

## PERSONAL INFORMATION



## Iolanda-Veronica Ganea

 67-103 Donat, Cluj-Napoca (Romania)

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Sex Female | Date of birth 29/08/1992 | Nationality română

## WORK EXPERIENCE

- 04/2019–Present **Senior Research Scientist - Biotechnical Engineer**  
National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca (Romania)  
Nanomaterials with applications in environmental protection and agriculture
- 11/2016–03/2019 **Research Assistant - Biotechnical Engineer**  
National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca (Romania)  
Nanomaterials with applications in environmental protection and agriculture
- 09/2016–2017 **Member**  
Students' Academic Performance College (SAPC), Institute of Advanced Studies in Science and Technology – STAR-UBB, Cluj-Napoca (Romania)
- 2016–2017 **Research Assistant - Project "Agroforestry that will advance rural development" (AGFORWARD)**  
Babes - Bolyai University, Cluj-Napoca (Romania)  
- Soil sampling and analysis, Performing PPGIS studies, Tree species monitoring
- 06/2016–08/2016 **Guide & Translator**  
Operation Wallacea & Fundatia ADEPT, Sighisoara (Romania)  
- Protection of Biodiversity in Transilvania: Identification, Tracking and Monitoring for species of bats, small and large mammals, moths, butterflies, reptiles, plants, birds and grasshoppers from the Natura 2000 site ROSCI0227 Sighisoara – Tamava Mare
- 2016–Present **Assistant Manager**  
EnviroTeam Association, Cluj-Napoca (Romania)
- 05/2015–06/2015 **Production Engineer - Wastewater treatment/disinfection technologies (Internship)**  
SC.ICPE.SA, Bistrita (Romania)
- 2015–2016 **Projects Writing and Implementation Assistant**  
EnviroTeam Association, Cluj-Napoca (Romania)
- 2015–2016 **Volunteer**  
"Octavian Goga" Cluj County Library, Cluj-Napoca (Romania)

2014–2017 **Volunteer**  
Fundatia ADEPT, Saschiz (Romania)

08/2014–09/2014 **Environmental Health and Safety Inspector (Internship)**  
SC. VARD a Fincantieri. SA, Braila (Romania)

07/2014–08/2014 **Water Inspections and Emergency Situations Expert (Internship)**  
"Romanian Waters" National Administration, Braila (Romania)

2014–2015 **Volunteer**  
Impossible Theater Association, Cluj-Napoca (Romania)

## EDUCATION AND TRAINING

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04/2019–05/2019 **Research Internship - Nanomaterials with applications in environmental protection/ agriculture**  
Louisiana State University, Department of Biological and Agricultural Engineering, Bioprocessing and Colloidal Systems Laboratory, Baton Rouge (Louisiana (USA))

2018–Present **PhD - Environmental Science**  
Babes-Bolyai University, Doctoral School of Environmental Science, Cluj-Napoca (Romania)  
PhD Thesis - " $\alpha$ -Hydroxy acids as bricks for designing new hybrid materials with applications in water treatment for reducing exposure and the associated risks".

2016–2018 **Risk Assessment and Environmental Security Expert**  
Babes-Bolyai University, Faculty of Environmental Science and Engineering, Cluj-Napoca (Romania)  
Dissertation Thesis: "Reducing exposure to heavy metals from contaminated water by applying new synthesized materials based on poly(benzofurane co arylacetic acid)".

2016–2018 **Pedagogy Level II**  
Department for Teacher Training (Babes-Bolyai University), Cluj-Napoca (Romania)  
Dissertation Thesis: "Education level regarding natural disasters among students from VIIIth-XIth grade in Romania".

27/08/2016–02/09/2016 **Certificate of Participation**  
International Summer School on Disaster Management - National and Regional Disaster Management Systems, Arcalia (Romania)  
Union Civil Protection Mechanism (UCPM), Early Warning Systems, Public Awareness, Evacuation, Decision Making at Tactical Level under Time Pressure, National and Regional Emergency Environment and Vulnerabilities, Host Nation Support, Information Management and Communication in Disasters

2012–2016 **Bachelor Degree in Biotechnical and Ecological Systems Engineering**  
Babes-Bolyai University, Faculty of Environmental Science and Engineering, Cluj-Napoca (Romania)

Thesis' Title: "The environmental impact on the Lacu-Sarat area, Braila County, in the last 200 years: A Multidisciplinary Analysis"

- 01/03/2016–31/07/2016 **YouthPass - Mobility of Youth Workers**  
 Higher Youths and Fundatia ADEPT Transilvania, Sighisoara (Romania)  
 The "PECT (Protecting the Environment through Conservation Techniques) for Future Generations" learning mobility project included:  
 - Ecology sessions and workshops: Activities to gain further knowledge about European biodiversity, ecological issues and conservation techniques  
 - Hands-on activities: On-site environment related activities, GPS skills, farm surveys  
 - EU Values & opportunities: Discussions on EU legislation and employment opportunities abroad
- 12/10/2015–20/10/2015 **YouthPass - Mobility of Youth Workers**  
 Youth and Environment Europe & Asociatia Ecouri Verzi, Praga (Czech Republic)  
 Main activities of the "How to be a green entrepreneur" learning mobility project were:  
 - Sessions lead by experts on design thinking, Lean Canvas, sustainable finances, legal issues and profiles of the team.  
 - Study visits to successful green start-ups.  
 - Discussions on the definition of green entrepreneurship and on environmental issues.
- 2012–2015 **Pedagogy Level I**  
 Department for Teacher Training (Babes-Bolyai University), Cluj-Napoca (Romania)
- 2008–2012 **Highschool Diploma - Humanities and Social Sciences Specialist**  
 "Gh.M.Murgoci" National College, Braila (Romania)

PERSONAL SKILLS

Mother tongue(s) Romanian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Linguistic Competence Certificate (Babes-Bolyai University)					
French	B1	B1	A2	A2	B1
Spanish	A1	A1	A1	A1	A1
Course organized by "Gh. M. Murgoci" National College					
Chinese	A1	A1	A1	A1	A1
Course organized by Confucius Institute (Babes-Bolyai University)					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
 Common European Framework of Reference for Languages

**Communication skills** - good communication skills gained through the involvement in various projects and scientific competitions  
 - team spirit  
 - intercultural skills: I have studied and collaborated with a large variety of ethnic minorities (good ability to adapt to multicultural environments)

**Organisational / managerial skills** - leadership (vice president of the "Vox Historiae" journal redaction committee during 2008-2012)

- good organisational and team-leading skills gained as responsible for the the coordination of different activities/events organized in the faculty

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

European Computer Driving Licence (ECDL- Complete)

- basic photo and video editing skills
- good command of applied statistics
- skills in GIS , Origin Lab., Aloha, Bartsoft, C2, Solid Edge, PAST, Effects, RiskCurves, ChemDraw, MestReNova, Spectra Manager
- Basic Accounting skills

ADDITIONAL INFORMATION

Contests/Awards

- June 2017: Excellentia Award - Students Category - Environmental Science and Engineering Field, Babes-Bolyai University Cluj-Napoca
- October 2015: Scientific Performance Scholarship - Babes-Bolyai University Cluj-Napoca (2015-2016) - Contract no. 35226/11.11.2015 : "Monitoring Environmental Factors in Lacu-Sarat Area (Braila County)"
- May 2015: Ursus Scholarship -Students for Community
- May 2013: 1st prize at the Ecouniversitaria International Conference for the project: "Miniaturized Microbial Fuel Cells"
- October 2012 - July 2018: Merit Scholarships for the academic performance
- May 2011: 1st prize at the Session of Scientific Studies and Communications organized by Constantin Brancoveanu University Braila for the project "Exploitation of balnear potential in Braila county"

Conferences

- March 2019: Participation at the XI-th edition of the International Conference "Air and Water-Components of the Environment" (Cluj-Napoca, Romania), with the study: "Comparative study of new types of materials for improved heavy metals removal from contaminated water and reduced human health impact" (I.-V. Ganea, A. Nan, R. Turcu, M. Senila, I. Neamtiiu)
- October 2018: Participation at the XXXV-th edition of the National Conference on Chemistry (Calimanesti-Caciulata, Romania), with the study: "p Hydroxymandelic acid as a brick for designing a new type of highly functionalized polymers" (A. Nan, I.-V. Ganea , X. Filip, R. Turcu)
- September 2018: Participation at the XXI-th edition of the International Symposium "Environment and Industry" (Bucharest, Romania), with the study "New promising hybrid material based on montmorillonite for metal ions removal from contaminated water" ( I. V. Ganea , A. Nan, C. Roba, R. Turcu)
- May 2018: Participation at the XII-th edition of the International Conference "Environmental Legislation, Safety Engineering and Disaster Management" – ELSEDIM (Ecouniversitaria Section) (Cluj-Napoca, Romania), with the study: "New modified chitosan for improved heavy metal adsorption from wastewater" ( I. V. Ganea , D. Gligor, A. Nan, R. Turcu)
- May 2018: Participation at the II-nd edition of the "Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE II)",(Budapest, Hungary), with the study "Magnetic nanostructures based on functionalized poly(benzofurane-co-arylacetic acid) for heavy metals adsorption" ( I. V. Ganea , A. Nan, M. Dan, S. Porav, R. Turcu)
- September 2017: Participation at the XI-th edition of the International Conference "Processes in Isotopes and Molecules",(Cluj Napoca, Romania), with the studies: "Materials based on functionalized

poly(benzofurane-co-arylacetic acid) for wastewater treatment" ( I. V. Ganea , D. Gligor, A. Nan ) and "α Hydroxy acids as bricks for functionalized polymers engineering" (A Nan, M. Cîrcu, A. Bunge, A. Petran, I. Ganea , X. Filip, R. Turcu)

September 2017: Participation at the XIII-th edition of the "International Conference on Iminium Salts (ImSaT 13)",(Goslar ,Germany), with the study "Poly(benzofurane-co-arylacetic acid) a new type of highly functionalized polymers" (A. Nan, A. Bunge, M. Cîrcu, I. V. Ganea , X. Filip, J. Liebscher)

July 2017: Participation at the XIII-th edition of the "International Conference on Materials Chemistry", (Liverpool, UK), with the study "New Polyesters for Coating Surfaces" (A. Nan, M. Cîrcu, A. Bunge, A. Petran, I. V. Ganea , X. Filip, J. Liebscher)

May 2016: Participation at the XI-th edition of the International Conference "Environmental Legislation, Safety Engineering and Disaster Management" – ELSESEDIMA (Ecouniversitaria Section), with the study: "Assessment of environmental quality in Lacu Sărat Area (Brăila County, Romania)"

May 2015: Participation at the National Geology Students Session (Iasi, Iasi County), with the study: "Impact of Chiscani Thermal Power Plant activities (Braila County) on the environmental factors quality"

May 2014: Participation at the International Session "Ecouniversitaria" (Cluj-Napoca, jud.Cluj) with the studies "Miniaturized Soil-based Microbial Fuel Cells" and "NO<sub>2</sub><sup>-</sup> and S<sup>2-</sup> detection in water and soil samples using amperometric sensors and monitoring activities of bacteria involved in sulphur cycle from Baia de Arieș mining area, Alba County"

**Seminars** Sep 2009: Participation at the International Project 'Be conscious, not dependent' in 2009

**Courses** October 2015: Participation at the "How to be a green entrepreneur" training(Erasmus+), organized by Youth and Environment Europe in Prague (Czech Republic)

**Publications** Alexandrina Nan, **Iolanda Veronica Ganea**, Rodica Turcu, 2019, Physico-chemical properties of a New Magnetic Nanostructure Based on Poly(benzofurane-co-arylacetic acid), Analytical Letters , 52(1),pp. 27-36

**Iolanda Veronica Ganea**, Carmen Roba, Delia Gligor, Anca Farkas, Ramona Bălc, Mircea Moldovan, 2017, Assessment of Environmental Quality in Lacu Sărat Area (Brăila County, Romania),Carpathian Journal of Earth and Environmental Sciences, 12 (2), pp.377-387

**Iolanda Veronica Ganea**, Ramona Bălc, Robert Csaba Begy, Ioan Tantău,Delia Gligor, Combining contamination indices and multivariate statistical analysis for metal pollution evaluation during the last century in lacustrine sediments of Lacu Sărat Lake, Romania (Manuscript)

**Iolanda Veronica Ganea**, Alexandrina Nan, Rodica Turcu, Xenia Iulia Neamțiu, Eugen Gurzău, Development of a new eco-friendly copolymer based on chitosan for enhanced removal of Pb 2+ and Cd 2+ from water (Manuscript)

**Projects** **Research Assistant** - (2018-2020)-"New methods for diagnosis and treatment: present challenges and technological solutions based on nanomaterials and biomaterials - Development of bio-active nanostructures integrated in therapeutical and diagnostic systems" - No. 58PCCDI/2018 - PCCDI Competition - Development of the National Research System  
**Research Assistant** - (2018-2020) -"The development of inovative solutions for the improvement of techniques used in treatments with radiosotopes" - PCCDI Competition - Development of the National Research System  
**Research Assistant -Biotechnical Engineer** (2017-2018)-"New approaches in the field of isotopic and molecular technologies IZOMOL 18"- Core Project- PN18-03-P5- "Nanocomposite materials with applications in depollution, nanomedicine, photovoltaic systems and information storage and processing".  
**Research Assistant -Biotechnical Engineer** (2016-2018)- "Polyesters with special properties for covering solid surfaces, with applications in medicine and nanotechnology", PN II RU-TE-2014-4-0654- Young Research Teams Competition 2014  
**Research Assistant -Biotechnical Engineer** (2016-2017) - "Isotopic and molecular technologies: from research & development to innovation" - Core Project- IZOMOL PN16-30-P6- Nanostructured materials with controlled properties for specific applications in health and environment

**Project Manager** (2016-2017)- "Monitoring environmental factors from Lacu Sarat area, Braila

County - Case Study: Development and comparative analysis of depollution methods for saline surface waters " (Interdisciplinary Research Project financed by Babes-Bolyai University, Cluj-Napoca, through Students' Academic Performance College)

**Team Member** (2016-2017)- „Analysis of teleseismic earthquakes recorded with ROEDUSEIS (FSIM-UBB) educational seismometer for the interpretation and highlighting of seismic phases", Research Project financed by Babes-Bolyai University, Cluj-Napoca, through Students' Academic Performance College

**Research Assistant** (2016-2017) -"Agroforestry that will advance rural development" - (AGFORWARD) funded by the European Union's Seventh Framework Programme for Research and Technological Development (FP7)

**Project Manager** - (2015-2016)-contract no. 35226/11.11.2015: "Monitoring environmental factors in Lacu Sarat area, Braila County", research project financed by Babeş-Bolyai University, Cluj-Napoca

**Member** (2015) "Collaboration project between student from the Faculty of Environmental Science and Engineering Cluj-Napoca and Private Forestry District Pitesti, regarding the assessment of conservation status of forest habitats"

- Patents**
- Patent application- No. A/01092 from 12.12.2018, title: "Magnetic nanostructures based on polymers functionalized with chelatic agents" ( I. V. Ganea , A. Nan, R. Turcu)
  - Patent application- No. A/00245 from 04.04.2018, title: "Chitosan based on poly(benzofurane-co-arylacetic acid)" ( I. V. Ganea , A. Nan, R. Turcu)
  - Patent application - No. A/00774 from 05.10.2018, title: "Montmorillonite modified with poly(benzofurane-co-arylacetic acid) functionalized with dopamine"(I. V. Ganea , A. Nan, R. Turcu)