

# Curriculum Vitae

## Personal information

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|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| First name(s) / Surname(s) | <b>Maria Șologan (born Vintilă)</b>                                                                                                            |
| Address                    | Ugo Foscolo, 39, Trieste, Italy.                                                                                                               |
| Mobile                     | 3202206200                                                                                                                                     |
| E-mail(s)                  | <a href="mailto:maria.vintila@phd.units.it">maria.vintila@phd.units.it</a><br><a href="mailto:marikoanjin@yahoo.com">marikoanjin@yahoo.com</a> |
| Nationality                | Romanian                                                                                                                                       |
| Date of birth              | 12/12/1987                                                                                                                                     |

## Education and training

### 2013-2015

**PhD Student** (XXVIII cycle) of the PhD Course in Chemistry.

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|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Principal subjects / occupational skills covered               | Organic synthesis, gold nanoparticles protected by homo or heteroligands monolayers.                                |
| Name and type of organisation providing education and training | Department of Chemical and Pharmaceutical Sciences, University of Trieste, Italy, supervisor: prof. Lucia Pasquato. |

### 2010 - 2012

#### **Master degree**

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|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title of qualification awarded                   |                                                                                                                                                                                                                               |
| Principal subjects / occupational skills covered | Organic Chemistry, Inorganic Chemistry, with a final thesis on: "RCM reactions for the synthesis of macrolides precursors of enantiomerically pure hydroxystearic acids", supervisor: prof. Patrizia Nitti.<br>Score: 105/110 |

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|----------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Name and type of organisation providing education and training | Department of Chemical and Pharmaceutical Sciences, University of Trieste, Italy. |
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#### **Master Degree**

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|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title of qualification awarded                   |                                                                                                                                                                                 |
| Principal subjects / occupational skills covered | Analysis techniques for cosmetics, food and pharmaceutical industries, with a final thesis on: "Solar distillation of water", supervisor: prof. Otilia Bizerea.<br>Score: 10/10 |

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|----------------------------------------------------------------|------------------------------------------------------------------------------|
| Name and type of organisation providing education and training | Department of Chemistry, West University of Timisoara<br>Timisoara (Romania) |
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### 2007 - 2010

#### **Bachelor degree**

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| Title of qualification awarded                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Principal subjects / occupational skills covered | Inorganic Chemistry, Organic Chemistry – Synthesis and characterization of organic compounds, Analytical techniques, Physical and chemical methods for pollutants analysis, Environmental quality monitoring, Chromatographically techniques, Kinetics and Thermodynamics, Macromolecular compounds, Enzymatic catalysis.<br>Perform research activities on: Electroanalysis of environmental pollutants, Sensors and Biosensors and their applications, Analysis of Food Additives, with a final thesis on: "Studies on matrices for glucose biosensors", supervisor: prof. Otilia Bizerea.<br>Score: 10/10 |

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|----------------------------------------------------------------|------------------------------------------------------------------------------|
| Name and type of organisation providing education and training | Department of Chemistry, West University of Timisoara<br>Timisoara (Romania) |
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### Dates

### 2003 - 2007

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|--------------------------------------------------|--------------------------------------------------------------------------------|
| Title of qualification awarded                   | High School Diploma                                                            |
| Principal subjects / occupational skills covered | Mathematics, Informatics, Chemistry, Physics, English<br>Score: <b>9.51/10</b> |

Name and type of organisation providing education and training      “Theoretical High School” from Balș, Romania.

**Educational activities**

Tutoring activity at the University of Trieste, Department of Chemical and Pharmaceutical sciences, in teaching Organic chemistry I with lab and Organic chemistry II with lab.

**Scholarships and awards**

2008-2010 – scholarship offered by Foundation “Dinu Patriciu” to students with good academic results.

10 december 2009 - Award “Honor student” for good results in the academic work offered by Association “Orizonturi Universitare”.

**Personal skills and competences**

Design and synthesis of metal nanoparticles protected by organic ligands. Synthesis of functional thiols. Synthesis and purification of fluorinated compounds. Purification methodologies using different chromatographic techniques. Very good skills on 1D- and 2D-NMR experiments on  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{19}\text{F}$  nuclei. Expertise on different techniques used for the characterization of hybrid organic-inorganic materials such as TEM, TGA, IR, UV-Vis, fluorescence.

Mother tongue(s)      Romanian

Foreign languages:      English, Italian.

**Publications:**

1. M. Șologan, P. Posocco, M. Boccalon, S. Bidoggia, S. Polizzi, M. Fermeiglia, S. Pricl, P. Pengo, L. Pasquato Assessing the morphology of mixed monolayers on gold nanoparticles composed of hydrogenated and fluorinated ligands, *Manuscript in preparation*.
2. O. Bizerea Spiridon, G. Preda, B. Vlad-Oros, M. Vintilă, M. Dragomirescu, Studies Regarding the Membranous Support of a Glucose Biosensor Based on GOx, *Scientific Papers: Animal Science and Biotechnologies*, 43 (1), **2010**, p. 354-357.
3. O. Bizerea Spiridon, G. Preda, B. Vlad-Oros, M. Vintilă, The optimal composition of a PVA membrane used as support for a glucose biosensor based on GOx, *Annals of West University of Timișoara*, Series of Chemistry, 19(1), **2010**, p. 97-104.

**Scientific communications:**

1. M. Șologan, M. Boccalon, S. Bidoggia, P. Pengo, L. Pasquato, Assessing the morphology of mixed monolayers on gold nanoparticles composed of hydrogenated and fluorinated ligands, XII Congresso Nazionale di Chimica Supramolecolare, Giardini Naxos, Italy, 27-30 September 2015 (oral communication).
2. M. Vintilă, M. Boccalon, P. Pengo L. Pasquato, Self-organization of binary mixtures of fluorinated and hydrogenated alkylthiolates on the surface of gold nanoparticles, XXXVI Convegno Nazionale della Divisione di Chimica Organica, Bologna, Italy, 13-17 September 2015 (oral communication).
3. M. Șologan, M. Boccalon, S. Bidoggia, P. Pengo, L. Pasquato, Mixtures of hydrogenated and fluorinated ligands on gold nanoparticles: nanoscale tuning of phase segregated domains morphology, Winter School of Physical Organic Chemistry, Bressanone, Italy, 1-6 february 2015 (poster and flash presentation).
4. M. Vintilă, M. Boccalon, S. Bidoggia, P. Pengo, L. Pasquato, Gold nanoparticles protected by mixtures of fluorinated and hydrogenated ligands: tuning the morphology of phase segregated domains, I Giovani e la Chimica nel Friuli Venezia Giulia, Udine, Italy, 27 September 2014 (oral communication).
5. M. Vintilă, M. Boccalon, S. Bidoggia, P. Pengo, L. Pasquato, Gold nanoparticles protected by mixtures of fluorinated and hydrogenated ligands: tuning the morphology of phase segregated domains, Gordon Research Conference “Noble Metal Nanoparticles” , Mount Holyoke College, South Hadley, MA, U.S.A., 15-20 June 2014 (poster communication).
6. O. Bizerea Spiridon, G. Preda, B. Vlad-Oros, M. Vintilă, M. Dragomirescu, Studies on glucose assay in real samples using glucose oxidase biosensors with different membrane supports, 14<sup>th</sup> International Biotechnology Symposium and Exhibition, Rimini, Italy, 14-18 September 2010 (poster communication); *Journal of Biotechnology*, 150S, 2010, 206.
7. O. Bizerea-Spiridon, G. Preda, B. Vlad-Oros, M. Vintilă, Studies regarding the membranous support of a glucose biosensor based on GOx, International Scientific Symposium: 65 years of higher education and research in the field of animal husbandry in Banat, Timișoara, Romania, 27-28 may 2010 (poster communication).
8. O. Bizerea Spiridon, B. Vlad Oros, G. Preda, M. Vintilă, The influence of membrane material on the performances of some biosensors for glucose determination, Academic Days of Timisoara, XI<sup>th</sup> edition, 28-29 May 2009, Timișoara, Romania (poster communication).

Autorizzo il trattamento dei dati personali, ivi compresi quelli sensibili, ai sensi e per gli effetti del decreto legge 196/2003.