

# Curriculum Vitae

## Personal information



First name(s) / Surname(s) **Elena DARBINEAN**

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## Education

Dates September 2013 - 2017

**Name of the institution** **Université de Bordeaux, Centre de Recherche Paul Pascal (CRPP), UPR CNRS 8641, Molecular Materials and Magnetism group (M3) Bordeaux, France.**

**Title of qualification awarded** Doctorate in Condensed Matter of Physical Chemistry, Erasmus Mundus Program (MID)  
Title: *Functionalization of Molecular Materials Towards Magnetic Liquids and Liquid-Crystals.*

Dates September 2011 – June 2013

**Name of the institution** **Moldova State University**

**Title of qualification awarded** **Master in Science, Coordination Chemistry**

Dates September 2008 – June 2011

**Name of the institution** **Moldova State University**

**Title of qualification awarded** **Bachelor in Science, Chemistry**

## Projects Undertaken

### Project titles

(January 2013 – May 2013) -Synthesis of indolizines based on 4,4'-bipyridine quaternary salts containing SCN groups.

Organization -Moldova State University, Department of Organic Chemistry

Deliverables -To design and synthesize new bisindolizines containing SCN groups, that can serve as markers in biology, medicine, bioorganic and protection of environment.

### Project titles

(September 2012- May 2013) -Synthesis and characterization of some bisindolizines based on 4,4'-bipyridine quaternary salts functionalized with SCN groups.

Organization -Moldova State University, Department of Organic Chemistry

Deliverables -To synthesize some indolizines containing SCN groups based on 4,4'-bipyridine quaternary salts, that can serve as a markers in biology and protection of environment.

## Work experience

Dates September 2011-March 2013

**Occupation of Position Held** Junior Scientific Researcher

-Pheromones Syntheses.

-To improve steps of synthesis in order to increase the yield and purification.

**Name of the institution** *Institute of Plant Protect and Ecological Agriculture, Chisinau, Moldova*

Dates September 2011-May 2013

**Occupation of Position Held** -Chemistry Teacher.

**Main activities** -Teaching inorganic and organic chemistry;

-Performing chemical experiments according to the teaching lessons.

**Name of the institution** *College of Management, Economics and Law, Chisinau, Moldova.*

- Publications, Peer Reviewed**
- Dmitri Mitcov, Diana Siretanu, **Elena Darbinean**, Ahmed Bentaleb, Philippe Barois, Pierre Dechambenoit, Daniel Rosario-Amorin, Rodolphe Clérac, *Rational Functionalization of Mn<sub>12</sub> Single-Molecule Magnets: Towards Liquid-Crystalline Phases*, manuscript in preparation.
  - **Elena Darbinean**, Maria Botnaru, Cristina Turcanu, *Synthesis of bisindolizines based on 4,4'-bipyridine quaternary salts*, Scientific Annual Publications of Moldova State University, Students works, 2013, Chisinau, Moldova.
  - **Elena Darbinean**, Maria Botnaru, Cristina Turcanu, *Synthesis of indolizines based on 4,4'-bipyridine quaternary salts functionalized with SCN groups*, Scientific Annual Publications of Moldova State University, Students works, 2011, Chisinau, Moldova.

**Publication, Conference Preceding Presentations & Posters**

- 2016 -Bordeaux Olivier Kahn Discussions BOOK-D. Poster presentation: *Functionalization of Molecular Materials Towards Magnetic Liquids and Liquid-Crystals*, May 26-28<sup>th</sup>, Bordeaux, France.
- 2015 -The 5<sup>th</sup> EUROPEAN CONFERENCE ON MOLECULAR MAGNETISM (ECMM). Oral communication: *Rational Functionalization of Molecular Materials Towards Magnetic Liquids and Liquid-Crystals*, September 6-10<sup>th</sup>, Zaragoza, Spain.
- Bordeaux Olivier Kahn Discussions BOOK-D. Poster presentation: *Functionalization of Molecular Materials Towards Magnetic Liquids and Liquid-Crystals*, July 2-3<sup>rd</sup>, Bordeaux, France.
- Journée de Chimie de Coordination (JCC). Poster presentation: *Rational Functionalization of Molecular Materials Towards Magnetic Liquids*, January 29-30, Bordeaux, France.
- 2014 -GdR - Magnétisme et Commutation Moléculaires. Poster presentation: *Functionalization of Molecular Materials Towards Magnetic Liquids and Liquid-Crystals*, December 10-12<sup>th</sup>, Dourdan, France.
- GECOM-CONCOORD. Poster presentation: *Rational Functionalization of Molecular Materials Towards Magnetic Liquids and Liquid-Crystals*, May 18-23<sup>rd</sup>, Toulouse (Vers), France.
- 2012 -International Scientific Conference: *University interferences – integration through research and innovation*. Oral communication: Synthesis of indolizines based on 4,4'-bipyridine quaternary salts functionalized with SCN groups. September 24-25<sup>th</sup>, Chisinau, Republic of Moldova.
- Interuniversity Conference: *Education through research - performance guarantee of higher education*. Oral communication: Synthesis of some indolizines based on 4,4'-bipyridine quaternary salts containing SCN groups. May 3-4<sup>th</sup>, Chisinau, Republic of Moldova.
- 2011 -International Symposium: *Chemistry for sustainable development priorities*. Poster presentation: Synthesis of some indolizines based on 4,4'-bipyridine quaternary salts containing SCN groups. October 27-28<sup>th</sup>, Bucharest, Roumania.

**Seminars**

- 2014 *Training on Powder X-ray analysis*, Institut de Chimie de la Matière Condensée de Bordeaux (ICMCB), June 2-4<sup>th</sup>, Bordeaux, France
- 2012 Virtual learning with topic: *Current Topics in Chemical Research* organized by Moldova Aid. February-May. Chisinau, Republic of Moldova.

## Personal skills & competences

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| Technical skills | -Fourier transformed infrared (FT-IR) analyses, Nuclear Magnetic Resonance (NMR), Single X-Ray analysis, Differential Scanning Calorimetry (DSC), Small Angle X-Ray Scattering (SAXS), UV/Vis analysis, Polarized Optical Microscopy (POM), Reflectivity analysis, Thermogravimetric analysis (TGA). |
| Computer skills  | -Microsoft Office, Kaleidagraph, ChemDraw, Crystal Maker, Mercury, MestReNova, Delta, WinGX, TA Universal Analyses.  |
| Language Skills  | <ul style="list-style-type: none"><li>- English (Full Professional Proficiency)</li><li>- French (Elementary Proficiency)</li><li>- Russian (Full Proficiency)</li><li>- Romanian (Native)</li></ul>   |