

## BERGER Daniela Cristina



**Address:** University "Politehnica" of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Inorganic Chemistry, Physical Chemistry and Electrochemistry, Street Polizu no. 1-7, Bucharest, 011061, Romania

phone: +40-214023986; mobile: +40-721694275

e-mail address: [danaberger01@yahoo.com](mailto:danaberger01@yahoo.com)

**Date and birth place:** 5.11.1966, Constanta, Romania

**Nationality:** Romanian

**Graduate:**

Institution	Period	Grades or diplomas obtained
Institute Polytechnic Bucharest, Fac. of Ind. Chemistry	1986-1991	engineer
University "Politehnica" of Bucharest	03/1995–12/2000	PhD in chemical engineering

**Professional experience:**

Institution	Period	Function	Description
Chiminform Data, Bucharest	oct. 1991 – dec.1992	researcher	Translator from and to English or French to and from Romanian of technical and scientific documents
Romanian Academy, Institute of Chemistry-Physics, Bucharest	dec.1992– sept.1995	Research assistant	Scientific research activity in heterogeneous catalysis
University "Politehnica" Bucharest, Department of Inorganic Chemistry	oct. 1995- oct.1999	Assistant	Teaching and research activity in the field of oxide materials and coordination chemistry
University "Politehnica" Bucharest, Department of Inorganic Chemistry	oct.1999- sept. 2005	Lecturer	Teaching and research activity in the field of oxide materials and catalysis
University "Politehnica" Bucharest, Department of Inorganic Chemistry	oct. 2005- present	Assoc. professor	Teaching and research activity in the field of inorganic and hybrid materials
University "Politehnica" Bucharest Department of Inorganic Chemistry, Physical Chemistry and Electrochemistry	from oct. 2013	Full Prof.	Teaching and research activity in the field of inorganic and hybrid materials

**Scientific title:** Doctor

**Habilitation thesis,** *Contributions to liquid phase synthesis of inorganic nanomaterials*, (sept. 2013)

From dec. 2013 – PhD supervisor in the field of Chemical Engineering

**Foreign languages:** English, French

**Expertise in:**

- synthesis of mesoporous inorganic and organic-inorganic materials
- designing and obtaining of drug delivery systems based on inorganic mesoporous matrix

- synthesis by different soft chemistry routes (solution combustion, modified Pechini, coprecipitation, reverse microemulsions method, sol-gel, hydrothermal method) of different oxide materials
- synthesis and deposition of metallic and bimetallic nanoparticles on different supports
- good knowledge of inorganic chemistry
- physico-chemical characterization of oxide, metal and composite nanoparticles
- obtaining and characterisation of ceramic materials

Author of **92 papers published in ISI journals (37 papers as main author)**, total impact factor=109, **total citations=890 (Scopus)**, 4 Romanian patents; **Hirsch index=19 (Scopus)**

### Research fellowships

- dec. 1996 – aug. 1997, TEMPUS Program – JEP-7147 / 96, Politecnico di Torino, Dipartimento di Scienza dei Materiali ed Ingegneria Chimica, scientific coordinator feb. 2000-may 2000, Laboratory for Inorganic Chemistry, Delft University of Technology, The Netherlands, doctoral fellowship
- march 2003 - sept. 2003, postdoctoral fellowship, grant CNRS, Institute de Recherche sur catalyse, Villeurbane, France, associated researcher (poste rouge).
- nov. 2005-april 2007, postdoctoral fellowship, Institut de Ciencia de Materials de Barcelona (ICMAB-CSIC), Spain, in the field of composite nanomaterials.

### Teaching activity

#### Courses

Inorganic Chemistry I, Faculty of Engineering in Foreign Languages (in English)

Inorganic Chemistry II, first year, semester II, Faculty of Applied Chemistry and Materials Science

Nanostructured materials and biomimetism, second year of Master, Faculty of Applied Chemistry and Materials Science, specialization Life sciences and ecology

Catalysts and catalytic processes involved in de-pollution and pollution prevention.

#### POSDRU projects

Elaboration of course and digital lessons as coordinator of inorganic chemistry in the frame of the POSDRU/87/1.3/S/61839 project, *Looking to the future e-chemistry*.

6 taught courses (July – December 2012) in the field of nanomaterials synthesis, in the frame of the project, POSDRU/89/1.5/S/54785 / Postdoctoral programme for advanced research in the field of nanomaterials, acronym NANOMAT.

### Organizational skills and competences

- ✓ Membership in Organising Committee of RICCE edition 14, Bucharest 2005, edition 16, Sinaia 2009, 17, Sinaia 2011.
- ✓ Competences in coordination and organisation of a research lab of Department of Inorganic Chemistry, Physical-Chemistry and Electrochemistry, Group of Inorganic Chemistry
- ✓ Experimental test organisation at Inorganic chemistry of contest C.D. Nenişescu.

### Additional information

- ✓ *Membership in scientific organizations:* Romanian Society of Chemistry and Romanian Society of ceramics and oxide materials (CEROM).
- ✓ Reviewer at different prestigious ISI journals: Solid State Sciences, Journal of Physics and Chemistry of Solids, Catalysis Letters, Journal of Alloys and Compounds, Materials Science and Engineering B and C, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Journal of Nanoparticle Research, Micropor. Mesopor. Mater., Romanian Journal of Materials etc.
- ✓ Responsible of the committee of the national contest of chemistry C.D. Nenişescu for students from high school – section: Inorganic chemistry
- ✓ Editorial board at U.P.B. Sci. Bull., Series B
- ✓ Invited editor at U.P.B. Sci. Bull., Series B, Vol. 72, Iss. 1, 2010 and vol. 71, Iss. 4, 2009.

- ✓ Member in Scientific Committee of international conferences și străinătate: European Conference on Materials and Technologies for Sustainable Growth, Bled, Slovenia, 2013, RICCE 18 –Sinaia, sept. 2013
- ✓ Invited conferences or keynote contribution at several international conferences

**Scientific and managerial expertise gained in national/international projects**

Programme/Project	Function	Period/ Funds (in lei)
UEFISCDI, Complex Project, PCCDI no. 85/2018, Complex valorisation of Black Sea bioresources by development and application of novel and emergent biotechnologies (INOBIOMAR) <i>Component project no. 1</i> , New biotechnologies for valorisation of marine resources for obtaining natural, bioactive compounds used for cosmetics Component Project no. 2, Technologies of bioactive substances encapsulation for valorisation of bioresources from Black Sea coast region for biomedicine	UPB project responsible  UPB project responsible Project scientific responsible	2018-2020 790.000 lei
UEFISCDI, PCCA no. 131/2012, <i>Drug delivery systems based on inorganic mesoporous matrix</i> , acronym MESODRUG	director	2012- present (~820.000 lei)
PNII-Capacities, bilateral project Romania-Slovenia no. 533/2012, Metal-oxide nanostructures for waste water removal, acronym MONWAT	director	2012-present
PNII-Capacities, bilateral project Romania-France no. 483/17.03.2011, „Nanocomposite materials for nitrate removal from waste waters (MADECEAU)	director	2010-2012
PNCDI II Partnership for priority fields – Contract no. 71-030, Advanced ceramic materials for components of IT-SOFC	UPB Scientific responsible	2007-2010 (374.084 lei)
PNCDI II Partnership for priority fields – Contract no. 32-116, Architectures of advanced materials with applications in the treatment of polluted waters - AMAP	UPB Scientific responsible	2008-2011 (202.664 lei)
POS CCE ID 691, <i>New materials from mesoporous aluminosilicates class for controlling release of biologic active substance</i> , research project, acronym ZEOMED	long term expert-activity scientific responsible	2010 – 2014
Contract no. 33552/1.07.2003, no. theme 14, cod CNCIS 124 Synthesis and characterisation of some perovskite ceramic materials for renewable energy sources	Director	2002-2003 (7500 lei)
Contract no. 5076, B109, A91, ANSTI Lanthanum based oxides as catalysts for post-combustion	Director	1999-2000 (2800 lei)

Gold medal, Inventica 2017, Iasi, June 2017 for the Romanian patent, Procedure for deposition of ceramic oxide layers, inventors: C. Matei, D. Berger, S. Stoleriu RO 127660/30.09.2015, BOPI nr. 9/2015

Gold medal, Inventica 2017, Iași, June 2017 for the Romanian patent, D. Berger, S. Nastase, C. Matei, Procedure for obtaining of mesostructured aluminosilicates in the presence of n-butyldiethanolamine, RO 130218/30.01.2017, BOPI nr. 1/2017

“Petru Spacu” prize of Romanian Academy in 2017 for the papers in the field of Physico-chemical processes due to nanoconfinement in mesoporous materials

I declare that the data presented here reflect the reality.



Date: 15.01.2019