



Curriculum Vitae

Personal information

First name(s) / Surname(s) **Maria Boşca**
 Telephone(s) **0264 401262**
 Fax(es)
 E-mail Maria.Bosca@phys.utcluj.ro
 Nationality Romanian
 Date of birth 11.02.1978

Work experience

Dates 01.10.2015 - Present
 Name and address of employer Technical University of Cluj-Napoca, Department of Physics and Chemistry
 Occupation or position held Lecturer
 Main activities and responsibilities - planning teaching, including lectures, seminars, lab works and learning materials.
 - writing research proposals, papers and other publications.
 - carrying out administration, such as attending faculty meetings.

Dates 01.10.2005 – 01.10.2015
 Name and address of employer Technical University of Cluj-Napoca, Department of Physics and Chemistry
 Occupation or position held University Assistant
 Main activities and responsibilities - planning teaching, including seminars, lab works and learning materials.
 - writing research proposals, papers and other publications.
 - carrying out administration, such as attending faculty meetings.

Dates 01.10.2003 – 01.10.2005
 Name and address of employer Technical University of Cluj-Napoca, Department of Physics and Chemistry
 Occupation or position held Teaching Assistant
 Main activities and responsibilities - teaching, including seminars, lab works and learning materials.

Education and training

Dates 2013
 Title of qualification awarded Ph.D in Physics
 Principal subjects/occupational skills Physics of Materials Oxide
 Name and type of organization Babeş-Bolyai University of Cluj-Napoca, Physics Department
 providing education and training

Dates 2004
 Title of qualification awarded Master's in Physics
 Principal subjects/occupational skills Physics of Materials Oxide
 Name and type of organization Babeş-Bolyai University of Cluj-Napoca, Physics Department
 providing education and training

Dates 2003

Title of qualification awarded Bachelor's degree in Engineering

Principal subjects/occupational skills Applied Sciences – Applied Physics

Name and type of organization providing education and training Technical University of Cluj-Napoca, Machine Building Faculty

Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment

European level (*)

English

French

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B2	C1	B2	B2	C1
B2	B2	B2	B2	B2

Didactic activity

Teaching Courses Physics

Study year I: Energy Management, Medical Engineering, Economical Engineering in Electric, Electronic and Energetics domain, Electrical Systems.

Training Mobility

Institutional Projects
(max 5 the most representative)

Research

National Grants (max 5 the most representative) TD 506 / 2007, Preparation and study of vitreous oxidic systems type (1-X) (Bi₂O₃*PbO*Ag₂O)*R₂O₃ and (1-X)(Bi₂O₃*Ag₂O)*R₂O₃, where (R=Er, Nd) with silver nanoparticle content.

International Grants
(max 5 the most representative)

Scientific publications

1. L.Pop, M.Bosca, E.Culea, Spectroscopic and magnetic behavior of Gd and Nd ions in lead-germanate glasses, Journal of Alloys and Compounds, 525 (2012) 58;
2. P. Pascuta, M.Bosca, G.Borodi, E.Culea, Thermal, structural and magnetic properties of some zinc phosphate glasses doped with manganese ions, Journal of Alloys and Compounds 509 (2011) 4314;
3. E.Culea, L.Pop, M.Bosca, Structural and physical characteristics of CeO₂-GeO₂-PbO glasses and glass ceramics, Journal of Alloys and Compounds 505 (2010) 754;
4. S.Rada, M.Bosca, E.Culea, M.Rada, V.Dan, V.Maties, The local structure of gadolinium vanadate-tellurate glasses and glass ceramics: Te₂V₂O₉ crystalline phase, Structural Chemistry 20 (2009) 801;
5. M.Bosca, L.Pop, G.Borodi, P.Pascuta, C.Culea, XRD and FTIR structural investigations of erbium-doped bismuth-lead-silver glasses and glass ceramics, Journal of Alloys and Compounds 479 (2009) 579.

Additional information

Awards Post-Doctoral fellow

Membership of Professional Societies POSDRU – PARTING from Technical University of Cluj-Napoca

**Significant books published
in the last 10 years (max 10)**

R. Fechete, D. Moldovan, R.Chelcea, L. Pop, M. Bosca, Physics – Guide for virtual lab works, UTPRESS, Cluj-Napoca, 2021, ISBN 978-606-737-519-0

**Significant papers published
in the last 10 years (max 10)**

1. L.Pop, M.Bosca, E.Culea, Spectroscopic and magnetic behavior of Gd and Nd ions in lead-germanate glasses, Journal of Alloys and Compounds, 525 (2012) 58;
2. P. Pascuta, M.Bosca, G.Borodi, E.Culea, Thermal, structural and magnetic properties of some zinc phosphate glasses doped with manganese ions, Journal of Alloys and Compounds 509 (2011) 4314;
3. E.Culea, L.Pop, M.Bosca, Structural and physical characteristics of CeO₂-GeO₂-PbO glasses and glass ceramics, Journal of Alloys and Compounds 505 (2010) 754;
4. S.Rada, M.Bosca, E.Culea, M.Rada, V.Dan, V.Maties, The local structure of gadolinium vanadate-tellurate glasses and glass ceramics: Te₂V₂O₉ crystalline phase, Structural Chemistry 20 (2009) 801;
5. M.Bosca, L.Pop, G.Borodi, P.Pascuta, C.Culea, XRD and FTIR structural investigations of erbium-doped bismuth-lead-silver glasses and glass ceramics, Journal of Alloys and Compounds 479 (2009) 579.

Cluj-Napoca,
September 2024

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