

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) Address(es)

Irina Atkinson

Telephone(s) Fax(es) E-mail Nationality

Gender

Dates 2021 - present

Occupation or position held

Head of Oxide Compounds and Material Science Department

Main activities and responsibilities

Managed a research team of over 20 members to achieve scientific goals, efficient scientific collaboration,

and organizational coordination.

Name and address of employer

Institute of Physical Chemistry - Ilie Murgulescu of the Romanian Academy, 202, Splaiul Independentei,

060021 Bucharest, Romania

2019 - present Dates

Occupation or position held Main activities and responsibilities Scientific Researcher II Research activity in the field of physical chemistry of oxide systems, bio-glasses

Name and address of employer

Institute of Physical Chemistry - Ilie Murgulescu of the Romanian Academy, 202, Splaiul Independentei, 060021

Bucharest, Romania

2014 - 2019

Dates Occupation or position held

Scientific Researcher III

Main activities and responsibilities

Name and address of employer

Scientific research focused on the physical chemistry of oxide systems, nanomaterials, biomaterials, and

materials characterization using X-ray diffraction (XRD) and X-ray fluorescence (XRF). Institute of Physical Chemistry - Ilie Murgulescu of the Romanian Academy, 202, Splaiul Independentei, 060021

Bucharest, Romania

Dates

2010 - 2014

Occupation or position held Main activities and responsibilities

Scientific Researcher Scientific research focused on the physical chemistry of oxide systems, nanomaterials, biomaterials, and

materials characterization using X-ray diffraction (XRD) and X-ray fluorescence (XRF).

Institute of Physical Chemistry - Ilie Murgulescu of the Romanian Academy, 202, Splaiul Independentei,060021

Bucharest, Romania 2001 - 2010

Name and address of employer Dates

Occupation or position held

Assistant Researcher

Main activities and responsibilities Scientific research focused on the physical chemistry of oxide systems, glasses, and glass ceramics, and

materials characterization using X-ray diffraction (XRD) and X-ray fluorescence (XRF).

Name and address of employer

Institute of Physical Chemistry - Ilie Murgulescu of the Romanian Academy, 202, Splaiul Independentei, 060021 Bucharest, Romania

Education and training

Dates

September 2004-September 2005

Title of qualification awarded

Marie Curie fellowship

Principal subjects/occupational skills covered Name and type of organisation providing "Multinuclear Solid State NMR Investigations of Silicate-Based Ceramic Glazes" University of Warwick, UK

education and training

2009 Dates

Title of qualification awarded

Ph.D in Chemical Engineering

Principal subjects/occupational skills covered Preparation and investigation of ceramic glazes with improved properties

Name and type of organisation providing education and training Politehnica University of Bucharest

Level in national or international classification

ISCED 5 Dates 1998

Title of qualification awarded

Chemical Engineer

Principal subjects/occupational skills covered. Oxide Materials Science and Engineering

Name and type of organisation providing education and training Politehnica University of Bucharest, Faculty of Industrial Chemistry, Bucharest Romania

Other language(s) Self-assessment Understanding European level (*)

Speaking

Writing

Listening Reading Spoken Spoken interaction production

English	C1	Proficient	C1	Proficient	C1	Proficient	C1	Proficient	C1	Proficient
French	B2	user Independent user	B2	user Independent user	A2	user Basic user	A2	user Basic user	A2	user Basic user

Organisational skills and competences

Managerial experience

- -PhD supervisor, IOSUD-SCOSAAR, Chemistry domain (Romanian Academy)-2023
- -Head of Oxide Compounds and Material Science Department at the Institute of Physical Chemistry of the Romanian Academy since June 2021 (managed a team of more than 20 researchers).
- Member of the Scientific Council of the Institute of Physical Chemistry Ilie Murgulescu of the Romanian Academy (2021-present)

-Coordinator of the Materials Science and Advanced Characterization Methods Research Program (Program 6) within the research plan of the Institute of Physical Chemistry - Ilie Murgulescu, Romanian Academy Project leader: Functionalized mesoporous bioglass-based 3D scaffolds for hard tissue regeneration (BIOSCAFTIS), PN-III-P2-2.1-PED-2019-0598-600000 lei https://www.icf.ro/pr_2019/BIOSCAFTIS/index.html Project leader: Development of a new generation of eco-friendly flame retardant products for the treatment of cellulose-based materials, PN-IV-P7-7.1-PED-2024-0582-budget 750000 lei (152010 co-financing)

Project leader of 3 Joint Research Projects between the Romanian Academy and the Hungarian Academy of

Sciences, and between the Romanian Academy and the Bulgarian Academy of Sciences Research team member in more than 20 national projects and 2 joint research projects

Member of the organizing Committee of the Summer School of the COST Action MP0902-(COINAPO)-2012 and International Conference Romphyschem 15th edition (2013), 16th edition (2016), and 17th edition (2023).

Expert evaluator Polish National Science Centre (PRELUDIUM 10 call for research projects 2016)
Polish National Science Centre (OPUS 24 call for research projects 2024)

Research area and Technical skills

Physical chemistry of silicates; nanomaterials, glass and glass ceramics, mesoporous bioactive glasses; solgel route; hydrothermal method. Expertise in the following techniques for materials characterization: X-ray

diffraction (XRD), X-ray fluorescence (XRF), IR spectroscopy, and nuclear magnetic resonance (MAS-NMR of

Publications 27Al and 29Si)
More than 138 scientific papers published in refereed journals and proceedings of conferences;

More than 150 presentations at national and international conferences;

3 patent applications:

More than 1400 citations, h-index 22 (scopus)
Proficient in Microsoft Office, Original ab

Computer skills Proficient in Microsoft Office, OriginLab
Reviewer for ISI journals: J. Therm. Anal. Calc

Reviewer for ISI journals: J. Therm. Anal. Calorimetry, J. Sol-Gel Sci.Technol., J. Chem. Eng. Mater.

Sci. J Aloy Compd., Ceram. Int., Int. J. Biol. Macromol. Acta Biomater.

Seminars Course Coordinator: X-ray Diffraction – Methods of Structural Characterization of Chemical Compounds, as part of the advanced university training program at the School for Advanced Studies of the Romanian Academy

(SCOSAAR).

Additional Information "Ilie Murgulescu" Award from the Romanian Academy (2019) for the research "Advanced materials and nanomaterials with tailored design and properties for multiple applications." Member of the Romanian Chemical

Society.

-Member of the Romanian Chemical Society

Selected Publications

- I. Atkinson*, A.-M. Seciu-Grama, A. Serafim, S. Petrescu, M. Voicescu, E. M. Anghel, C. Marinescu, R. A. Mitran, O. C. Mocioiu, J. Pandele Cusu, D. Lincu, A.-M. Prelipcean, O. Craciunescu, Bioinspired 3D scaffolds with antimicrobial, drug delivery, and osteogenic functions for bone regeneration, *Drug Deliv Transl Res*, 2024, 14,1028–1047. (Pharmaceutical Science -Q1)
- I. Atkinson*, O.C. Mocioiu, E.M. Anghel, A study of zircon crystallization, structure, and chemical resistance relationships in ZrO₂ containing ceramic glazes/Un estudio de cristalización de circón, relaciones de estructura y resistencia química en esmaltes cerámicos que contienen ZrO₂, Bol. Soc. Esp. Ceram, 2022, 61(6), 677-685 (Q1).
- 3. M. Chelu, J. Calderon Moreno, I. Atkinson, J. Pandele Cusu, A. Rusu, V. Bratan, L. Aricov, M. Anastasescu, A.-M. Seciu-Grama, A. M. Musuc, Green synthesis of bioinspired chitosan-ZnO-based polysaccharide gums hydrogels with propolis extract as novel functional natural biomaterials, *Int. J. Biol. Macromol.* 2022, 211, 410-424, (Q1)
- C.D. Ene, P. Cucos, A. lanculescu, D.C. Culita, E.M. Anghel, A. Cucos, I. Atkinson, M.C. Chifiriuc, J.M Calderón-Moreno, O. Carp, Benign by design: porous spherical ZnO alginate family via a dual-template synthesis, Appl. Surf. Sci., 2022, 580, art. no. 152231. (Q1)
- Craciun, F., Cordero, F., Cernea, M., Fruth, V., Atkinson, I., Stanica, N., Vasile, B.S., Trusca, R., Iuga, A., Galizia, P., Galassi, C. Multiferroic (Nd,Fe)-doped PbTiO3 ceramics with coexistent ferroelectricity and magnetism at room temperature, Ceram. Int., 2019, 45 (7), pp. 9390-9396
- 6. Atkinson, I.*, Anghel, E.M., Petrescu, S., Seciu, A.M., Stefan, L.M., Mocioiu, O.C., Predoana, L., Voicescu, M., Somacescu, S., Culita, D., Zaharescu, M. Cerium-containing mesoporous bioactive glasses: Material characterization, in vitro bioactivity, biocompatibility and cytotoxicity evaluation, *Microporous Mesoporous Mater.*, 2019, 276, pp. 76-88. (Q1)
 *corresponding author

Data:

01.09.2025