

Mihaela Mocanu



## Personal

**Nationality:** Romanian

**Driving Licence:** Yes, B

**Languages:** Romanian - native, English - full professional proficiency

**Interests:** science, hiking, listening to music, reading

## Work Experience

- Chemical Engineer** **Apr 2022 - present**  
**Fremach Group Xpeqtis Bulgaria, Sofia**  
- define the needs for a full functional laboratory, set up, run and operate a laboratory in Sofia, Bulgaria;  
- support Fremach in the production process for all plants (Belgium, Slovakia, Czech Republic);  
- perform standardized quality tests for automotive industry;  
- manage product validation testing revolving around paint coat;  
- offer support in develop of digital printing process;  
- research and develop of inks.
- The Alchemist** **Apr 2022 – present**  
**WorkNomads, Sofia, Bulgaria**  
- conducting interviews for technical positions.
- Research Scientist** **Sep 2021 – Mar 2022**  
**Sara Pharm Solutions, Bucharest**  
- Pre-formulation studies;  
- Solid and solution state stability studies;  
- Physical and chemical stability for active pharmaceutical ingredients (APIs);  
- Polymorph, salt and co-crystal screening for APIs;  
- Recording and analysing data;  
- Writing research proposals and reports for clients worldwide;  
- Perform routine maintenance on lab equipment as needed.
- Quality Control Chemist** **Apr 2020 – Jul 2021**  
**Teva Pharmaceuticals, Bucharest**  
- Performing physical-chemical analysis in compliance with GMP, current procedures and quality specifications for monitoring and stability studies;  
- Performing physical-chemical analysis for raw material, in-process and bulk product as needed to support the manufacturing;  
- Transfer of methods from R&D Department to QC Department;  
- Writing and revision of SOPs;  
- Managing storage and disposal of the reference samples;  
- Perform routine maintenance on lab equipment as needed.
- Research Assistant** **Aug 2017 – Dec 2019**  
**Faculty of Chemistry, University of Bucharest, Bucharest**  
• Project-based  
- Experience in Coordination Chemistry and Supramolecular Chemistry;  
- Conducting literature searching;  
- Syntheses of organic and inorganic compounds and characterization;  
- Interpret research data and write reports;  
- Participate at national and international conferences and workshops;  
- Writing and publishing scientific articles;  
- Supervising Bachelor and MS students.
- Research Assistant** **May 2017 – Sep 2017**  
**Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, Bucharest**  
• Project-based  
- Syntheses of coordination compounds with Schiff bases and their characterization;  
- Interpret research data and write reports;  
- Participate at national and international conferences and workshops.
- Research Assistant** **Jan 2016 – Dec 2016**  
**Faculty of Chemistry, University of Bucharest, Bucharest**  
• Project-based  
- Syntheses of organic compounds and their characterization;  
- Conducting literature searching;  
- Participate at national conferences.

## Education

- PhD** - Inorganic Chemistry, Coordination Chemistry, Magnetic Materials and Magnetism **Oct 2014 - Present**  
**Faculty of Chemistry, University of Bucharest, Bucharest**  
- POSDRU fellowship at Institute of Molecular Science (ICMol), University of Valencia, Spain (Nov 2015);  
- ERASMUS+ Research Fellowship at ICMol, University of Valencia, Spain (Jun - Jul 2016).

**Master of Science** - Chemistry of Advanced Materials **Oct 2011 – Jun 2013**

**Faculty of Chemistry, University of Bucharest, Bucharest**

Bachelor in Chemistry - Chemistry

**Oct 2008 – Jun 2011**

**Faculty of Chemistry, University of Bucharest**

## Skills

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### Computer:

Microsoft Office, Diamond, Mercury, WinGX, Empower Software, IsisDraw, ChemDraw, KaleidaGraph, Origin.

### Techniques:

High Performance Liquid Chromatography (HPLC), Ultra Performance Liquid Chromatography (UPLC), Differential Scanning Calorimetry (DSC), X-Ray Diffraction (XRD), Polarized Light Microscopy (PLM), Atomic Absorption Spectrometry (AAS); KF Titration, FTIR Spectroscopy, UV-Vis Spectroscopy.

### Others:

-Internship at *Mina Minovici* Forensic Institute (2011 - 3 weeks), Bucharest, Romania;

-Organizing committee member for CEEC-TAC2-Thermal Analysis and Calorimetry Conference - 2013, Vilnius, Lituania;

-Organizing committee member for ECMM2017 - European Conference on Molecular Magnetism -2017, Bucharest, Romania;

-Trainer, PlaYouth: - “Chemistry is fun” - Workshop for children, Bucharest, Romania.

## Publications

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1. M. I. Mocanu, A. A. Patrascu, S. Ionescu, M. Andruh, *J. Coord. Chem.*, **2020**, *73*, 2773;
2. M. I. Mocanu, A. A. Patrascu, M. Hillebrand, S. Shova, F. Lloret, M. Julve, M. Andruh, *Eur. J. Inorg. Chem.*, **2019**, *44*, 4773;
3. M. I. Mocanu, S. Shova, F. Lloret, M. Julve, M. Andruh, *J. Coord. Chem.*, **2018**, *71*, 693;
4. M. I. Mocanu, A. A. Patrascu, A. M. Madalan, M. Andruh, *Rev. Roum. Chim.*, **2018**, *63*, 545.

## Conferences (selection)

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- **XXXV National Conference of Chemistry, 2-5 October, 2018, Caciulata, Romania**  
*Homo- and Heterometallic Complexes Constructed from Hexafluoroacetylacetonato and Schiff Base Complexes as Building-Blocks* – **Mihaela Mocanu**, Sergiu Shova, Francisc Lloret, Miguel Julve, Marius Andruh

- **16<sup>th</sup> International Conference on Molecular-Based Magnets, 1-5 September 2018, Rio de Janeiro, Brazil**  
*A new family of polynuclear complexes using mixed Schiff and Mannich base ligands* – **Mihaela Mocanu**, Andrei A. Patrascu, Francisco Lloret, Miguel Julve, Marius Andruh

- **6<sup>th</sup> European Conference on Molecular Magnetism, 27-31 August 2017, Bucharest, Romania**  
*A new synthetic approach towards polynuclear complexes using mixed Schiff and Mannich base ligands*- **Mihaela Mocanu**, Andrei A. Patrascu, Francisco Lloret, Miguel Julve, Marius Andruh

- **Workshop “Crystal Engineering of Multifunctional Molecule-Based Materials”, 2-6 May 2016, Sinaia, Romania**  
*New oligonuclear complexes derived from  $M^{\text{II}}(\text{hfac})_2$  precursors. Synthesis and characterization.*  
- **Mihaela Mocanu**, Augustin M. Madalan, Sergiu Shova, Marius Andruh

- **10<sup>th</sup> International Conference “Students for Students”, 11-15 April 2013, Cluj-Napoca, Romania**  
*Synthesis and Characterization of Novel Extended Structures of Copper(II) with Interesting Topologies*- **Mihaela Mocanu**, Augustin M. Madalan, Catalin Maxim, Delia-Laura Popescu, Marius Andruh