

## Curriculum Vitae



### Personal information

Surname(s) / First name(s) **MURESAN Liana Maria**  
Address(es) 11 Arany Janos Str., 400028 Cluj-Napoca, ROMANIA  
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E-mail limur@chem.ubbcluj.ro  
Nationality Romanian  
Date of birth 3<sup>rd</sup> May 1954

### Academic training and positions

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| Dates  | 1990 – 1992   |
| Title of qualification awarded                                 | PhD in Chemistry  |
| Name and type of organisation providing education and training | «Babeş-Bolyai» University Cluj-Napoca                       |
| Dates  | 1973 - 1977   |
| Title of qualification awarded                                 | Bachelor in Chemistry                                       |
| Name and type of organisation providing education and training | Faculty of Chemistry, «Babeş-Bolyai» University Cluj-Napoca |
| Dates  | 1969 - 1973   |
| Title of qualification awarded                                 | High school graduation degree                               |
| Name and type of organisation providing education and training | “ George Bariţiu ” Highschool Cluj-Napoca                   |

### Work experience

#### Teaching/research/industry

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| Dates                                | 2016-present   |
| Occupation or position held          | Director of the Research Center in Electrochemistry and Non-conventional Materials   |
| Dates                                | 2005-present   |
| Occupation or position held          | <i>PhD coordinator</i>   |
| Dates                                | 2002-present   |
| Occupation or position held          | <i>Full Professor</i>  |
| Main activities and responsibilities | Courses: Electrochemistry, Electrochemical investigation methods, Advanced electrochemistry; Corrosion.<br>Research activities                     |
| Name and address of employer         | “Babes-Bolyai” University, Dept. of Physical Chemistry, Cluj-Napoca, Romania   |
| Type of business or sector           | Education/Teaching   |
| Dates                                | 1997-2000  |
| Occupation or position held          | <i>Associate Professor</i>   |
| Main activities and responsibilities | Courses: Electrochemistry (in Romanian, English and German), Electrochemical investigation methods, Environmental chemistry<br>Research activities |

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| Name and address of employer<br>Type of business or sector | "Babes-Bolyai" University, Dept. of Physical Chemistry, Cluj-Napoca, Romania<br>Education  |           |         |           |                    |           |                   |              |                |      |
| Dates  | 1990-1997  |           |         |           |                    |           |                   |              |                |      |
| Occupation or position held                                | <i>Lecturer</i>  |           |         |           |                    |           |                   |              |                |      |
| Main activities and responsibilities                       | Courses: Electrochemistry, Electrochemical Reactions in organic chemistry, Environmental chemistry, Kinetics and electrochemistry (biology-chemistry specialization)<br>Research activities  |           |         |           |                    |           |                   |              |                |      |
| Name and address of employer<br>Type of business or sector | "Babes-Bolyai" University, Dept. of Physical Chemistry, Cluj-Napoca, Romania<br>Education  |           |         |           |                    |           |                   |              |                |      |
| Dates  | 1986-1990  |           |         |           |                    |           |                   |              |                |      |
| Occupation or position held                                | <i>Assistant</i>   |           |         |           |                    |           |                   |              |                |      |
| Main activities and responsibilities                       | Practical works in the field of electrochemistry and of chemical kinetics  |           |         |           |                    |           |                   |              |                |      |
| Name and address of employer<br>Type of business or sector | "Babes-Bolyai" University, Dept. of Physical Chemistry, Cluj-Napoca, Romania<br>Education  |           |         |           |                    |           |                   |              |                |      |
| Dates  | 1981-1986  |           |         |           |                    |           |                   |              |                |      |
| Occupation or position held                                | <i>Scientific Researcher</i>   |           |         |           |                    |           |                   |              |                |      |
| Main activities and responsibilities                       | Research in the field of fuel cells and of metal electrodeposition / electrorefining   |           |         |           |                    |           |                   |              |                |      |
| Name and address of employer<br>Type of business or sector | Institute of Chemical and Electrochemical Energetics, Cluj-Napoca<br>Research  |           |         |           |                    |           |                   |              |                |      |
| Dates  | 1977 -1981   |           |         |           |                    |           |                   |              |                |      |
| Occupation or position held                                | <i>Chemist</i>   |           |         |           |                    |           |                   |              |                |      |
| Main activities and responsibilities                       | Quality control of products  |           |         |           |                    |           |                   |              |                |      |
| Name and address of employer<br>Type of business or sector | Heavy Equipment Enterprise, Cluj-Napoca, Romania<br>Industry   |           |         |           |                    |           |                   |              |                |      |
| <b>Research interests</b>                                  | Electrochemistry, Modified electrodes, Electrodeposition of metals and composites; Corrosion   |           |         |           |                    |           |                   |              |                |      |
| <b>Awards</b>  | Excellency diploma PROINVENT, International Exhibition "Inventica" <b>2014</b> , Cluj-Napoca<br>Excellency diploma for important contribution in the field of corrosion and corrosion protection awarded by Technical University Cluj-Napoca |           |         |           |                    |           |                   |              |                |      |
| <b>Personal skills and competences</b>                     |  |           |         |           |                    |           |                   |              |                |      |
| Mother tongue(s)   | <b>Romanian</b>  |           |         |           |                    |           |                   |              |                |      |
| Other language(s)  | <b>French, English, German</b>   |           |         |           |                    |           |                   |              |                |      |
| Self-assessment  |  |           |         |           |                    |           |                   |              |                |      |
|  | <b>Understanding</b>   |           |         |           | <b>Speaking</b>    |           |                   |              | <b>Writing</b> |      |
|  | Listening  |           | Reading |           | Spoken interaction |           | Spoken production |              |                |      |
| <b>French</b>  | F  | excellent | F       | excellent | F                  | very well | F                 | very well    | F              | well |
| <b>English</b>   | E  | very well | E       | very well | E                  | well      | E                 | well         | E              | well |
| <b>German</b>  | G  | well      | G       | well      | G                  | well      | G                 | satisfactory | G              | well |

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| <b>Research stays abroad</b>                         | <ul style="list-style-type: none"> <li>-Université Pierre et Marie Curie, Paris, France (1990-1991, 1996, 1999 and 2005),</li> <li>-University Eotvos Lorand, Budapest, Hungary (1993),</li> <li>-Institute of Physical Chemistry of the Bulgarian Academy of Sciences Sofia, Bulgaria (1994),</li> <li>Université Joseph Fourier, Ecole Nationale Supérieure d'Electrochimie et Electrometallurgie Grenoble, France (1996),</li> <li>-Université Libre de Bruxelles, Service de Métallurgie – Electrochimie, Bruxelles, Belgium (1999).</li> <li>- Università degli Studi di Cagliari, Italia, ERASMUS mobility, 2017</li> <li>- Università di Pisa, Italia, ERASMUS mobility, 2018</li> </ul>                          |
| <b>Managerial skills</b>                             | <ul style="list-style-type: none"> <li>- Head of Physical Chemistry Department, Faculty of Chemistry and Chemical Engineering(2008-2012)</li> <li>- Director of Research Center in Electrochemistry and Non-conventional Materials (2016-present)</li> <li>- Member of the Faculty Council (2008-present) and of the Engineering Department Council (2012-present)</li> </ul>  |
| <b>Affiliations</b>                                  | <p>International Society of Electrochemistry (ISE) –Regional representative (2008-2014)</p> <p>Romanian Society of Chemistry</p> <p>Romanian Society of Electrochemistry</p>   |
| <b>Reviewer</b>                                      | <p>Journal of Applied Electrochemistry</p> <p>Sensors&amp;Actuators</p> <p>J. Solid State Electrochem</p> <p>Mat. Chem. Phys.</p> <p>Electrochimica Acta</p> <p>Corrosion Science etc.</p>   |
| <b>Peer review activity - international projects</b> | <ol style="list-style-type: none"> <li>1. Evaluation of Serbian projects proposals financed by the Serbian Ministry of Education and Science 2010</li> <li>2. INTAS projects evaluator 2003-2006</li> <li>3. Evaluation of proposals in open calls of the National Science Centre Poland 2015</li> <li>4. Evaluation of OTKA project proposals, Hungary 2015</li> <li>5. Remote evaluator for H2020-FETOPEN-2016-2017-RIA</li> <li>6. Evaluation des candidatures dans le cadre d'appels à candidatures 2014-2015, 2015-2016, 2016-2017 et 2017-2018 pour le programme des bourses Eugene Ionesco mis en place par le Gouvernement de la Roumanie et coordonnée par l'Agence universitaire de la Francophonie</li> </ol> |
| <b>Member of Editorial board</b>                     | Journal of Electrochemical Science and Engineering ISSN: 1847-9286   |
| Computer skills and competences                      | Microsoft Office, Origin, Internet   |

**Relevant publications  
(last 5 years)**

1. Patrick Ioan Nemes, Maria Lekka, Lorenzo Fedrizzi, **Liana Maria Muresan, 2014**, Influence of the electrodeposition current regime on the corrosion resistance of Zn–CeO<sub>2</sub> nanocomposite coatings, *Surface & Coat. Technol.* 252, 102-107.
2. Ileana Rotaru, Simona Varvara, Luiza Gaina, **Liana Maria Muresan, 2014**, Antibacterial drugs as corrosion inhibitors for bronze surfaces in acidic solutions, *Applied Surface Science*, 32, 188–196
3. **L.M. Muresan, 2014**, Corrosion Protective Coatings for Ti and Ti Alloys Used for Biomedical Implants in “*Intelligent Coatings for Corrosion Control*”, Elsevier, ISBN 978-0-12-411467-8, Chapter 17, 585-603.
4. Emőke Albert, Nicoleta Cotolan, Norbert Nagy, György Sáfrán, Gabriella Szabó, **Liana-Maria Mureşan, Zoltán Hórvölgyi, 2015**, Mesoporous silica coatings with improved corrosion protection properties, *Microporous & Mesoporous Materials*, 206, 102-113.
5. A. R. Deac, C. Morar, G. Turdean, M. Darabantu, E. Gál, A. Bende, **Liana Maria Muresan, 2016**, Glassy carbon electrode modified with hemin and new melamine compounds for H<sub>2</sub>O<sub>2</sub> amperometric detection, *J. Solid State Electrochem.*, 20, 3071-3081.
6. Roxana Bostan, Simona Varvara, Luiza Găină, Traian Petrisor jr., **Liana Maria Mureşan, 2017**, Investigation of the protective effect of inhibitor-containing nitrocellulose lacquer on artificial bronze patinas, *Prog. Org. Coat.*, 111 (2017) 416–427
7. Ana Maria Sacara, Castelia Cristea, **Liana Maria Muresan, 2017**, Electrochemical detection of Malachite Green using glassy carbon electrodes modified with CeO<sub>2</sub> nanoparticles and Nafion, *J. Electroanal. Chem.*, 792 23–30
8. Ana Maria Sacara, Valentina Nairi, Andrea Salis, Graziella Liana Turdean, and **Liana Maria Muresan, 2017**, Silica-modified Electrodes for Electrochemical Detection of Malachite Green, *Electroanalysis*, 29, 2602-2609
9. Aglaia Raluca Deac, **Liana Maria Muresan**, Liviu Cosmin Cotet, Lucian Baia, Graziella Liana Turdean, **2017**, Hybrid composite material based on graphene and polyhemin for electrochemical detection of hydrogen peroxide, *J. Electroanal. Chem.*, 802, 40–47
10. Nicoleta Cotolan, Liviu Cosmin Cotet, Daniel Marconi, **Liana Maria Muresan, 2018**, Influence of graphene oxides produced by different processing techniques on the corrosion resistance of electrodeposited Zn-graphene composite coatings, *Rev. Roum. Chim.*, 64(1) 55-63
11. Ana-Maria Sacara, Federica Pitzalis, Andrea Salis, Graziella Liana Turdean, **Liana Maria Muresan**, Glassy carbon electrodes modified with ordered mesoporous silica for cadmium ions electrochemical detection, **2019**, *ACS Omega*, 4, 1, 1410-1415.
12. Ana-Maria Săcară, Cerasella Liliana Indolean, Vasile Mircea Cristea, **Liana Maria Mureşan, 2019**, Application of adaptive neuro-fuzzy interference system on biosorption of malachite green using fir (*Abies nordmanniana*) cones biomass, *Chem. Eng. Commun.*, DOI: 10.1080/00986445.2018.1555531

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**Grants and research projects**

1. Electrolytic recovery of some heavy metals from solid industrial wastes and waste waters, - CNCSU 215/1998-1999, **Project manager**
2. Application of electrochemical impedance spectroscopy in metal / electrolyte interface investigation, **Project manager**, CNCSIS /2001-2003
3. Nanocomposite hybrid matrices with electrocatalytic properties, **Project manager**, contract CNCSIS-A-34/349-2004-2006
4. Etude des inhibiteurs organiques non-nocifs à la protection de la patine des bronzes archéologiques, programme ECONET, dossier 10279NA-2005-2006, **international project** (cooperation Romania- France -Croatia) –**romanian coordinator**
5. Technology for the obtaining of zinc composite coatings with anticorrosion properties by electro-codeposition of metals with nanoparticles, Project INOVARE nr. 97/28.09.2007, NANOTECH (**UBB project coordinator**), **2007-2009**
6. Corrosion resistant composite coatings obtained by electrolytic codeposition of copper with nanoparticles, **project manager**, CNCSIS-A, **2007-08**
7. Innovative technology for the obtaining of Zn-Ni coatings with anticorrosion properties by composites-electrodeposition with nanometric particles, Project INOVARE nr. 1579, **2008**, ZINITECH (director Caius Bulea, S.C. BETAK S.A. Bistrita, **project coordinator UBB Liana Muresan**), **2008-2010**
8. Protective sol-gel layers on metallic surfaces: Preparation and characterization, (SOLGELCOR) Bilateral project Ro-HU (**RO project coordinator**), **2013-2014**