

Curriculum Vitae

Personal Information

First Name / Surname	Oana Cătălina Mocioiu
Address	Institute of Physical Chemistry Ilie Murgulescu of the Romanian Academy, 202 Splaiul Independenței, 060021 Bucharest, Romania omocioiu@icf.ro ; oana.mocioiu@yahoo
Gender	Female
Date of Birth	29/08/1976
Nationality	Romanian
ORCID	https://orcid.org/0000-0002-8612-536X
Job Applied For	Invited speaker at JTACC conference

Work Experience

Dates	2014-present
Occupation or position held	Senior researcher
Main activities and responsibilities	The research in the physical chemistry to the oxide and composite systems, nanomaterials, biomaterials, optoelectronics. Materials characterizations such as FTIR, DTA, SEM/EDAX, Electrochemical Impedance Spectroscopy. Writing the articles and projects. Participation at conferences. Teaching the students and junior researchers. Reviewer at journals and projects. Guest editor. Member in organizing committee of ROMPHYSICHEM conference.
Name and address of employer	Institute of Physical Chemistry, 202 Splaiul Independenței, 060021 Bucharest, Romania
Dates	2000-2014
Occupation or position held	Junior researcher
Main activities and responsibilities	The research in the physical chemistry to the mono and multicomponent oxide systems (crystalline and vitreous), in point of view determination to phase equilibrium, to reaction mechanism and to correlation structure-properties. Synthesis of ceramics by classical route (melting or thermal treatment); sol-gel method; hydrothermal method. Glasses and oxides. FTIR spectroscopy.
Name and address of employer	Institute of Physical Chemistry, 202 Splaiul Independenței, 060021 Bucharest, Romania

Education And Training

Dates	May 1 – July 31, 2009
Title of qualification awarded	Research stage
Principal subjects/ occupational skills	Chemical solution deposition of lead-free thin films based on alkaline niobates
Name and type of organisation	Josef Stefan Institute, Ljubljana, Slovenia:
Dates	January 2009
Title of qualification awarded	Short Term Scientific Mission (STSM) within the COST 539 scientific programme on Electroceramics from Nanopowders Produced by Innovative Methods(ELENA)

Principal subjects/ occupational skills	Chemical solution deposition of lead-free thin films based on alkaline niobates
Name and type of organisation	Josef Stefan Institute, Ljubljana, Slovenia
Dates	2008
Title of qualification awarded	PhD in chemistry
Principal subjects/ occupational skills covered	Glass synthesis in multicomponent systems. FTIR, RAMAN, DTA, XRD, SEM/EDAX, dilatometry, heating microscopy. Inertization of hazardous wastes (from batteries) in glasses. Kinetic of the non-isothermal crystallisation of glass. Flynn-Wall-Ozawa method, Kissinger-Akahira-Sunose, Johnson-Mehl-Avrami-Erofeev-Kolmogorov, and IKP methods.
Name and type of organisation	School of Advanced Studies of the Romanian Academy
Level in international classification	ISCED 5
Dates	1999 - 2000
Title of qualification awarded	Master degree
Principal subjects/ occupational skills	Crystalline and vitreous oxide materials with electrical and magnetic properties
Name and type of organisation	University POLITEHNICA of Bucharest, Faculty of Industrial Chemistry
Level in international classification	ISCED 5
Dates	1994 – 1999
Title of qualification awarded	Chemical engineer
Principal subjects/ occupational skills	Organic synthesis. Organic technologies. Reactors. Engineering skills
Level in international classification	ISCED 5

Other trainings

- Course: Micro and nanoengineering with topics: experimental realization of silicon nanostructures by corrosion processes. The obtaining of membranes on Si for biomedical devices, by methods compatible with technology of microelectronics. Methods of analyse the thin films and interfaces (XPS (ESCA)-AUGER. National Institute of Research-Development for Microtechnology, IMT, Bucharest, Romania. 4-6 November 2002
- Summer school: School of electronic microscopy SME 2005. Laboratory of Microstructure of Defects in Solids in the National Institute of Research-Development for Physics of Materials, Magurele, Ilfov. 19-21 September 2005
- Winter school: Sixth Students Meeting School of Ceramics. Faculty of Technology Novi-Sad, Serbia-Munteneagu. 1-2 December 2005

- Seminar: "THERMO ELECTRON – Complete solutions in spectrometry": FT-IR, Raman, ICP-MS, X-ray spectrometry. Faculty of Veterinary Medicine Bucharest. 4-5 May 2006

- Course: Chemical proceeds of stocking of electrical energy. SOFC. University POLITEHNICA of Bucharest, Science and Engineering of Oxide and Nanomaterials, Romania. 28 - 29 September 2006

- Workshop: Thermal analysis of materials and products by the following techniques: thermogravimetric (TG), differential thermal analysis (DTA), differential dynamic calorimetry (DSC) and dilatometry (DIL). National Institute of Research and Development for Electrical Engineering, Romania. 25-26 January 2007

- Course: Infrared Spectrometry (FT-IR), Certificate nr. A08-CT065190908F03 Bucharest.2008

Personal Skills

Mother tongue(s) Romanian

Other language(s)

English

French

Understanding		Speaking		Writing
Listening	Reading	Spoken Interaction	Spoken Production	
C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user
C1 Proficient user	C1 Proficient user	B1 Independent user	B1 Independent user	C1 Proficient user

(*) Common European Framework of Reference for Languages

Computer skills

Good command with Microsoft Office™ tools, Origin.

Communication skills

Good communication skills

Technical skills and competences

Scientific activity

- 75 scientific published papers in referred journals and conference proceedings,
- one book published at Editura Academiei Romane
- 2 book chapters published at Springer
- Research team member in 20 national projects;
- Research team member in 1 M-Era-NET project
- Research team member in 3 inter-governmental projects
- Research team member in 5 inter-academic projects

Other skills and competences

Reviewer for ISI journals;
Member in Organizing Committee of the International Conference ROMPHYSICHEM 14th edition (2011), 15th edition (2013), 16th edition (2016). and 17th edition (2023).

Annexes

List with selected publications

Bucharest, 2023, 16th March

Dr. Mocioiu Oana Catalina

Selected List of Publications

1. Atkinson, I; Seciu-Grama, AM; Petrescu, S; Culita, D; **Mocioiu, OC**; Voicescu, M; Mitran, RA; Lincu, D; Prelipcean, AM; Craciunescu, O
Cerium-Containing Mesoporous Bioactive Glasses (MBGs)-Derived Scaffolds with Drug Delivery Capability for Potential Tissue Engineering Applications
Pharmaceutics 2022, 14, 1169
- 1.
2. **Mocioiu, OC**; Atkinson, I; Mocioiu, AM; Neagu, S; Ruginescu, R; Mitran, R; Enache, M.
3. *Effect of ZnO on Properties of Gels for Heritage Objects Conservation.*
4. Gels 2021, 7, 251.
- 5.
3. Musat, V; Anghel, EM; Zaharia, A; Atkinson, I; Mocioiu, OC; Busila, M; Alexandru, P.
A Chitosan-Agarose Polysaccharide-Based Hydrogel for Biomimetic Remineralization of Dental Enamel.
Biomolecules 2021, 11, 1137.
4. Vladut, CM; Mihaiu, S; Mocioiu, OC; Atkinson, I; Pandele-Cusu, J; Anghel, EM; Calderon-Moreno, JM; Zaharescu, M.
Thermal studies of Mn²⁺-doped ZnO powders formation by sol-gel method.
Journal of Thermal Analysis and Calorimetry 2019, 135, 2943-2951
5. Vladut, CM; Mihaiu, S; Szilagyi, IM; Kovacs, TN; Atkinson, I; Mocioiu, OC; Petrescu, S; Zaharescu, M.
Thermal investigations of the Sn-Zn-O gels obtained by sol-gel method
Journal of Thermal Analysis and Calorimetry 2019, 136, 461-470
6. Atkinson, I; Anghel, EM; Petrescu, S; Seciu, AM; Stefan, LM; Mocioiu, OC; 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 and Mesoporous Materials 2019, 276, 76-88
7. **Mocioiu, OC**; Atkinson, I; Pandele-C., J; Bratan, V; Petrescu, S; Baila, D; Mocioiu, AM.
Structural and Physico-Chemical Characterization of Zn-doped SiO₂ Glasses Obtained by Sol-Gel Route.
Revue Roumaine De Chimie 2018, 6, 419-424.
8. Zaharia, A; Musat, V; Anghel, EM; Atkinson, I; **Mocioiu, OC**; Busila, M; Plescan, VG
Biomimetic chitosan-hydroxyapatite hybrid biocoatings for enamel remineralization
Ceramics International 2017, 43, 11390-11402
9. **Mocioiu, OC**; Mocioiu, AM; Marin, A; Zaharescu, M
Study of historical lead silicate glasses and their preservation by silica coating
Ceramics International 2017, 43, 77-83
10. Atkinson, I; Anghel, EM; Predoana, L; **Mocioiu, OC**; Jecu, L; Raut, I; Munteanu, C; Culita, D; Zaharescu, M.
Influence of ZnO addition on the structural, in vitro behaviour and antimicrobial activity of sol-gel derived CaO-P₂O₅-SiO₂ bioactive glasses.
Ceramics International 2016, 42, 3033-3045.

Book

1. P. Budrugaec, O. Carp, D. Oancea, **O. Mocioiu**, M. Zaharescu, *Aplicatii ale Analizei Termice*, vol. I (in Romanian), Ed. Academiei Romane, București, p. 234 (2016)

Book Chapter

1. M. Zaharescu, **O. C. Mocioiu**, *Infrared Spectroscopy*, in *Chemical Solution Deposition of Functional Oxide Thin Films*, Springer, Wiena, 2013, p. 213-230, Eds.: T. Schneller, R. Waser, M. Kosec, D. Payne, ISBN 978-3-211-99311-8