

Dr. Mihaela SILION, Post-Doc

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Researcher (CS/CSIII): 2009 - present - Institute of Macromolecular Chemistry “Petru Poni” Iasi, Romania

Assistant Researcher: 2008 - Gh. Asachi” Technical University, Faculty of Chemical Engineering, Department of Chemical Engineering, Iasi, Romania

Education: 1998-2003 - B.Sc. Eng – University of Bacau, Faculty of Engineering, **2007- PhD in Chemistry**- Gh. Asachi” Technical University, Faculty of Chemical Engineering, Department of Chemical Engineering, Iasi, Romania, **Postdoc Researcher: 2008-2009** - Laboratory Advanced Materials for Catalysis and Health Care (MACS), Ecole Nationale Supérieure de Chimie de Montpellier, France

Research experience and technical skills: • Development of new separation/identification methods of organic compound, drugs and biopolymers using High Performance Liquid Chromatography coupled to Mass Spectrometry (HPLC-MS) with electrospray ionization (ESI-MS) or Matrix Assisted Laser Desorption Ionization Mass Spectrometry (MALDI-MS); • Synthesis of complex polyols from glycerol and their derivatives by formose reaction. Study of reaction kinetics and their characterization by NMR, HPLC, GC and GC-MS; • Perform research in the field of supramolecular chemistry related to water and ion channels membranes; • Synthesis and characterization of the layered double hydroxides (LDH) and intercalations of the bioactive compounds into LDHs (pesticides, drugs); physical chemical characterization of hybrid materials using the following experimental methods: XRD, FT-IR, TG-DTG; kinetics and controlled release of bioactive compounds. • Expertise in other surface characterization techniques (Raman, AFM, TEM, EDX/SEM) and analytical techniques (UV-Vis, Circular Dichroism).

Trainings: 9-11.02.2018 – Training in Quartz Crystal Microbalance (QCM) at IntelCentre, Institute of Macromolecular Chemistry “Petru Poni” Iasi; **22-26.01.2017** -Training in mass spectrometry and proteomics “*Hands-on Course in Ultrafast Sample Treatment for Proteomics*” Faculty of Science and Technology of NOVA University of Lisbon, Caparica, Portugal; **09-14.07.2017** – International Summer School "PROTEOMICS - from Introduction to Clinical Application", Faculty of Chemistry, Alexandru Ioan Cuza University Iasi and Regional Institute of Oncology Iasi; **03-10.08.2016** – Training in MALDI-TOF MS at UMF Iasi · Center for Advanced Research and Development in Experimental Medicine (CEMEX); **20.09-20.12.2011** – Research stage study of interactions between liposomes and proteins using (QCM) technique; at Institut Européen des Membranes, Montpellier, France;

Computer skills: Microsoft Office; OriginLab; LabView; CorelDraw; ChemDraw.

Languages: Romanian (native language), English (reading, writing, speaking: fluent)

Publications: **53** articles published in ISI journals, **18** articles published in IDB journals; **65** scientific papers presented at national or international conference.

Hirsch index and the total number of citations, according to Web of Science database: H-index: **11**; Sum of the Times Cited (without self-citation): **303**.

Research projects/employment: I was involved in **16** national/international research projects (**2** as director of the project).