



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Victor FRUTH-OPRISAN**
Address 14, Str. Plantelor, S2, Bucharest
Mobile 40720959569
E-mail(s) vfruth@icf.ro
Nationality Romanian
Date of birth 27/02/1954
Gender Male

**Desired employment /
Occupational field** **Senior Scientific Researcher
CP1**

Work experience

Dates 1987 → present
Occupation or position held Senior Scientific Researcher / Department 6 (Oxide compounds and material science) – Deputy Director - Institute of Physical Chemistry "Ilie Murgulescu" of the Romanian Academy
Main activities and responsibilities – Research in the field of physical chemistry of the oxide materials (single and poly-component), particularly concerning the phase equilibrium, reaction mechanisms and correlations structure-properties in oxides (crystalline and glassy)
– Advanced ceramic materials with special properties (magnetic, electric, optic, mechanic, ex. superconductors, ionic conductors);
– Non conventional route of preparation. Nanopowders, bulk, thin and thick films, 1D nanostructures. Biomaterials; Cocrystals; Nutraceuticals
Name and address of employer Institute of Physical Chemistry "Ilie Murgulescu"
202, Splaiul Independentei, 060021 Bucharest (Romania)
Type of business or sector Academic
Dates 1979 - 1987
Occupation or position held researcher
Main activities and responsibilities Technological Research in Portland Cement Industry
Name and address of employer PROCEMA
6, Bulevardul Preciziei , Bucharest (Romania)
Type of business or sector Researcher

Education and training

Dates 1974 - 1979
Title of qualification awarded "Politehnica" University of Bucharest, BSc graduation Diploma Chemical Engineering in 1979

Principal subjects / occupational skills covered

Physical chemistry of the oxide materials

Name and type of organisation providing education and training

University of Bucharest, Bucharest, Romania

Dates

1998

Title of qualification awarded

PhD in Material Science "Politehnica" University of Bucharest,

Principal subjects / occupational skills covered

Phase *Equilibria and properties in superconductor oxides from the system $M^{II} - M^{III} - Cu - O$* – coordination: Prof. Dr. Doc. I. Teoreanu.

Name and type of organisation providing education and training

"Politehnica" University of Bucharest, Chemical Engineering Faculty

Level in national or international classification

ISCED 5

Personal skills and competences

Mother tongue(s)

Romanian

Other language(s)

Self-assessment
European level (*)

French
English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B1	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
C1	Proficient user	C1	Proficient user	B1	Independent user	B1	Independent user	B1	Independent user

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences

Team work: I have worked in various types of team projects

Organisational skills and competences

Good experience in project or team management

Awards

- Romanian Academy Award "Gh. Spacu" -2006 for the group of papers "Bismuth based advanced ceramics"

- Romanian Chemical Society Award -2011

-Silver medal at Inventika 2009 and gold medal at Eureka-Brussels 2009, for patent *PROCEDURE FOR OBTAINING SILICON NITRIDE WITH DIRECTED STRUCTURE* ", OSIM file A 00229 / 27.03.2008

Member in the board committee of ISRN Ceramics (<http://www.isrn.com/journals/ceramics/editors/>) 2011-2017

Other competences

Member in the board committee of Romanian Journal of Materials (<http://solacolu.chim.upb.ro/ColegiuEditorialeng.htm>)

Education competence

Doctoral courses; Tutorials activities for students and masters; Conferences, workshops and summer school organiser.

Member of professional associations:

- Romanian Chemistry Society – member of the national comity 2016-2019

- Romanian Ceramic Society (CEROM) -vice-president

- European Ceramics Society (ECERS)- member

- Romanian Electron Microscopy Society (SMER) – member of the director comity 2016-2021

Additional information

Experience in other national/international programs

- COST Action: CA22107 - Bringing Experiment and Simulation Together in Crystal Structure Prediction -national coordinator.

- Proiectul nr. 98PTE/2022 cod proiect: PN-III-P2-2.1-PTE-2021-0393, Transfer de tehnologii inovative de co-cristalizare pentru dezvoltarea de produse functionale nutraceutice 2022-2024, Responsible of the project
 - Proiectul 634 PED, cod proiect: PN-III-P2-2.1-PED-2021-4171, Transformarea intr-un singur proces a celulozei in molecule platform: Acidul Lactic- Acronim CelMolLac 2022-2024, Responsible of the project
 - Interacademic research project - Piezoelectric and Multiferroic Molecular Perovskites for Flexible and Wearable Devices 2020-2023 – Director of the project
 - Interacademic research project "Porous materials based on MgO and metallic nanoparticles for catalytic applications"(AR-FRBCF-2018-2019) Belarus-Romania , Director of the project
 - Interacademic research project "Study and Development of Single-Phase Multiferroic Perovskite Ceramic and Thin Films for Multifunctional Devices" CNR Italy- Romanian Academy 2014-2016, Director of the project
 - European Regional Development Fund – ERDF, Intervention Domain: 2.2. Research and Development Infrastructure Investments and Administrative Capabilities Development, 2nd priority axis: Research, technological development and innovation for competitiveness, Project: INFRANANOCHEM "Modernizing the research and development infrastructure within the „Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, with extension of the interdisciplinary research in the field of nanomaterials and nanotechnologies", (2008-2011), Project Manager
 - COST MP0902 Composites of Inorganic Nanotubes and Polymers (COINAPO) (2010-2013) – MC for Romania
 - PNII (national complex project), *Ceramic materials, component of SOFC for IT (intermediate temperature)* (2007-2010), Director of the project
 - PNII (national complex project), *Superior composite armor plates for protection against multiple threatening* (2008-2011), Responsible of the project
 - PNII (national complex project), *Polymer-ceramic nanocomposites foams, for de-pollution of gas flow from thermal power plant* (2008-2011), Responsible of the project
 - CEEX (center of excellence) project: "Optical and electrical processes in hybrid nanostructured materials obtained by intercalation of bi-dimensional crystalline structures" (2006-2008), Responsible of the project.
 - CEEX (centre of excellence) project "Serpentine and vinyl polymers based inorganic-organic hydride nanostructures for advanced composites" (NAHANOSCA)-(2005-2008), Responsible of the project.
 - CEEX (centre of excellence) project "Analysis of the cement structures obtained with alternative combustible" (IARIS) (2005-2008), Responsible of the project
 - CEEX (centre of excellence) project "Photoconduction and Photoluminescence processes in para-phenilen vinylen/carbon nanotubs and poly- Para phenilen vinylen/ oxide nanoparticles (COMPPPVNTCNPO)" (2005-2008), Responsible of the project
 - Grant AR *Ceramic films and nanopowder oxides with ionic conduction properties* (2005-2006), Director of the project
 - Scientific Cooperation *Modifications determined by twin-ions in zirconia composites* with Institute of Nuclear Science Vinca Belgrad (2005-2007), Coordinator of the Romanian group
 - *Polar Electroceramics* POLECER, thematic network in the frame of *Competitive and Sustainable Growth*, contract No G5RT-CT-2001-2005-05024 on 14/03/01 (2002-2006), Participant
 - Project COST 539, *Electroceramics from Nanopowders Produced by Innovative Methods* - ELENA (2005-2008), National responsible
 - Project COST 525 *Grain Boundary Engineering* (2003-2005), Participant
 - Interdisciplinary program for the prevention of high-risk phenomena at national scale, *Academica XIII (155) 62 (2003): Oxide films with mixed conduction as sensors in environment monitoring* (2003-2005), Responsible of the sub-project
 - Project MATNANTECH, *Research Centre in Nanotechnology for new Materials and Processing* (NANOMATFAB), Sub-program S10, Nr. Project 3100258, Contract 152 (310), 2003-2005, Participant
 - *Oxide materials with special electrical and magnetic properties* - Grant ANSTI/MEC 5206/1999 and 6029GR/2000 (1999-2001), Responsible of the project
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- N. Terenti, N. Nedelko, E. Melnic, S. Preda, V. Fruth, J. Latuch, V. Ch Kravtsov, A. Slawska-Waniewska, A. Lazarescu, V. Lozan, Heterometallic Co–Sr -2,3-

pyridinedicarboxylate complex and its related perovskite oxide: Synthesis, structural characterization and magnetic properties, *Journal of Solid State Chemistry* 331 (2024) 124538

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- Andrada-Ioana Damian-Buda, Cristina-Daniela Ghițulică, Andreia Cucuruz, Georgeta Voicu, Daniela Culita, Victor Fruth-Oprisan and Lucian Toma Ciocan, Mesoporous Bioactive Glass Nanoparticles in the SiO₂-P₂O₅-CaO-MO (M=Mg, Zn) System: Synthesis and Properties, *J. Funct. Biomater.* 2022, 13, 180. <https://doi.org/10.3390/jfb13040180>
- Catalina Haidau, Ruxandra Nastase-Bucur, Paul Bulzu, Erika Levei, Oana Cadar, Ionut Cornel Mirea, Luchiana Faur, Victor Fruth, Irina Atkinson, Silviu Constantin and Oana Teodora Moldovan, A 16S rRNA Gene-Based Metabarcoding of Phosphate-Rich Deposits in Muierilor Cave, South-Western Carpathians. Available from: https://www.researchgate.net/publication/360732101_A_16S_rRNA_Gene-Based_Metabarcoding_of_Phosphate-Rich_Deposits_in_Muierilor_Cave_South-Western_Carpathians [accessed Jun 16 2022]. *Frontiers in Microbiology* 13:877481 DOI: 10.3389/fmicb.2022.877481
- Victor Fruth, Ligia Todan, Cosmin Iulian Codrea, Iuliana Poenaru, Simona Petrescu, Ludmila Aricov, Madalina Ciobanu, Luiza Jecu, Rodica Mariana Ion, Luminita Predoana, Multifunctional Composite Coatings Based on Photoactive Metal-Oxide Nanopowders (MgO/TiO₂) in Hydrophobic Polymer Matrix for Stone Heritage Conservation, *Nanomaterials* 2021, 11 (10), 2586
- Cosmin Iulian Codrea, Alexa-Maria Croitoru, Cosmin Constantin Baciu, Alina Melinescu *, Denisa Ficai, Victor Fruth, Anton Ficai, *Advances in osteoporotic bone tissue engineering Journal of Clinical Medicine* 10(2)253, January 2021, doi.org/10.3390/jcm10020253
- Marius-George Parvan, Georgeta Voicu, Alina-Ioana Badanoiu, Victor Oprisan Fruth, *Self-sensing Piezoresistive Composites Based on Cement Incorporating Low Dosage of Carbon Black Used as Multifunctional Construction Materials*, *Revista de Chimie (Rev. Chim.)*, Year 2020, Volume 71, Issue 5, 30-44
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- Irina Matsukevich, Irina Atkinson, Siarhei Basarab, Gabriela Petcu, Simona Petrescu, V. Parvulescu and V. Fruth, *Composite materials based on MgO and metallic nanoparticle for catalytic application*, *Romanian Journal of Materials* 49(4)483-490.
- Anamaria Zaharia, Anita-Laura Radu, Stela Iancu, Ana-Mihaela Florea, Teodor Sandu, Iulian Minca, Victor Fruth-Oprisan, Mircea Teodorescu, Andrei Sarbu and Tanta-Verona Iordache, *Bacterial cellulose-poly(acrylic acid-co-N,N0-methylene-bis-acrylamide) interpenetrated networks for the controlled release of fertilizers*, *RSC Adv.*, 2018, 8, 17635
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