

Larisa Mădălina MELIȚĂ
Associate Professor

CURRICULUM VITAE

Addresses

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Personal Information

Place of birth : Buzau, Romania
Nationality : Romanian
Marital status : Married, one child

Education

- **Ph.D.:** *Use of the Artificial Neural Networks for simulating some physical – chemical properties and processes*, Chemical Engineering Department, **University POLITEHNICA of Bucharest, Romania** and Analytical Chemistry Department, **University AUTONOMA of Barcelona, Spain**, 2001.
- **BSc/MSc:** **University POLITEHNICA of Bucharest, Romania**, Faculty of Industrial Chemistry, Chemical Engineering Department, 1992.

Work Experience

- Roads, Railways and Construction Materials Department, Technical University of Civil Engineering of Bucharest, Romania, (2004 - present).
- Chemical Engineering Department, University POLITEHNICA of Bucharest, Romania (1992-2004).
- Faculty of Industrial Chemistry, University POLITEHNICA of Bucharest, Romania (1987-1992).

Language Skills

- English – EU level: C1
- French – EU level: B2
- Spanish – EU level: C1

Fields of Research and Interest

- New composite building materials and their applications in the environment infrastructure;
- Methods of removal and recovery of heavy metals from water/wastewaters with composite membranes;
- Recovery and recycling of industrial waste;
- IR, UV – VIS, AA, ICP spectroscopy and SEM for structural characterization of organic and inorganic compounds;
- Chemistry of composite building materials;
- Aerogel based thermal insulations materials;
- Equilibrium in non-aqueous solutions;
- Identification and monitoring of pollutants from water and air;
- Artificial Neural Networks.

Fellowships and Training stages

- Course of *Writing European Projects through the HORIZON 2020 Program- Expert in Accessing European Structural and Cohesion Funds*; cod COR 2423213, Graduation Certificate issued by the Romanian National Authority for Qualifications and **Technical University of Civil Engineering of Bucharest - Romania**, September 2019.
- **ERASMUS+** Mobility for Teaching, with course title: *Advances in Composite Membranes Technologies and Applications for Wastewater Treatment*, **NOVA University of Lisbon, School of Science and Technology, Lisbon - Portugal**, June-July, 2019.
- Course of *Trainer in Education*; cod COR 242401, Graduation Certificate issued by the **Ministry of Labor, Family, Social protection and Older Persons** and the **Ministry of National Education, Bucharest- Romania**, March 2014.
- Postgraduate course in the EU program of *Blended Learning and Modern Educational Technologies for Higher Education* in the field of *Computers and Information Technology, DidaTec*, **Technical University of Cluj-Napoca** and **Technical University of Civil Engineering of Bucharest - Romania**, April – December 2013.
- Course of *Mentor in Education*; cod COR 235902, Graduation Certificate issued by the **Ministry of Labor, Family, Social protection and Older Persons** and the **Ministry of National Education, Bucharest- Romania**, December 2013.
- Postgraduate course in the EU program of *Training and awareness program in Distance Education Quality Assurance – ID, POSDRU/86/1.2/S/60720*, **Spiru Haret University of Bucharest, Commercial Academy of Satu Mare, Romania** and **Technical University of Vienna Austria**, November 2013.
- Intensive course for *Energy Auditors in Buildings and Equipment*, Romanian Association of Buildings Services Engineers from Romania, **Technical University of Civil Engineering of Bucharest - Romania**, September – October 2013.
- Invited researcher at **Alberta Research Council - Heavy Oil and Oil Sands (HOOS) Department, Edmonton – Canada**, *Applications of Activated Composite Membranes in heavy metals and oily water separation*, December 2008.
- **NATO fellowship - University DEGLI STUDI of Milan – Italy**, *Artificial Neural Networks for Instrumentation, Measurement and Related Industrial Applications*, **NATO ASI NIMIA**, October 2001.
- **Ph.D. fellowship - University AUTONOMA of Barcelona- Spain**, *The properties of activated composite membranes at transport of Zn(II), Cu(II), Fe(III) and Ga(III) cations from aqueous solutions*, February 1999-August 2000.

- Postgraduate course in *Chemical and Electrochemical Reactions in Non-Aqueous Solvents*, **University AUTONOMA of Barcelona – Spain**, May 2000.

Memberships

- Member of the Romanian Society of Chemical Engineering (SICR) part of the European Federation of Chemical Engineering (EFCE).
- Member of the Romanian Association of Building Services Engineers (A.I.I.R).
- Member of the Research Center for Waste Recovery of Construction Mineral Materials (VADEMC) of Technical University of Civil Engineering of Bucharest, Romania.
- Member of the National Consultancy Centre for Environmental Protection of University POLITEHNICA of Bucharest, Romania (CNC-UPB).

Reviewer of Journals

- Journal of Hazardous Material – Elsevier (ISI Citation Reports)
- Chemical Engineering Journal – Elsevier (ISI Citation Reports)
- Chemical Papers - Springer (IDB Citation Reports)
- CLEAN - Soil, Air, Water - Wiley (ISI Citation Reports)
- Desalination and Water Treatment – Taylor & Francis (ISI Citation Reports)
- Environmental Earth Sciences – Springer (ISI Citation Reports)
- Process Safety and Environmental Protection - Elsevier (ISI Citation Reports)

Reviewer of Congresses

- The 13th REHVA World Congress CLIMA 2019, 26-29 May 2019, Bucharest, Romania.

Evaluator of Projects / Research grants

- Research Grants Evaluator for the Universities of Romanian Alliance of Technical Universities (ARUT) PCDTCUPT2017.

Translations of Books and Chapters book

- Physical Chemistry (sixth edition) Prof. P.W. Atkins, Oxford University, U.K., Chapters 16, 17, Technical Publisher, Bucharest, Romania, 2002.

Other Competencies

- Certificate (EU Language Passport) of *French Language Competence*, Foreign Language Centre (CLS) - University of Bucharest, Romania, 2018.
- Certificate from FIDES Foreign Languages School of Bucharest and University of Bucharest, Romania, for the *Cambridge First Certificate in English examination*, 2002.
- Certificate to absolve the course *Errors measurement evaluation in chemical analysis* in accord with EURACHEM guide, organized by IMRN Belgium, 2001.
- Certificate from CERVANTES Institute of Bucharest, Romania, to attendance of *Spanish Language Courses*, 1999/2000.

Scientific and / or Professional prizes

- Certificate of Outstanding Contribution in Reviewing, Elsevier Reviewer Recognition, The Editors of Process Safety and Environmental Protection, ELSEVIER, Amsterdam, The Netherlands, December 2017;
- Certificate of Editorial Board Membership in American Journal of Civil Engineering (AJCE), Science Publishing Group, New York, NY 10018, U.S.A., July 31, 2018.

Total number of citations according to Web of Science and Google Academic

- 82
- h-index 4

National and International Grants

- Member of TEMPUS - PHARE Programme of *National Centre of Consultancy in Environmental Protection (CNC-UPB)* POLITEHNICA University of Bucharest, SJEJ Nr. 12031-1997/2000, partners: Universidad Autónoma de Barcelona (Spain) and University of Hertfordshire (Hatfield, UK), Romanian Project Director: Prof. Eugen Pincovschi;
- Grant Director in the project with Romanian Ministry of Education and Research (MEC) – National Agency for Science, Technology and Innovation (ANSTI) - RO Nr: 5617 /1999-2000, *Modern method of color analysis of solid materials using Artificial Neural Networks*; <http://cncsis.gov.ro/Public/cat/456/Granturi-1995--2008.html>
- Grant Director in the project with Romanian Ministry of Education and Research (MEC) – National Agency for Science, Technology and Innovation (ANSTI) – RO Nr: 7072/2001, CNCSIS–RO Nr: 33784 /2002, *Modern method of water purification with Activated Composite Membranes. Simulation of Membrane Absorption Capacity with Artificial Neural Networks*; http://cncsis.gov.ro/UserFiles/File/Competitii%20derulate/Rez_2002_MEC_At.htm
- Grant Director in the project with Romanian Ministry of Education and Research (MEC) – National Agency for Science, Technology and Innovation (ANSTI) RO Nr: 33552 /2003-2004, *Liquid-liquid extraction of heavy metals from ground and residual waters with di- (2-ethylhexyl) dithiophosphoric acid immobilized in activated composite membranes and their use in industrial processes of metal recovery*; http://cncsis.gov.ro/UserFiles/File/Competitii%20derulate/Rez_2003_AT_finantate_noi.pdf
- Director of International Bilateral Cooperation COPBIL between University POLITEHNICA of Bucharest and Middle East Technical University Ankara, Turkey, 2003/2004.
- Member of the National Project PN-III-P1-1.2-PCCDI-2017-0391, *Smart buildings adaptable to the climate change effects* (Project coordinator: Prof. Daniel-Viorel UNGUREANU - Polytechnic University of Timișoara), 2018/2020.
- Member of the National Project PN-III-P4-ID-PCE-2016-0758, *Passive control methods to improve heat and mass transfer processes in compacting jets* (Project coordinator: Assoc. Prof. Ilinca NĂSTASE- Technical University of Construction Bucharest), 2017/2020.
- Member of the National Project PN-II-P2-2.1-BG-2013-0158, BRIDGE GRANT, *Improvement of the dewatering environment of sludge from the wastewater treatment process at SEAU Glina through the optimization of the local effluent capture and*

treatment system (Project coordinator: Assoc. Prof. Cristiana Verona CROITORU - Technical University of Construction Bucharest), 2016/2019.

List of Publications

Books and Courses

1. Larisa Melita, *The Chemistry of Construction Materials*, e-Learning Course, DidaTec, 2013, <http://www.didatec.ro/>
2. Larisa Melita, *Installation Materials*, e-Learning Laboratory Practices, DidaTec, 2013, <http://www.didatec.ro/>
3. Larisa Melita and Maria Popescu, *Technological Applications of Composite Membranes in: Membrane Technology and Applications*, Boca Raton Florida, CRC Press USA, Taylor & Francis Group, 2011.
4. Maria Popescu, Mitu Corina, Larisa Melita, *Installation Materials – Laboratory practices*, Ed. Conspress (in Romanian), 2012.
5. Maria Popescu, Larisa Melita, Mitu Corina, *Physico-chemical basis of the building materials study*, Ed. Conspress (in Romanian), 2010.

Papers (selected)

1. Larisa Melita, Cristiana Croitoru, *Aerogel, a high performance material for thermal insulation – A brief overview of the building applications*, CLIMA 2019 REHVA 13th HVAC World Congress, 26-29 May 2019, Bucharest, Romania, Congress Proceedings, Published in E3S Web of Conference, vol. 111, article nr: 06069, <https://doi.org/10.1051/e3sconf/201911106069>.
2. Larisa Melita, *Selective transport and removal of Cd(II) from the Ni-Cd batteries leaching with polymer inclusion membranes (PIMs)*, *Bulletin of Romanian Chemical Engineering Society*, vol. 5, No. 2, pag. 16-26, 2018.
3. Marin Amăreanu, Larisa Melita, *Non-traditional aluminous binders. Composition – properties correlations*, *Refractories and Industrial Ceramics*, SPRINGER, vol. 59, No. 3, pag. 306, 2018.
4. Marin Amăreanu, Larisa Melita, *A comparative research study concerning the cements composition influence on the durability and physical-mechanical properties of the concretes*, *European Journal of Environmental and Civil Engineering*, TAYLOR & FRANCIS, vol. 20. Issue 3, pag. 282, DOI: 10.1080/19648189.2015.1036124, 2016.
5. Marin Amăreanu, Larisa Melita, *Organic Polymer Modified Cement Concrete*, *Studia Universitatis Babeş Bolyai Chemia*, vol. 59, Issue 1, pag. 159, 2014.
6. Larisa Melita, Fevzi Gumrah, Marin Amăreanu, *Porous polymer membranes used for wastewater treatment: a review*, *Membrane Water Treatment*, vol. 5, No. 2, pag. 147-170, DOI: <http://dx.doi.org/10.12989/mwt.2014.5.2.147>, 2014.
7. Marin Amăreanu, Larisa Melita, *Aspects of Improving Concrete Durability*, *Studia Universitatis Babeş Bolyai Chemia*, vol. 59, Issue 2, pag. 7, 2014.
8. Larisa Melita, *Vanadium (V) removal study from oily wastewater using activated composite membrane*, *Mathematical Modeling in Civil Engineering Journal*, vol.7, nr. 2 BIS, pag. 42, 2011.
9. Larisa Melita, Fevzi Gumrah, *Studies on transport of Vanadium (V) and Nickel (II) from wastewaters using activated composite membranes*, *Journal of Waste and Biomass Valorization*, SPRINGER, vol.1, nr. 4, pag. 461, 2010.
10. Larisa Melita, Maria Popescu, *Removal of Cr (VI) from industrial water effluents and surface waters using activated composite membranes*, *Journal of Membrane Science*, ELSEVIER, vol. 312, issue1-2, pag. 157, DOI: <https://doi.org/10.1016/j.memsci.2007.12.049>, 2008.

11. Larisa Melita, Maria Popescu, ***Research of polluted water with chromium by the chromitic refracted wastes***, The XIVth Conference of Building Services of Technical University of Civil Engineering of Bucharest, Romania, “Comfort, Efficiency and Energy Preservation”, November 28-30, 2007, Bucharest, Conference Proceedings, pag. 101.
12. Maria Popescu, Larisa Melita, ***Membranes techniques for industrial gaseous effluents depollution***, The XIIIth Conference of Building Services of Technical University of Civil Engineering of Bucharest, Romania, “Comfort, Efficiency and Energy Preservation”, November 1-2, 2006, Bucharest, Conference Proceedings, pag. 68.
13. Larisa Melita, Maria Popescu, Fevzi Gumrah, ***Removal of Cr (VI) from industrial water effluents and surface waters using activated composite membranes***, ISEAC 34, The 34th International Symposium on Environmental Analytical Chemistry, June 4-8, 2006, Hamburg, Germany, Abstract Proceedings on CD.
14. Popescu Maria, Popescu Răzvan, Larisa Melita, Ibriş Corina, ***Air pollution by a metallic powder plant. Pollutants dispersion***, The XIIth Conference of Building Services of Technical University of Civil Engineering of Bucharest, Romania, “Comfort, Efficiency and Energy Preservation”, November 24-25, 2005, Bucharest, Romania, Conference Proceedings, pag. 63.
15. Anicuta Stoica, Marta Stroescu, Larisa Melita, Dinca Evelina, ***Ionic permeation through biopolymeric membranes***, The 14th Romanian International Conference on Chemistry and Chemical Engineering, September 2005, Bucharest, Romania, Proceedings RICCE 14, vol. 3, pag. 324.
16. Larisa Melita, Maria Popescu, ***Removal of Cd (II) and Zn (II) from wastewaters with activated composite membranes***, The XIth Conference of Building Services of Technical University of Civil Engineering of Bucharest, Romania, “Comfort, Efficiency and Energy Preservation”, November 24-26, 2004, Bucharest, Conference Proceedings, pag. 198.
17. Larisa Melita, Maria Popescu and Fevzi Gumrah, ***Industrial wastewaters treatment containing heavy metals Cd (II) and Zn (II), using activated composite membranes. The experimental model study***, *Science and Technology of Environmental Protection*, vol. 11, nr. 1, pag. 18, 2004.
18. Larisa Melita, Maria Popescu and Fevzi Gumrah, ***Industrial wastewaters treatment containing heavy metals. Experimental and mathematical model study***, The 4th International Conference of the Chemical Societies of the South –East European Countries, July 18-21, 2004, Belgrade, Serbia and Montenegro, Abstracts vol. II, pag. 193.
19. Larisa Melita, Aurelia Meghea and Maria Munoz Tapia, ***Activated Composite Membranes applied in heavy metals separation***, *Czechoslovak Journal of Physics*, SPRINGER, vol. 53, supplement A, pag. A 563, 2003.
20. Anicuta Stoica, Larisa Melita, Tatiana Ofiteru, Marta Stroescu, Petronele Matei, ***Chromium (VI) recovery from wastewater using activated composite and emulsion liquid membranes***, The 3th Romanian International Conference on Chemistry and Chemical Engineering, September 2003, Bucharest, Romania, Proceedings RICCE 13, vol.2, pag. 92.
21. Amalia Gheorghe, Anicuta Stoica, Larisa Melita, Marta Stroescu, Octavian Floarea, ***Uranium (VI) recovery using emulsion liquid membranes***, The 13th Romanian International Conference on Chemistry and Chemical Engineering, September 2003, Bucharest, Romania, Proceedings RICCE 13, vol.2, pag. 86.
22. Larisa Melita, V. Lavric, A. Meghea, ***Simulation of colour spectra using artificial neural networks***, *NATO on Neural Networks for Instrumentation, Measurement and Related Applications: Study Cases*, October 9-20, 2001, Crema, Italy, pag. 101.
23. Larisa Melita, Josefina de Gyves, Maria Munoz Tapia, Aurelia Meghea, ***Removal of Zn (II) and Ga (III) from wastewaters using activated composite membranes***, The 9th International Conference SIS, Bratislava, Slovakia, June 5-10, 2001, Abstracts, pag. 100.

24. Larisa Melita, Josefina de Gyves, Maria Munoz Tapia, Aurelia Meghea, ***Removal of Cu (II) and Zn (II) from wastewaters using activated composite membranes***, *Science and Technology of Environmental Protection*, vol. 8, no. 1, pag. 26, 2001.
25. Larisa Melita, Peggy Paduraru, Maria Oleinikova, Josefina de Gyves, Maria Munoz Tapia, ***Separation of Cu (II) and Zn (II) with activated composite membrane using aliquat 336 (tricaprylmethylamonium chloride) as a carrier***, SICHEM 2000, International Chemistry Show, Bucharest, Romania, October 3-6, 2000, Symposium Papers, pag. 39.
26. V. Lavric, Larisa Melita, A. Meghea, ***Artificial Neural Networks modelling of colour spectra***, The 14th International Congress of Chemical and Process Engineering, August 27-31, 2000, Prague, Czech Republic, CD-ROM.
27. Larisa Melita, V. Lavric, Aurelia Meghea, ***A method for colour analysis of solid materials using artificial neural networks (ANN)***, Chemical and Chemical Engineering International Conference, Bucharest, Romania, September 30- Oct. 2, 1999, CD-ROM.
28. Simona Pasolescu, Larisa Melita, C. Guran, ***Biological active phenothiazines as ligands for complexation of 3d and 4d metal ions***, The Vth International Symposium on Applied Bioinorganic Chemistry, Corfu -Greece, April 13-17, 1999, Book of Abstracts, pag. 155.
29. Cornelia Guran, I Ciocoiu, V. Iluc, Larisa Melita, C. Ciocoiu, ***Hydrazinopyridazines as polydentate generators of cis -Pt (II) and Pd (II) complexes***, The Vth International Symposium on Applied Bioinorganic Chemistry, Corfu - Greece, April 13-17, 1999, Book of Abstracts, pag. 154.
30. A. Meghea, M. Sima, M. Buda, Larisa Melita, ***The influence of the electrode potential on optic, paramagnetic and semiconducting characteristics of the polyaniline films***, Analele Universității București, Chimie, no. 6, pag. 63-71, 1997.
31. Larisa Melita, R., I., Preda, Aurelia Meghea, Marcela Savu, ***Mathematical Model for colour analysis, applied in leather dyes industry***, Official Papers of University POLITEHNICA of Iasi, Romania, The VIIIth Textile-Leather Section, 1997, Tom. XLIII (XLVII), Issue 3-4, pag. 81.
32. R. Preda, Larisa Melita, Aurelia Meghea, Marcela Savu, ***Mathematical model for trichromatic Colour Analysis***, Chemical and Chemical Engineering International Conference, October 16-18, 1997, Bucharest, Romania, Conference Proceedings, vol.5, pag. 142.
33. Woinaroschy A., Larisa Melita, Popescu M., Rehner R., ***A new method for IR spectra identification using Artificial Neural Networks***, Chemical and Chemical Engineering National Conference, October 29-30, 1993, Bucharest, Romania, Conference Proceedings, vol.2, pag. 441.

Assoc. Prof. Larisa Mădălina MELIȚĂ

