

Catalina Bordeianu

Ph.D. Scientist in Pharmaceutical Products Development

<http://www.catalinabordeianu.com>

Skills

Synthesis: dendrimers • small and macro-molecules • polymers • development of drug delivery materials: films, hydrogels, polymeric and metallic nanoparticles • scale-up.

Analysis: composition • structure • properties - thermal, mechanical, magnetic, optical • morphology • size • stability • performance • interactions • compatibility

Management: projects • cross-functional groups • resources and consumables • development of collaborations and partnerships • writing reports, publications, and fundraising projects.

Professional Experience

Scientist Boston University / Harvard Medical School

2016 - 2018 (2 years) 📍 Boston, MA, USA

Managed pharmaceutical product development projects from concept to launch, including formulation, characterization, and data analysis.

- Designed and formulated under sterile conditions controlled release materials for chemotherapy: films, nanoparticles, and hydrogels.
- Developed and run tests to evaluate physical properties, stability, drug release, *in vitro* toxicity, performance, and compatibility.
- Supervised 3 graduate students.

Research Associate Institute of Physical-Chemistry of Materials / CMMI Biopark

2013 - 2016 (3 years) 📍 Strasbourg, France / Charleroi, Belgium

Developed contrast agents for Magnetic Resonance Imaging for parenteral administration, from synthesis to *in vitro* tests.

- Synthesized and scaled-up iron, cobalt, and gold based contrast agents.
- Developed and run tests to evaluate chemical composition, structure, physical properties, stability, *in vitro* toxicity, and *in vivo* performance under MRI.
- Supervised 1 graduate student, and 1 technical staff.

Research Project Saarland University

2013 - 2013 (6 months) 📍 Saarbrücken, Germany

Collaborated on a team of 5 to synthesize the novel antibiotic Isoplagiochin D.

- Synthesized in fourteen steps an enantiopure macro-cycle by direct asymmetric synthesis.
- Performed tests to analyze molecular conformation using chiral HPLC and 2D NMR.

Research Project Solvay

2012 - 2012 (5 months) 📍 Brussels, Belgium

Worked on the R&D team in charge of the qualitative analysis of oxygen peroxide production pipeline.

- Synthesized 9,10-anthraquinone byproducts by heterogeneous catalysis in continuous flow.
- Analyzed and studied thermal properties using TGA and DSC.

Education

Ph.D. in Physics and Chemical-Physics Strasbourg University / Mons University

2013 - 2016 📍 Strasbourg, France/Mons, Belgium

Engineering Degree in Organic Chemistry Grande École ECPM

2008 - 2013 📍 Strasbourg, France

Master in Molecular and Supramolecular Chemistry Strasbourg University

2012 - 2013 📍 Strasbourg, France

Personal Information

Immediate availability

Address

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Phone

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E-mail

bordeianu.catalina@gmail.com

Additional Skills

Communication	🟢🟢🟢🟢🟢
Interpersonal	🟢🟢🟢🟢🟢
Curiosity	🟢🟢🟢🟢🟢
Teamwork	🟢🟢🟢🟢🟢
Analytical thinking	🟢🟢🟢🟢🟢
Multitasking	🟢🟢🟢🟢🟢
Reporting	🟢🟢🟢🟢🟢
MS Office	🟢🟢🟢🟢🟢
MS Project	🟢🟢🟢🟢🟡
Origin	🟢🟢🟢🟢🟡
GraphPad Prism	🟢🟢🟢🟢🟡

Languages

English	🟢🟢🟢🟢🟢
French	🟢🟢🟢🟢🟢
Russian	🟢🟢🟢🟢🟢
Romanian	🟢🟢🟢🟢🟢
German	🟢🟢🟢🟢🟡

Interests

- Volunteering
- Graduate Women in Science
 - Peace Corps
- Teaching
- Strasbourg University
- Piano
- Cooking