

PERSONAL INFORMATION

Claudia-Maria SIMONESCU

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🌐 <https://chimie.upb.ro/departamente/chimie-analitica-si-ingineria-mediului/colectiv/simonescu-claudia-maria/>;

JOB APPLIED FOR POSITION

National University of Science and Technology POLITEHNICA Bucharest

PROFESIONAL EXPERIENCE

2022 April - present

Professor PhD

National University of Science and Technology Politehnica Bucharest, Faculty of Chemical Engineering and Biotechnology, Splaiul Independenței Street no. 313, District 6, Bucharest, <https://www.chimie.upb.ro/>

- Teaching and research activity at the Department of Analytical Chemistry and Environmental Engineering - preparation and teaching courses in the disciplines: Ecology and sustainable development (2nd year FICBi), Pollution prevention and environmental protection (2nd year FCBi), Biological degradation of pollutants (1st year master IM), Green chemistry - sustainable (1st year master PCCCP), Consumer protection in Romania (2nd year master PCCCP), laboratory activities in: Biological degradation of pollutants (1st year master IM), Green chemistry - sustainable (1st year master PCCCP),
 - Student guidance as a tutor,
 - Student guidance in the development of diploma, bachelor's and master's theses,
 - Guidance of doctoral students,
 - Guidance of teaching staff for obtaining the didactic degree I
 - Participation in activities for the benefit of the academic community
- Business or sector** Education and research

February 23, 2015- March 2022

Professor PhD

Politehnica University of Bucharest, Faculty of Applied Chemistry and Materials Science, 313 Splaiul Independenței Street, District 6, Bucharest, <https://www.chimie.upb.ro/>

- Teaching and research activity at the Department of Analytical Chemistry and Environmental Engineering - preparation and teaching of courses in the following subjects: Ecology and sustainable development (2nd year CASM), Pollution prevention and environmental protection (2nd year CASM), Biological degradation of pollutants (1st year IM master), Green chemistry - sustainable (1st year PCCCP master), Consumer protection in Romania (2nd year PCCCP master), laboratory activities in: Biological degradation of pollutants (1st year IM master), Green chemistry - sustainable (1st year PCCCP master),
 - Student guidance as a tutor,
 - Student guidance in the development of diploma, bachelor's and master's theses,
 - Guidance of doctoral students
 - Guidance of teaching staff for obtaining the first teaching degree
 - Participation in activities for the benefit of the academic community
- Business or sector** Education and research

October 1, 2009 - February 22, 2015

Associate Professor PhD

Politehnica University of Bucharest, Faculty of Applied Chemistry and Materials Science, 313 Splaiul Independenței Street, District 6, Bucharest, <https://www.chimie.upb.ro/>

- Teaching and research activity at the Department of Analytical Chemistry and Environmental Engineering/Department of Inorganic Substances Technology and Environmental Protection - preparation and teaching of courses in the following subjects: Ecology and sustainable development (2nd year CASM), Biological degradation of pollutants (1st year master IM), Green chemistry - sustainable (1st year master PCCCP), Consumer protection in Romania (2nd year master PCCCP), laboratory activities in: Biological degradation of pollutants (1st year master IM), Green chemistry - sustainable (1st year master PCCCP),
 - Student guidance as a tutor,
 - Student guidance in the development of diploma, bachelor's and master's theses,
 - Doctoral student guidance
 - Teaching staff guidance for obtaining the first didactic degree
 - Participation in activities for the benefit of the academic community
- Business or sector** Education and research

October 1, 2004 - September 30, 2009

Lecturer PhD Student/PhD

Politehnica University of Bucharest, Faculty of Applied Chemistry and Materials Science, 313 Splaiul Independenței Street, District 6, Bucharest, <https://www.chimie.upb.ro/>

- Teaching and research activity at the Department of Inorganic Substances Technology and Environmental Protection - preparation and teaching of courses in the following disciplines: Ecology and Sustainable Development, Biological Wastewater Treatment, Crystallography and Mineralogy
 - Guiding students as a tutor,
 - Guiding students in the preparation of diploma, bachelor's and master's theses,
 - Guiding doctoral students,
 - Participation in activities for the benefit of the academic community
- Business or sector** Education and research

October 8, 1997- September 30, 2004

Assistant Professor PhD Student

Politehnica University of Bucharest, Faculty of Applied Chemistry and Materials Science, 313 Splaiul Independenței Street, District 6, Bucharest, <https://www.chimie.upb.ro/>

- Teaching and research activity at the Department of Inorganic Substances Technology and Environmental Protection - preparation and teaching courses in the disciplines: Ecology, Environmental Protection and Pollutant Dynamics, Precipitation, laboratory activities in Ecology and General Chemical Technology
 - Guiding students as a tutor,
 - Guiding students in the preparation of diploma, bachelor's and master's theses,
 - Participation in activities for the benefit of the academic community
- Business or sector** Education and research

October 1, 1995 - June 30, 1997

Associate teaching staff

University of Bucharest, Faculty of Chemistry, Regina Elisabeta Boulevard 4-12, Bucharest 030018, <https://unibuc.ro/>

- Teaching activity at the Department of Complex Combinations
 - Preparation and participation in laboratory work in the discipline of Chemistry of Complexes, research activity
- Business or sector** Education and research

October 3, 1995- October 7, 1997

Chemist

SC CARMESIN SA Bucharest, Pantelimon Road, No. 1, District 2

- Laboratory activity within the technical quality control laboratory
 - Laboratory activity (laboratory analyses)
- Business or sector** Industry

EDUCATION AND TRAINING

May 5-30, 2025

Invited Researcher

CEMHTI (Conditions Extrêmes et Matériaux: Haute Température et Irradiation, CNRS), (Orléans), France

- Competencies in the field of materials characterization
- Competencies in the field of synthesis of materials based on mesoporous periodic organosilica

February 25-28, 2019

Certificate of completion of the course "Quality Management System Auditors in an accredited/in the process of accreditation laboratory according to SR EN ISO/IC 17025:2018 and SR EN ISO 19011:2018 standards"

Fia Test Bucharest

- Competencies required for an auditor in the field of the Quality Management System in an accredited laboratory/in the process of accreditation according to the SR EN ISO/IC 17025:2018 and SR EN ISO standards;
- General requirements for the competence of testing, sampling and calibration laboratories
- Coordination of an audit program; Application of audit procedures, methods and criteria; Planning and conducting the audit; Preparation of audit reports; Reporting the results of the application of an audit program, its analysis and improvement

June 19-20, 2018

Certificate of participation in the training session on the topic "Basic training in the field of drugs"

National Anti-Drug Agency - National Center for Training and Documentation in the Field of Drugs

- Basic issues in the field of drugs

March 3-6, 2014

Graduation diploma of the courses entitled "Solving Contaminant Problems for a Sustainable Environment through Application of Environmental Engineering and Science Concepts"

Michigan State University, the Institute of International Health and the Fogarty International Center Program on Environmental Health, Bucharest, Romania

- Environmental protection and engineering,
- Environmental pollution

June 25-27, 2012

Internal auditor training diploma

COR 241105

Department of Quality Management at Politehnica University of Bucharest

- Quality Management Systems according to ISO 9001/2008;
- External quality assessment methodology according to ARACIS;
- Audit management program - ISO 19011;
- Internal audit for Politehnica University of Bucharest

January 1 – December 31, 2011

Certificate of completion of the postdoctoral training program

Project POSDRU / 89 / 1.5 / S / 52432 of 1.04.2010 - Institutional organization of a post-doctoral school of national interest "Applied biotechnologies with impact in the Romanian economy" beneficiary: University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca - Politehnica University of Bucharest

- Industrial biotechnologies,
- Microbial biomass used to remove heavy metals from wastewater

October 3 – 4, 2011

Science Shop Autumn School Graduation Diploma

Dublin City University – courses organized by Living Knowledge Network with the support of the European project FP7/2007-2013 PERARES no. 244264

- Organization and working of Science Shops

June 1 – 30, 2011	Certificate of participation in the postdoctoral training internship	University of Chemical Technology and Metallurgy in Sofia, Bulgaria	COR 241205
April 12 – 22, 2010	Certificate of completion of the 40-hour specialization program for the TRAINER occupation	Adult Vocational Training Association - AFPA, Bucharest	COR 241205
February 22 – 26, 2010	Certificate of completion of the 40-hour specialization program for the occupation PROJECT MANAGER	Adult Vocational Training Association - AFPA, Bucharest	COR 241919
March 9 – 12, 2010	Certificate of completion of the courses organized within the International Training Workshop on Fundamentals of Environmental Chemistry and Engineering - Transformation and Behavior of Contaminants in Natural and Engineering Systems	Michigan State University, Institute of International Health and Fogarty International Center Program on Environmental Health – Training and Research in Environmental Health in the Balkans	
March 2009	Certificate of participation in Laboratory Seminar I	ABL&E-JASCO Romania	
September 20 – 30, 2006	Certificate of completion of the postgraduate courses "Environmental Pollution Monitoring. Pollutants, Analysis Methods, Legislation, Quality Assurance and Management" organized under the aegis of the LEONARDO da VINCI Vocational Training Program of the European Union, within the pilot project no. RO/02/B/F/PP – 141004	Courses organized under the aegis of the European Union's LEONARDO da VINCI Vocational Training Program, within the pilot project no. RO/02/B/F/PP – 141004 by the University of Bucharest, Faculty of Chemistry – Automated Analysis Methods Research Center	

- Types of environmental pollutants,
- Methods of analysis,
- Environmental legislation,
- Quality assurance and management,
- Monitoring

September 19-20, 2005

Certificate of participation in theoretical and practical introductory courses in electron microscopy

National Research Institute for Materials Physics

- Techniques for analyzing solid materials through electron microscopy

March 7-10, 2005

Certificate of completion of courses on Environmental Contaminants

Michigan State University, Institute of International Health and Fogarty International Center Program on Environmental Health – Training and Research in Environmental Health in the Balkans

- Environmental contaminants, methods of controlling and remediating environmental pollution

October 1, 1996- September 2005

PhD in Chemistry

Romanian Academy – IG Murgulescu Institute of Physical Chemistry/University of Bucharest, Faculty of Chemistry

- Inorganic chemistry, preparation and characterization of copper sulfides

October 3, 1994 - June 30, 1995

Advanced Studies Diploma

University of Bucharest, Faculty of Chemistry – Department of Inorganic Chemistry

- Courses from the advanced study program "Specialization in multifunctional natural and synthetic organic compounds"

October 1, 1989 - June 30, 1994

Bachelor's Degree

University of Bucharest, Faculty of Chemistry – Department of Inorganic Chemistry

- Courses within the bachelor's program of the inorganic chemistry specialization/Bachelor's degree

PERSONAL SKILLS

Foreign languages known

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English language	C1	C1	B1	B1	B1
French language	B1	B1	A2	A2	A1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- good communication skills within the group and the organization obtained as a result of experience in lecturing to students and teachers;
- ability to adapt to multicultural environments;

Organisational/managerial skills

- leadership - competence acquired by participating in the organizing committee of international events "The Romanian International Conference on Chemistry and Chemical Engineering (RICCCE)", RICCCE 18, September 2013, Sinaia, Romania and as a member of the executive committee of the conference "The Romanian International Conference on Chemistry and Chemical Engineering (RICCCE)", RICCCE 19, September 2015;
- good experience in project or team management;
- able to work in a team and be part of research project teams - competences acquired by participating in various national and international research projects, POSDRU projects obtained through competition

Job-related skills

- trainer of trainers – competence acquired both by participating in various training courses and by participating as a Trainer at the Bucharest Teaching Staff House – where I gave lectures entitled "General notions of pollution and environmental protection" within courses accredited by the Ministry of Education through the continuous training program for pre-university teachers, engineers, foremen, advanced training courses for physics, chemistry, biology, geography, engineering teachers, technological education teachers, teachers and educators organized by the Bucharest Teaching Staff House (300 teachers participating in the training courses).
- team spirit – competence acquired while still at university where I participated in the development of bachelor's and master's projects, in various research papers and as a result of group activities carried out for the development of research contracts and curricula;
- open-minded and eager for continuous training and acquiring new knowledge – demonstrated by participating in training courses in the field of engineering and environmental protection/materials science/project management;
- a good knowledge of the ARACIS accreditation system of higher education institutions – participating as a member of the ARACIS committee

Computer skills

SELF-EVALUATION				
Information processing	Communication	Content creation	Security	Problem solving
Experienced user	Independent user	Independent user	Basic user	Basic user

- a good command of an office suite (word processor, spreadsheet, presentation software);
- a good knowledge of Microsoft Office™ (Word™, Excel™ and PowerPoint™);
- basic knowledge of computer graphics applications (Adobe, Paint).
- good knowledge of photo editing, acquired as an amateur photographer

Other skills

- painting

Driving licence

B

ADDITIONAL INFORMATION

Publications

- 10 books
- 1 chapter in a book – published abroad
- 2 laboratory works
- 86 articles (ISI + ISI proceedings) (Web of Science)/52 as first author/corresponding author
- 8 articles in specialized journals
- 21 articles published in volumes of recognized international scientific events
- 3 articles published in volumes of recognized national scientific events

Projects

participation in various national and international research projects, POSDRU projects obtained through competition:

- 1 as project manager;
- 1 as project responsible from UPB;
- 9 as a member of the research team of national projects;
- 1 as European Project Manager (MSCA Staff Exchange)
- 2 as a member of the research team of international projects;
- short-term expert in 2 POSDRU projects
- junior expert in a PHARE project

participation in research projects with third parties

- 3 as member in the research team

Honours and awards

- Articles awarded by CNCSIS/UEFISCDI in the PNCDI2 competition - HUMAN RESOURCES - Awarded articles - in 2016 – 2 awarded articles; in 2017 – 3 awarded articles; in 2018 – 1 article; 2020 – 2 awarded articles + 1 patent; 2021 – 1 awarded article; 2023 – 2 awarded articles
- First prize for scientific research in chemistry through the paper presented at the young researchers section in chemistry of the International Conference "Several Aspects of Biology, Chemistry, Informatics, Mathematics & Physics" organized by the Faculty of Sciences – University of Oradea in Băile Felix between November 11-13, 2005

Memberships

Membership in professional organizations :

- Romanian Chemical Society,
- Founding member of the InterMEDIU Environmental Protection Information and Consultancy Center, Bucharest
- Member of EuCheMS (European Association for Chemical and Molecular Sciences), since 2007
- Reviewer of the MATRIX Rom Bucharest publishing house
- Member of the editorial board of the International Journal of Materials and Chemistry;
- Member of the editorial board of the Journal of Chemistry and Chemical Engineering;
- Member of the editorial board of the Journal of Inorganic & Organometallic Polymers & Materials
- Scientific reviewer of the Scientific & Academic Publishing publishing house;
- Member of the editorial board of the Algerian Journal of Environmental Science and Technology, since 2016
- Member of the editorial board of the World Journal of Biotechnology, since 2016
- Member of the editorial board of the International Journal of New Chemistry, since 2019 (<http://www.ijnr.com/journal/editorial.board>)
- Member of the editorial board of the Journal of Chemistry Letters, since 2020 (<http://www.jchemlett.com/journal/editorial.board>)

Member of the tutoring committee during doctoral training internships

- During the period 2013-present I participated as a tutor in the supervision committee of 40 doctoral students

Member of competition committees for teaching positions

- since 2009 I have coordinated 14 first degree papers completed and presented publicly;
- participation since 2009 - as a member of committees for the second degree and the first degree.

 ADDITIONAL INFORMATION

References

Participation in activities within the academic community as a member of admission committees and evaluation of the completion of bachelor's and master's studies - UPB admission committee

- admission committee to the Faculty of Applied Chemistry and Materials Science – UPB
- admission committee to the dissertation for the masters of Environmental Engineering, Environmental Quality Control and Consumer Protection. Product Quality Control,
- undergraduate and dissertation committee for Environmental Engineering,
- evaluation committee of dissertation works for the master of Consumer Protection. Product Quality Control,
- evaluation committee of undergraduate works of the Environmental Engineering section – Sapientia University – Miercurea Ciuc,
- evaluation committee of students' scientific works within the Student Scientific Communications Session,

Tutor for the 3rd and 4th year of IM (from 2002 – 2018); for the 1st and 2nd year of the Master's degree in Consumer Protection. Product Quality Control (from 2020-present)

Member of the CASM Quality Assessment and Assurance Committee (secretary during 2012-2015; 2015-2016 committee coordinator)

Member of the CASM Teaching Council 2012-2016

Member of the jury at the last editions (from 2010 to present) of the "School Science and Technology Events - Florin Vasilescu" competition organized by the Ministry of Education, Research, Youth and Sports, the School Inspectorate of Călărași County, the House of the Teaching Staff of Călărași, the IDD CREDIS Călărași Zonal Center of the University of Bucharest, the GIFF Foundation

Scientific reviewer of international journals: **Chemical Engineering Journal**, International Journal of Materials and Chemistry, Journal of Chemistry and Chemical Engineering, Journal of Inorganic & Organometallic Polymers & Materials, **Journal of Materials Chemistry A**, Transnational Journal of Agriculture and Soil Sciences(TJASS), The Chemical Industry and Chemical Engineering Quarterly (Chem Ind. Chem. Eng. Q.), International Biodeterioration & Biodegradation, Industrial & Engineering Chemistry Research, Advanced Research Journal of Biochemistry, Advanced Journal of Environmental Science and Technology, **Food Packaging and Shelf Life**, International Journal of Applied Microbiology and Biotechnology, International Journal of Microbiology Research and Reviews, Herald Journals of Biochemistry and Bioinformatics, Agricultural Research Journal, Nanoscience and Nanotechnology, Sensors Journal, Polish Journal of Environmental Studies, Bull UPB, Peak Journal of Environmental Studies, Ceramics International, MethodX, Desalination and Water Treatment, International Journal of Environmental Analytical Chemistry, Annals of Microbiology, European Journal of Biological Research, Net Journal of Agricultural Science, **Reactive and Functional Polymers**, Revista de Chimie, Sustainability, South African Journal of Chemical Engineering, Microbiology Research International, Journal of Cleaner Production, Water, Environmental Science & Technology, Journal of Dispersion Science and Technology, Separation Science and Technology, Journal of King Saud University – Science, RSC Advances, Polymers, **Desalination**, Journal of Environmental Management, Journal of Molecular Liquids, Environmental Research, Applied Surface Science, Revista de Materiale Plastice, **Ecotoxicology and Environmental Safety**, Sustainable Chemistry and Pharmacy, Materials Chemistry and Physics, Industrial & Engineering Chemistry Research, Energies, ACS Applied Energy Materials, Atmospheric Pollution Research, Organic Electronics, International Journal of Environmental Research and Public Health, Environmental Science: Nano, Journal of Macromolecular Science, Part A: Pure and Applied Chemistry, Journal of Analytical Methods in Chemistry, ACS Applied Nano Materials, **International Journal of Biological Macromolecules**, **Journal of Hazardous Materials**, Environmental Science and Pollution Research, Environmental Technology, Clean - Soil, Air, Water, ACS Applied Materials & Interfaces, World Journal of Applied Chemistry, Applied Sciences, **Chemosphere**, Inorganic and Nano-Metal Chemistry, Nanomaterials, Colloids and Surfaces A: Physicochemical and Engineering Aspects, SN Applied Sciences, Revue Roumaine de Chimie, Microchemical Journal, **Science of Total Environment**, Arabian Journal of Chemistry, ACS Omega, Separation Science and Technology, Chemical Engineering Communications, Materials, International Journal of Biomaterials, Scientific Reports, International Journal of Phytoremediation, Molecules, Journal of Saudi Chemical Society, Journal of Chemical & Engineering Data, Environmental Technology, Materials Chemistry and Physics, Iranian Journal of Chemistry and Chemical Engineering, Frontiers of Environmental Science and Engineering, **Journal of Materials Chemistry B**, Journal of Materials Research and Technology, Journal of Chemistry, Adsorption Science & Technology, **Inorganic Chemistry Frontiers**,

ADDITIONAL INFORMATION

References

Scientific reviewer at the International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM and SGEM GeoConference – “Green Science for Green Life” conferences indexed by Scopus - 70 peer-reviewed articles (since 2020)

Editor of the book Dendrimers - Fundamentals and Applications 2018, IntechOpen Publishing House, online ISBN: 978-1-78923-059-8; print ISBN: 978-1-78923-058-1; <http://dx.doi.org/10.5772/intechopen.68738>

Editor of the book Nanocrystals and Nanostructures 2018, IntechOpen Publishing House, online ISBN: 978-1-78923-665-1; print ISBN: 978-1-78923-664-4; DOI: 10.5772/intechopen.71096, <https://www.intechopen.com/books/nanocrystals-and-nanostructures>

UEFISCDI Evaluator – 15 projects evaluated in the competition Research projects to stimulate the establishment of young independent research teams - type TE 2014; 4 projects evaluated in the competition Research projects to stimulate the establishment of young independent research teams - type TE 2016; 7 projects evaluated in the competition Postdoctoral research projects - type PD 2016;

ANCS Evaluator – 9 projects + 1 Nucleus program – December 2022

Evaluator for the Council for Science and Technological Development of the Ministry of Education of Chile (CONICYT) - FONDECYT Regular 2017

Evaluator for the Czech Science Foundation (2019)

ARACIS Evaluator (2024)

Citations

Total number of citations: 909 of which 784 (without self-citations – from Web of Science and Scopus databases)hirsch index 14 (Web of Science), 15 (Scopus), 14 (Google Scholar)

Courses

- **Participation in the seminar** entitled “Innovation and performance brought by Agilent Technologies in Atomic and Molecular Spectrometry” organized on March 24, 2015 by SC Agilrom Scientific SRL;
- **Participation in the PHARE TVET Seminar** RO 2006/018 – 147.04.01.02.01.03.01 “Training and Consulting for the Continuous Development of the TVET Sector” - Higher Education component – 26 – 28 February 2009 Sinaia on the implementation of the Methodology of the National Qualifications Framework in Higher Education, within which together with a group of professors from various Higher Education Institutions in the country we developed Grids 1 and 2 in accordance with the CNCIS Methodology for the study program: Inorganic Substances Engineering and Environmental Protection – Bachelor’s program
- **Participation in the seminar** “Micro and Nanoparticle Characterization Technologies & Thermal Analysis and Calorimetry” organized by Ankersmid NV (Romania) together with the Institute of Chemistry and Physics “Ilie Murgulescu” Bucharest, 22 October 2007
- **Participation in the seminar** on the topic “Management Chemical Substances” organized by JICA/JOCV Romania and the Ministry of Agriculture, Forests, Waters and Environment 2004,
- **Participation in the seminar** “Environmental Management in Romania” organized by the Japan International Cooperation Agency (JICA), the Environmental Protection Agency Bucharest, the Faculty of Industrial Chemistry (UPB) and the Information and Consulting Center InterMediu Bucharest, 29-30 September 2003;
- **Participation in the seminar** “Modern Methods for Treating Industrial Wastewater” Envirochimie-UPB, Ministry of Agriculture, Forests, Waters and Environment, 3-4 December 2003
- **Participation in the International Conference** on Avoiding Municipal Waste – Concepts and Best Practice Examples, 2-4 October 2002, Vienna

Certifications

- Trainer
- Project Manager

11.05.2025