



## Curriculum vitae Europass

### Personal Informations

Name / Surname Iancu Lorena  
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E-mail [lorena.iancu@icechim.ro](mailto:lorena.iancu@icechim.ro), [lorenna77ro@yahoo.com](mailto:lorenna77ro@yahoo.com)  
Nationality Romanian  
Birth date 19.11.1977  
Gender F

### Professional experience

Period Sep 2002- present  
Occupation or position held Scientific Research Assistant – 2002, Scientific Researcher – 2004, III<sup>rd</sup> degree Scientific Researcher (2009 - present)  
Main activities and responsibilities - Documentation, laboratory experiments, elaboration of technical-economic documents, preparation of internal reports.  
- Publishing specialized articles and participating in scientific manifestations.  
- Experience from nationale/internationale projects: project leader (2 Programs Nucleu), project responsible (1 PN II - Parteneriate Innovative technology and plant for making selective biocompatible membranes with the human blood destined to an extrabodily oxygenating device“ - MEMBIOX), participant in 18 research projects.  
Name and address of employer National Institute of Research and Development in Chemistry and Petrochemistry ICECHIM, Evaluation and conservation of cultural heritage, 202 Spl. Independence, 060021, district 6, Bucharest, Romania, [www.icechim.ro](http://www.icechim.ro).  
Type of activity or sector of activity Research  
- Carbonated hydroxyapatite (CHA) and CHA substituted with different metallic ions synthesis;  
- Obtaining nanomaterials for the conservation and restoration of heritage objects;  
- Study of wood artifacts (obtaining nanoparticles, treatment and characterization of wood samples);  
- Synthesis and characterization of block-copolymers obtained by anionic polymerization and of polymeric composites made on their basis;  
- Physico-chemical and component characterization of block-copolymers through: GPC, UV-VIS, IR.  
- Obtaining semiconductor polymers-polyaniline;  
- Introduction polar groups (hydroxyl, carboxyl, oxirane ring, maleic) in styrene-diene block-copolymers by polymer analogous reaction;  
- Sulfonated SEBS block copolymers in solution;  
- Compounds with high impact strength based on native and recovered polyolefins modified with styrene-diene block-copolymers.  
  
**Education and training**  
Qualification / diploma obtained High school diploma in 1996  
Name and type of educational institution / training provide Octav Onicescu, Bucharest  
Specialization Chemistry – Biology.

|  |   |                  |         |                  |                                   |                  |             |                  |
|--|---|------------------|---------|------------------|-----------------------------------|------------------|-------------|------------------|
| Qualification / diploma obtained   | Engineer Diploma, 2002  |                  |         |                  |                                   |                  |             |                  |
| Name and type of educational institution / training provide                  | “Politehnica University of Bucharest”, Faculty of Industrial Chemistry Technology of Macromolecular Compounds.  |                  |         |                  |                                   |                  |             |                  |
| <b>Personal skills and competences</b>                                       |   |                  |         |                  |                                   |                  |             |                  |
| Native language  | Romanian language   |                  |         |                  |                                   |                  |             |                  |
| Foreign language known   | English   |                  |         |                  |                                   |                  |             |                  |
| Self-assessment  |   |                  |         |                  |                                   |                  |             |                  |
| <i>European level (*)</i>  |   |                  |         |                  |                                   |                  |             |                  |
| <b>English</b>   |   |                  |         |                  |                                   |                  |             |                  |
|  | <b>Understanding</b>  |                  |         |                  | <b>Speaking</b>                   |                  |             | <b>Writing</b>   |
|  | Listening   |                  | Reading |                  | Participation in the conversation |                  | Oral speech |                  |
|  | B2  | Independent user | B2      | Independent user | B1                                | Independent user | B1          | Independent user |
|  | B2  | Independent user | B2      | Independent user | B1                                | Independent user | B2          | Independent user |
| (*)Level of the Common European Framework of Reference for Foreign Languages |   |                  |         |                  |                                   |                  |             |                  |
| Social skills and competences  | Punctuality, earnestness, sociable, ambitious, working capacity under stress, meticulousness, perseverance, team spirit.  |                  |         |                  |                                   |                  |             |                  |
| Organisational skills and competences  | Good collaboration with colleagues and superiors, efficient organization of professional activities, attention to details, practical analysis.  |                  |         |                  |                                   |                  |             |                  |
| Technical skills and competences   | Operation of laboratory equipment and apparatus (ultrasonic bath, sand / water bath, optical microscope, oven, polymerization reactor, magnetic stirrers, etc.); skills acquired while working with laboratory equipment.                                   |                  |         |                  |                                   |                  |             |                  |
| Computer skills and competences  | Microsoft Office: Word, Excel, Power Point, Origin Internet   |                  |         |                  |                                   |                  |             |                  |
| Research skills and competences  | Acquiring knowledge in developing a research project. Research orientation, sense of responsibility. Theoretical and practical competences in the research fields approached within the themes of the research works and in the operation of the equipment. |                  |         |                  |                                   |                  |             |                  |
| Other skills and competences   | Training program: "Expert in accessing European structural and cohesion funds", in 2011.  |                  |         |                  |                                   |                  |             |                  |
| <b>Additional informations</b>   |   |                  |         |                  |                                   |                  |             |                  |
|  |   |                  |         |                  |                                   |                  |             |                  |
|  |   |                  |         |                  |                                   |                  |             |                  |
| Scopus profile address   | Profile address www.scopus.com: <a href="https://www.scopus.com/authid/detail.uri?authord=8583167200">https://www.scopus.com/authid/detail.uri?authord=8583167200</a>   |                  |         |                  |                                   |                  |             |                  |
| <b>Annexes</b>   | Annex 1 List of scientific papers - articles, patents, awards, medals, distinctions (selection).  |                  |         |                  |                                   |                  |             |                  |

## **Annex 1 List of scientific papers - articles, patents, awards, medals, distinctions (selection).**

### **List of publications**

1. L. Iancu, R.M. Ion, R. M. Grigorescu, M. E. David, M. Ghiurea, G. Vasilievici, R.M. Stirbescu, I. D. Dulama, Double substituted carbonated hydroxyapatite for stone consolidation, *J. Sci. Arts*, 2020, 3 (52).
2. M. E. David, R.M. Ion, R. M. Grigorescu, L. Iancu, E. R. Andrei, Nanomaterials Used in Conservation and Restoration of Cultural Heritage: An Up-to-Date Overview, *Materials* 2020, 13, 2064; doi:10.3390/ma13092064.
3. R.M. Grigorescu, P. Ghioca, L. Iancu, M. E. Grigore, R.M. Ion, C.A. Nicolae, R. Gabor, M.I. Filipescu, M. Rapa, R. D. Trusca, M. Ghiurea, Impact strength elastomer composites based on polystyrene components separated from waste electrical and electronic equipment, *Journal of Applied Polymer Science*, 137(5), 48329, 2020, <https://doi.org/10.1002/app.48329>.
4. R.M. Ion, L. Iancu, G. Vasilievici, M. E. Grigore, R. E. Andrei, G.-I. Radu, R. M. Grigorescu, S. Teodorescu, I. A. Bucurica, M.-L. Ion, A. I. Gheboianu, C. Radulescu, I. D. Dulama, Ion-Substituted Carbonated Hydroxyapatite Coatings for Model Stone Samples, *Coatings* 2019, 9, 231; doi:10.3390/coatings904023.
5. R.M. Ion, S. Tincu, N. Ion, I.A. Bucurica, S. Teodorescu, I. D. Dulama, R.M. Stirbescu, A.I. Gheboianu, C. Radulescu, M.L. Ion, L. Iancu, R. M. Grigorescu, Archaeometric studies of mural paints from Matia Loggia (Corvins' Castle), *Romanian Reports in Physics*, 71, 804, 2019.
6. R.M. Ion, S. Tincu, L. Iancu, R.M. Grigorescu, Investigations of the new gate tower Corvins'Castle, *IOP Conferences Series: Materials Science and Engineerig* 572 (2019) 012088, doi:10.1088/1757-899X/572/1/012088.
7. M.E. Grigore, R.-M. Ion, L. Iancu, R.M. Grigorescu, Tailored porphyrin–gold nanoparticles for biomedical applications, *J. Porphyrins Phthalocyanines* 2019; 23: 767–780, DOI: 10.1142/S108842461930012X.
8. R-M Ion, S. Tincu, L. Iancu, R. M. Grigorescu, M.E. Grigore, A.I. Gheboianu, S. Teodorescu, Nanomaterials for conservation of ceramic tiles from Corvins'Castle, Hunedoara, in e-book abstract ed. E. Badea, A. Bernath, "The Cultural Object from Investigation to Restoration", Oscar Print Publishing House, Bucuresti, 2019, ISBN 978-973-668-503-3.
9. R.M. Grigorescu, M.E. Grigore, L. Iancu, P.Ghioca, R.M. Ion, Waste Electrical and Electronic Equipment: A Review on the Identification Methods for Polymeric Materials. *Recycling*. 4(3):32, 2019.
10. M. E. Grigore, R. M. Grigorescu, L. Iancu, R.M. Ion, C. Zaharia, R. E. Andrei, Methods of synthesis, properties and biomedical applications of polyhydroxyalkanoates: a review (Review), *Journal of Biomaterials Science, Polymer Edition*, Vol 30, Issue 9, 13 June 2019, pp. 695-712, <https://doi.org/10.1080/09205063.2019.1605866>
11. R.M. Ion, T. Nyokong, N. Nwahara, I.R Suica-Bunghez, L. Iancu, S. Teodorescu, I. D. Dulama, R. M. Stirbescu, A. Gheboianu, R. M. Grigorescu, Wood preservation with gold hydroxyapatite system, *Heritage Science*, 2018, pp.1-12, <https://doi.org/10.1186/s40494-018-0202-5>.
12. R. M. Grigorescu, F. Ciuprina, P. Ghioca, M. Ghiurea, L. Iancu, B. Spurcaci, D. M Panaitescu, "Mechanical and dielectric properties of SEBS modified by graphite inclusion and composite interface", *Journal of Physics and Chemistry of Solids* 89, 2016, p. 97–106

### **Books chapters**

1. R.M Ion, R.M. Grigorescu, L. Iancu, P. Ghioca, N. Radu, Polymeric micro and nanosystems for wood artifacts preservation, in Marcelo Ruben Pagnola, *New uses of micro and nano materials*, Intech 2018.

2. R.M. Ion, A. Nuta, A.A. Sorescu, L. Iancu, Photochemical degradation processes in cultural heritage, in Satyen Saha, Photochemistry and photo-physics, Intech 2018.

#### **OSIM patent applications**

1. A 2020-00300/29.05.2020 Patent application, R.M. Ion, L. Iancu, R.M. Grigorescu, M.E. David, N. Ion, "Carbonated hydroxyapatite co-substituted with strontium and zinc composition for consolidating heritage objects".
2. A2020 -0080/17.02.2020 Patent application, R-M Grigorescu, P. N. Ghioca, L. Iancu, R-M Ion, N. Ion, M-E David, E. R. Andrei, M. I. Filipescu, B. N. Spurcaci, "Recycling process of non-metallic wastes of printed circuit board and recovered polypropylene as impact strength composites".
1. A 2020-00030/23.01.2020 Patent application, R.M. Ion, P. N. Ghioca, R. M. Grigorescu, L. Iancu, M.-E. David, N. Ion, "Elastomeric films for the degradation of anti-tumor drug wastes in photocatalytic reactors".
2. A 2019-00054/31.01.2019 Patent application, R.M. Ion, N. Ion, L. Iancu, N. Radu, "Antifungal composition for restoration / preservation of wood artifacts, and method of use".
3. A 2018-00319/08.05.2018 Patent application, R.M. Ion, R.M. Grigorescu, L. Iancu, P.N. Ghioca, N. Ion, "Polymeric compositions for the protection and conservation of wood surfaces and procedure for the application of them".

#### **Patent**

1. L. Iancu, B. Spurcaci, P. Ghioca, E. Stepan, S. Velea, Z. Vuluga, "Process for obtaining styrene-butadiene block copolymers grafted with maleic anhydride", brevet RO nr. 126665, 2014.

#### **Awards, medals, distinctions**

1. R. M. Ion, P. N. Ghioca, R. M. Grigorescu, L. Iancu, M. E. David, N. Ion, Elastomeric films for the degradation of anti-tumor drug wastes in photocatalytic reactors, **Gold medal, EUROINVENT**, Iasi, Romania, 23 Mai 2020.
2. P. N. Ghioca, R.-M. Grigorescu, L. Iancu, R. M. Ion, N. Ion, M.-E. David, E. R. Andrei, M. I. Filipescu, B. Norocel, Spurcaci, Recycling process of non-metallic wastes of printed circuit board and recovered polypropylene as shock-resistant composites, **Gold medal, EUROINVENT**, Iasi, Romania, 23 Mai 2020.
3. R. M. Grigorescu, P.N. Ghioca, L. Iancu, Z.Vuluga, M. Iorga, R.-M. Ion, N. Ion, M. E. Grigore, R. E. Andrei, M. I. Filipescu, G. I. Radu, B. N. Spurcaci, Recycling method of the polystyrene fraction from waste electrical and electronic equipment as impact-strength polystyrene composite, **Diploma of excellence and Gold medal**, Proinvent International Invention Salon, 20-22 martie 2019, Cluj-Napoca.
4. R.-M. Ion, R. M. Grigorescu, L. Iancu, P.N. Ghioca, N. Ion, Polymeric compositions for the protection and conservation of wood surfaces and method of use, **Diploma of excellence**, Proinvent International Invention Salon, 20-22 martie 2019, Cluj-Napoca.
5. R.M. Ion, N. Ion, L. Iancu, N. Radu, Antifungal composition for restoration/preservation of wood artifacts, and method of use, **Diploma of excellence and Gold medal**, Proinvent International Invention Salon, 20-22 martie 2019, Cluj-Napoca.
6. R.M. Ion, N. Ion, L. Iancu, N. Radu, Antifungal composition for restauration/preservation of wood artifacts, and method of use, **Silver Medal, EUROINVENT, Iasi**, Romania, 16-18 May 2019.
7. R.M. Ion, R. M. Grigorescu, L. Iancu, P. N. Ghioca, N. Ion, Polymeric compositions for the protection and conservation of wood surfaces and procedure for the application of them, **Diploma and bronze medal, EUROINVENT, Iasi**, Romania, 16-18 May 2019.

10.08.2020