Curriculum Vitae



Marcela Mihai

E-mail: <u>marcelas@icmpp.ro</u>; <u>marcelasmihai@gmail.com</u> Phone: +40 751 795 591 Deputy Director Head of Laboratory of Functional Polymers ''Petru Poni'' Institute of Macromolecular Chemistry

Education and training

- 1986–1991 Chemical engineer, Polytechnic Institute of Iasi, Faculty of Chemical Engineering, Section Technology of Pulp, Paper and Artificial Fibers
- 2003–2009 Doctor in chemistry, "Petru Poni" Institute of Macromolecular Chemistry (PPIMC) of Romanian Academy, thesis "Specific interactions in multicomponent systems based on natural or synthetic cationic polyelectrolytes", scientific coordination Dr. E. S. Dragan
- 2010–2013 Postdoctoral scholar, Project European Social Fund Postdoctoral Program Cristofor I. Simionescu, research field - biomaterials, scientific subfield - nanostructured nano and biomaterials, funded individual project "New nanostructured architecture of the polymers obtained by self-assembly of synthetic and/or natural, with biomedical applications"

Habilitation

- 2016 Romanian Academy, thesis "Bioinspired crystal growth through polymeric additives and templates. From basic research to application", OM 4832/11.08.2016
- September 2016 Member on the "School for advanced studies of the Romanian Academy" (SCOSAAR), as PhD thesis supervisor in PPIMC

Work experience

- PPIMC: 2001–2002, Research assistant trainee; 2002–2008, Research assistant; 2008–2010,
 Scientific researcher; 2010–2015, Senior researcher III; 2016 present Senior researcher II
- Head of Laboratory of Functional Polymers (from January 2018)
- *Member of the Scientific Council* of PPIMC (from March 2015)
- *Head of the Commission* for promoting the image and increasing the visibility of the institute (from March 2015)
- Director of PPIMC research project "Nanostructurated composite materials based on linear and crosslinked ionic polymers", subprogram "Synthetic and Natural Ionic Polymers"

Research stages in European institutes

Leibniz Institute of Polymer Research, Dresden, Germany (2003, 2006, 2011, 2012, 2013, 2015, 2016)

- Institute of Polymers of Bulgarian Academy, Sofia, Bulgaria (2007)
- *Institute of Theoretical and Physical Chemistry of the National Hellenic Research Foundation*, Athens, Greece (2012, 2016).

Scientific activity

- *Field of research*: Complex multicomponent systems based on natural and synthetic polyions
- *Publications*: co-author of a book, 6 book chapters, 48 scientific papers (43 in ISI ranked journals, total impact factor ~130), 12 in scientific volumes, two patents
- Hirsch Index 11
- *Scientific meeting*: more than **120 presentations** (lectures by invitation in visited institutes, invited/plenary/keynote lectures, oral and posters) at national/international scientific meetings
- "Costin D. Nenitescu" Prize of the Romanian Academy for the papers in the field "Composite materials based on calcium carbonate and pH-sensitive polyelectrolytes" published in 2012
- Researcher ID: <u>http://www.researcherid.com/rid/B-9763-2012</u>

Projects

- Research team member in eleven national grants/projects
- *Technical Expert in the management team* Competitiveness Operational Programme 2014-2020, Priority Axis 1, Contract 142/10.10.2016, ID P_36_570
- **POSDRU individual project**, *New nanostructured architectures obtained by self-assembling of synthetic and/or natural polyelectrolytes, with biomedical applications*, 2010-2013
- **Project leader**, *Hollow microcapsules based on calcium carbonate and pH-sensitive polymers as advanced drug delivery systems* (MicroCapHs), PN-II-RU-TE-2014-4-1433, 2015-2017
- **Project leader**, Integrated and sustainable processes for environmental clean-up, wastewater reuse and waste valorization (SUSTENVPRO), contract 26PCCDI/1.03.2018, 2018-2020
- **Partner project leader**, Lego-style approach for problematic water streams treatment (WaterLego), 224-ERA.Net RUS Plus, 2018-2020
- **Tutor in Postdoctoral Project**: Design of novel beads chitosan/amidoximated starch for wastewater purification applications, PN-III-P1-1.1-PD-2016-1313, 2018-2020

Member of professional groups

- Member of *Romanian Chemical Society* (since 2004)
- Member of International Union of Crystallography (since 2011)

Specializations and qualifications

Theoretical training: Macromolecular chemistry at the border between classic and modern.
 Polymeric biomaterials (prof. G. David), Cell biology: structure –function correlation (Dr. D.
 Popov), Farmacology - Biocompatibility (Prof. Dr. X. Patras), Natural polymers with

biomedical applications (Prof. V. Popa), *Biodegradable materials* (Prof M. Kowalczuk), *Supramolecular chemistry. Selfassembly and applications in biomedical field* (Prof. G. David).

- Summer schools: Bioactive/biocompatible polymeric materials (Zabrze, Poland), Tendences in synthesis and characterization of advanced materials for applications in biology and medicine (Timisoara, Romania), Biomaterials (ESAO Educational School, Krems, Austria), Green Chemistry (Georg-August University, Gottingen, Germany).

Other activities

- *Training tutor for students in PPIMC*: theoretical and practical training on macromolecular chemistry materials synthesis, purification and characterization, activity coordination, periodic and final evaluation.
- Member of the scientific/organizing committee of scientific meetings: 11th Conference on Colloid and Surface Chemistry, 2013; XI^{ème} Colloque Franco-Roumain sur les Polymères", 2014; 6th International Conference "Biomaterials, Tissue Engineering & Medical Devices" BiomMedD'2014; 12th Conference on Colloid and Surface Chemistry, 2016; 3rd International Conference Analytical Chemistry, ROICAC'2016; 4th International Conference Analytical Chemistry, ROICAC'2018.

May, 2019