

Alina Iulia DUMITRU



INCDIE ICPE-CA/ Researcher

☎ +40 213468297/139 📠 -

✉ alina.dumitru@icpe-ca.ro

🌐 [State personal website\(s\)](#)💬 [Replace with type of IM service](#) -

Sex F | Date of birth 10.04.1969 | Nationality romanian

POSITION WITHIN THE
GRANT/PROJECT

Key person

WORK
EXPERIENCE

- 2004 - present Senior scientific researcher
National Institute for Research and Development in Electrical Engineering ICPE-CA,
Splaiul Unirii, 313, sector 3, 030138, Bucharest, Romania
www.icpe-ca.ro
Responsibilities in the scientific research projects in the field of piezoceramics
materials and piezoceramics thin films (PZT, modified PZT, PT, modified PT);
Experiments and characterization of piezoceramic materials; Participation in national
research projects.
[Business or sector](#) R & D
- 2001 - 2004 Scientific Researcher 3rd degree
ICPE-CA, Splaiul Unirii, 313, sector 3, 030138, Bucharest, Romania
Responsibilities in the scientific research projects in the field of piezoceramics (PZT,
modified PZT, PT, modified PT); Experiments and characterization of piezoceramic
materials; Participation in international research projects: NATO SfP No 974130, FP5
Project G5RT-CT-2001-05024 and bilateral cooperation with The Istanbul Technical
University, Turkey and TKI-Ferrit, Budapest, Hungary.
[Business or sector](#) R & D
- 1994 – 2001 Chemical engineer (1994), Scientific researcher (1997), Senior scientific researcher
(1999);
The Research and Development Institute for Electrical Engineering,
Splaiul Unirii, 313, sector 3, 030138, Bucharest, Romania
The activity was focused on the research and manufacturing of ferroelectric,
piezoelectric and dielectric ceramics; Experiments and characterization of
piezoceramicceramic materials; Participation in the national project.
[Business or sector](#) R & D

EDUCATION
AND TRAINING

- 1994-1995 Master of science Level 8
The University Politehnica Bucharest, The Faculty of Industrial Chemistry, The
Department of Crystalline and Noncrystalline Oxide materials with electric and
magnetic properties;
Physical chemistry of silicates; Modern techniques in ceramic processing;

1989-1994 Chemist Engineer Level 8
 The University Politehnica Bucharest, The Faculty of Industrial Chemistry, The Department of Science and Engineering of Oxide Materials; Graduated with the work entitled "Low permittivity dielectric ceramic"

Inorganic chemistry, physical chemistry of silicates, kiln technology and equipment, glass technology, ceramic technology, binders and concrete technology.

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	A2	A1	B1
Replace with name of language certificate. Enter level if known.					
Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages					

Communication skills

- Skills acquired through participation in research projects in networking and collaboration;
- Team spirit and ability to adapt to multicultural environments.

Organisational / managerial skills

- Management R & D projects of national competitions (director and project manager): CEEX; NUCLEUS; PN II;
- Participation in international research projects: NATO SfP No 974130, FP5 Project G5RT-CT-2001-05024 and bilateral cooperation with The Istanbul Technical University, Turkey and TKI-Ferrit, Budapest, Hungary.

Job-related skills

- Techniques for analyzing and characterizing materials - mechanical characterization of complex layers thin;
- Ability to use measuring equipment and control complex.

Digital competence	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem solving
	Basic user	Basic user	Basic user	Basic user	Basic user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Replace with name of ICT-certificate(s)

- Good knowledge and use Microsoft Office programs (Word, Excel, PowerPoint)

Other skills

- Training course: Management;

ADDITIONAL
 INFORMATION

Publications Presentations Projects Conferences Seminars Honours and awards Memberships References Citations Courses Certifications	Example of publication: in Annexes Member of Professional Associations: - Romanian Society of Ceramics, CEROM Publications: - more than 30 articles published in professional journals, including papers in ISI journals, - 1 book chapter (co-author); - 4 patent applications (2 patent granted)
---	--

ANNEXES

- List of scientific works
- Sajin Gheorghe Ioan, Craciunoiu Florea, Moisin Ana Maria, Dumitru Alina Iulia, Petrescu Daniel, Raluca Gavrilă, Sajin Maria, Bunea Alina Cristina, "Piezoelectric ceramic applications: micromixing in biology and medicine", chapter in the book PIEZOELECTRIC CERAMICS, edited by Ernesto Gomez Suaste, published by Sciyo, Croația, 2010, ISBN 978-953-307-122-0;
 - Alina Dumitru, Georgeta Velciu, Virgil Marinescu, Gabriela Sbarcea, „The elaboration of $Pb(Mg_{1/3}Nb_{2/3})-PbZrO_3$ solid solutions”, Romanian Journal of Materials, 42 (3), 2012, pp.290-293;
 - Jana Pinteă, Alina Dumitru, Lucian Pîslaru-Dănescu, Ionel Chirita "Piezoelectric transducer for fluid viscosity measurement", Electrotehnica, Electronica, Automatica, EEA, Vol. 60, nr. 3, Iulie-Septembrie, 2012, ISSN 1582-5175, pp. 63-68.
 - Georgeta Velciu, Cristian Şeitan, Alina Dumitru, Virgil Marinescu, Maria Preda, Alina Melinescu, „The characterization of structure and microstructure at interfaces cathode/electrolyte/anode for a fuel cell with solid electrolyte”, Romanian Journal of Materials, 43 (1), 2013, pp.96-101, ISSN 1583-3186;
 - J.Pinteă, A. Dumitru, G.Sbarcea, G. Velciu, "Electrical properties of Lead Titanate Zirconate ceramics doped with niobium", Journal of Optoelectronics and Advances Materials, vol. 15, no. 1-2, January-February 2013, p.99-102;
 - L.C. Burnea, T.Zaharescu, A.Dumitru, I.Plesa, F.Ciuprina; "Radiation stability of polypropylene/ lead zirconate composites" Radiation Physics and Chemistry 94 (2014)156–160;
 - Lucian Pîslaru–Dănescu, Laurențiu Constantin Lipan, Ioana Piscă, Ion Daniel Ilina, Alina Dumitru "New Energy Harvesting Systems, Designed for New Piezoelectric Transducers, with Charging Energy Management"; Electrical and Power Engineering (EPE), (2014) 646 – 651;
 - D. Talpeanu, F. Grigore, C. Tardei, M. Lucaci, G. Velciu, A. Dumitru, D. Savu , "Evaluation of biocompatibility of a cranial implant based on hydroxyapatite", International Federation for Medical and Biological Engineering (IFMBE), Proceedings;ISSN: 1680-0737; vol. 55, pp 315-318/ 2016;
 - T. Zaharescu, A. Dumitru, M.E. Lungulescu, G. Velciu, „EPDM composite membranes modified with cerium doped lead zirconate titanate” Radiation Physics and Chemistry 118(2016) 133-137;
 - Jana Pinteă, Alina Dumitru, Delia Patroi, Gabriela Sbarcea, Eugen Manta, Leonat Lucia – "Variation of the magnetic and electrical properties in $(1-x)BiFeO_3-xBaTiO_3$ solid solutions"; JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Vol. 19, No. 11 - 12, November – December 2017, p. 806 – 810;
 - L. Pîslaru-Dănescu, M. Morega, A. I. Dumitru and J. Pinteă - Analysis of Piezoelectric Structures Based on New Modified PZT Zirconate Titanate Designed for Energy Harvesting Applications- ISBN: 978-1-5090-5160-1/17/\$31.00 ©2017 IEEE;

