catal12101135.
- [6] L. Andronic, M. Lelis, A. Enesca, S. Karazhanov, Photocatalytic activity of defective black-titanium oxide photocatalysts towards pesticide degradation under UV/VIS irradiation, Surfaces and Interfaces. 32 (2022) 102123. https://doi.org/10.1016/j.surfin.2022.102123.
- [7] A. Enesca, L. Andronic, UV-Vis Activated Cu₂O/SnO₂/WO₃ Heterostructure for Photocatalytic Removal of Pesticides, Nanomaterials. 12 (2022). https://doi.org/10.3390/nano12152648.
- [8] L. Andronic, A. Vladescu, A. Enesca, Synthesis, Characterisation, Photocatalytic Activity, and Aquatic Toxicity Evaluation of TiO₂ Nanoparticles, Nanomaterials. 11 (2021) 3197. https://doi.org/10.3390/nano11123197.
- [9] C. Cazan, A. Enesca, L. Andronic, Synergic Effect of TiO₂ Filler on the Mechanical Properties of Polymer Nanocomposites, Polymers (Basel). 13 (2021) 2017. https://doi.org/10.3390/polym13122017.
- [10] C. Adochite, L. Andronic, Toxicity of a Binary Mixture of TiO₂ and Imidacloprid Applied to Chlorella vulgaris, Int. J. Environ. Res. Public Health. 18 (2021) 7785. https://doi.org/10.3390/ijerph18157785.
- [11] A. Enesca, L. Andronic, Photocatalytic Activity of S-Scheme Heterostructure for Hydrogen Production and Organic Pollutant Removal: A Mini-Review, Nanomaterials. 11 (2021) 871. https://doi.org/10.3390/nano11040871.
- [12] L. Andronic, A. Enesca, Black TiO₂ Synthesis by Chemical Reduction Methods for Photocatalysis Applications, Front. Chem. 8 (2020) 565489. https://doi.org/10.3389/fchem.2020.565489.
- [13] L. Andronic, L. Isac, C. Cazan, A. Enesca, Simultaneous Adsorption and Photocatalysis Processes Based on Ternary TiO₂–Cu_xS–Fly Ash Hetero-Structures, Appl. Sci. 10 (2020) 8070. https://doi.org/10.3390/app10228070.
- [14] A. Enesca, L. Andronic, The Influence of Photoactive Heterostructures on the Photocatalytic Removal of Dyes and Pharmaceutical Active Compounds: A Mini-Review, Nanomater. (Basel, Switzerland). 10 (2020) 1766. https://doi.org/10.3390/nano10091766.
- [15] C. Adochite, L. Andronic, Aquatic Toxicity of Photocatalyst Nanoparticles to Green Microalgae Chlorella vulgaris, Water. 13 (2020) 77. https://doi.org/10.3390/w13010077.
- [16] L. Isac, L. Andronic, M. Visa, A. Enesca, Selective photocatalytic degradation of organic pollutants by Cu_xS/ZnO/TiO₂ heterostructures, Ceram. Int. 46 (2020) 4265–4273. https://doi.org/10.1016/J.CERAMINT.2019.10.147.
- [17] L. Isac, C. Cazan, A. Enesca, L. Andronic, Copper Sulfide Based Heterojunctions as Photocatalysts for Dyes Photodegradation, Front. Chem. 7 (2019) 694. https://doi.org/10.3389/fchem.2019.00694.
- [18] A. Duta, L. Andronic, A. Enesca, The influence of low irradiance and electrolytes on the mineralization efficiency of organic pollutants using the Vis-active photocatalytic tandem CulnS₂/TiO₂/SnO₂, Catal. Today. 300 (2018) 18–27. https://doi.org/10.1016/j.cattod.2017.03.018.
- [19] L. Andronic, L. Isac, S. Miralles-Cuevas, M. Visa, I. Oller, A. Duta, S. Malato, Pilot-plant evaluation of TiO_2 and TiO_2 -based hybrid photocatalysts for solar treatment of polluted water, J. Hazard. Mater. 320 (2016) 469–478. https://doi.org/10.1016/j.jhazmat.2016.08.013.
- [20] M. Visa, L. Andronic, A. Enesca, Behavior of the new composites obtained from fly ash and titanium dioxide in removing of the pollutants from wastewater, Appl. Surf. Sci. 388 (2016) 359–369. https://doi.org/10.1016/j.apsusc.2015.12.154.