Curriculum vitae

PERSONAL INFORMATION

Cristian Căşuţ

- Strada Doctor Cornel Radu, bl. 315, sc. A, Arad, 310329 Arad (Romania)
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Sex Male | Date of birth 29/06/1995 | Nationality Romanian

EDUCATION AND TRAINING

Master's Degree

The Physics Faculty of the West University of Timisoara
Blvd. V. Parvan 4, Timisoara, Timis, Romania, 300223 Timisoara (Romania)

Master's Thesis: "Studiul experimental asupra sintezei și caracterizării ceramicii piezoelectrice de tip $BiFeO_3$ cu aplicaţii in senzoristica medicală"

The main areas studied:

- Plasma used in nano-micro technologies
- Biophysics
- Radiation therapy
- Transport phenomena in biological systems

Bachelor's Degree

The Physics Faculty of the West University of Timisoara
Blvd. V. Parvan 4, Timisoara, Timis, Romania, 300223 Timisoara (Romania)

Bachelor thesis: "Studiul numeric al unor probleme de hemodinamica"
The main areas studied:

- General Physics
- Optics
- Molecular Physics
- Mathematics
- Quantum mechanics
- Solid-state Physics
- Numerical modeling and simulation

WORK EXPERIENCE

01/01/2019–Present

Scientific Research Assistant

National Institute for Research in Electrochemistry and Condensed Matter, Timisoara (Romania)

- obtaining piezoceramic materials ($BiFeO_3$ / $BaTiO_3$) using hydrothermal synthesis.
- analysing the structure of materials using X-ray powder diffraction (XRD). And processing the XRD data using X'Pert HighScore software

PERSONAL SKILLS

| Mother tongue(s) | Romanian |

| Foreign language(s) |

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Hungarian	C2	B1	C2	C2	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- good communication skills gained through the teacher preparation program

Organisational / managerial skills

- creative thinking
- good team-leading skills gained as a football referee
- problem solving

Job-related skills

I have a good command of:

- X'Pert HighScore - is the ideal software for phase identification, semi-quantitative phase analysis, pattern treatment, profile fitting and more. The software contains many supporting functions to display, manipulate and to evaluate diffraction data. HighScore can handle all Malvern Panalytical XRD data formats and additionally most of the diffraction

- Comsol Multiphysics software - is a simulation platform that encompasses all of the steps in the modeling workflow; from defining geometries, material properties, and the physics that describe specific phenomena to solving and postprocessing models for producing accurate and trustworthy results.

- Origin - is a powerful and full-featured data analysis software. It offers linear and non-linear curve fitting, model validation, dataset comparison tools, and multi-dimensional data analysis. The powerful visual representation tools with accompanying descriptive statistical parameters help aid in hypothesis testing, model development and verification, and data analysis.

- office suite - able to open, create, save and modify documents in Word, send and receive email in Outlook and create spreadsheets in Excel

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Independent user	Independent user	Independent user	Independent user

Digital skills - Self-assessment grid

Driving licence   B