



Anca-Maria Roșca

Date of birth: 08/09/1998 | **Place of birth:** Bucharest, Romania | **Nationality:** Romanian | **Gender:** Female |

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Address: no. 19, Cornelia str., 040181, Bucharest, Romania (Home)

● WORK EXPERIENCE

24/02/2025 – CURRENT Bucharest, Romania

UNIVERSITY TEACHING ASSISTANT UNIVERSITATEA NAȚIONALĂ DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ DIN BUCUREȘTI - USAMV

Responsibilities:

- Supervision of Organic Chemistry and Anorganic & Analytical Chemistry practical courses;
- Assisting students in the learning process;
- Assessment of students at the end of the designated learning process period;
- Providing assistance to the main course lecturer as required.

11/12/2023 – 24/02/2025 Bucharest, Romania

RESEARCH ASSISTANT INSTITUTUL NAȚIONAL DE CERCETARE-DEZVOLTARE PENTRU PROTECȚIA MEDIULUI - INCDPM

Responsibilities:

- Preparation of the documentation needed for the experiments carried out in the department;
- Preparation, use and maintenance of the facilities and equipment necessary for the implementation of the aforementioned experiments and for the determination of physicochemical parameters for various types of environmental matrices;
- Sample preparation for specific physicochemical analyses;
- Result interpretation;
- Writing and editing periodic activity reports.

Business or Sector Professional, scientific and technical activities | **Department** Laboratories

17/07/2023 – 17/10/2023 Bucharest, Romania

CHEMISTRY ANALYST GIVAROLI IMPEX SRL

Responsibilities:

- Analysis of physical properties and chemical composition of water, soil, sludge and waste samples.

Business or Sector Professional, scientific and technical activities | **Department** Physicochemical Analysis

13/07/2020 – 21/08/2020 Bucharest, Romania

RESEARCH ASSISTANT INSTITUTUL NAȚIONAL DE DEZVOLTARE-CERCETARE PENTRU CHIMIE ȘI PETROCHIMIE - ICECHIM

Activity type: mandatory work placement (180 h), unpaid.

Responsibilities:

- Synthesis of hybrid superhydrophobic film coatings, based on SiO₂.
- Gathering and editing the necessary information for each synthesis.
- Gathering the reagents required for each synthesis and determining the appropriate quantities.
- Preparing, use and maintenance of the experimental installations.
- Preparing film samples for specific analysis: electron microscopy (TEM, SEM), antibacterial activity, Fourier transform infrared spectroscopy (FTIR), X-ray diffraction (DRX).

- Result interpretation for each analysis.
- Writing weekly reports, to be handed to senior research staff on the team.

Department Chemical and Petrochemical Technology (Team 10 - Functional dyes and related substances) |

Address no. 202, Splaiul Independenței, 060021, Bucharest, Romania | **Email** office@icechim.ro | **Website** <https://icechim.ro>

● EDUCATION AND TRAINING

01/10/2024 – CURRENT Bucharest, Romania

DOCTORAL STUDENT Facultatea de Inginerie Chimică și Biotehnologii, Universitatea Politehnica din București

Website www.upb.ro | **Level in EQF** EQF level 8

04/10/2021 – CURRENT Bucharest, Romania

MASTER'S DEGREE - BIOREACTORS AND BIOPRODUCTS Applied Chemistry and Materials Science Faculty, University Politehnica of Bucharest

Occupational skills covered:

- Research skills related to natural resource processing for obtaining bioproducts (biofuels, phytopharmaceutical products, natural dyes, biosurfactants, etc.) and by-product processing into fine chemical products.
- Knowledge and understanding of the complex processing of renewable natural resources in order to obtain bioproducts and other valuable bioactive components for use in the food, pharmaceutical or other industries.
- Fundamental notion knowledge of project management and feasibility studies regarding the preparation of business plans.
- Ability apply research and innovation techniques in the field of biorefineries and bioproducts in a creative manner.
- Ability to develop scientific papers and specialized research reports.

Main subjects covered:

- Biochemistry, Phytopharmaceutical products;
- Biofuels and biofuel industry by-products.

Address no. 313, Splaiul Independenței, 060042, Bucharest, Romania | **Website** www.upb.ro |

Field of study Chemical Engineering | **Level in EQF** EQF level 7 | **Type of credits** Transferable credits | **Number of credits** 120

25/09/2017 – 07/07/2021 Bucharest, Romania

DIPLOMAT ENGINEER (BIOMATERIALS) Medical Engineering Faculty, University Politehnica of Bucharest

Occupational skills covered:

- Ability to evaluate and study electrochemical processes that take place in different physiological environments.
- Knowledge of metallurgical methods used for obtaining biocompatible metal alloys and specific characterization methods.
- Knowledge regarding the methods used for obtaining and analysis of the main classes of natural polymers and biocomposite materials.
- Basic knowledge of science and engineering in the field of oxide materials and nanobiomaterials: methods of synthesis and advanced characterization.
- Basic knowledge regarding the composition, structure, production, properties and applications of the main ceramic biomaterials used as hard tissue substitutes.
- Basic medical knowledge: anatomy, physiology, immunology and DNA molecular diagnostic techniques.

Main subjects covered:

- General Chemistry and Electrochemistry, Materials Science.
- Implantable Ceramics, Nanobiomaterials.
- Biochemistry, Basic analysis techniques for biological samples.
- A wide array of subjects concerning medicine and biology, as mentioned above.
- Polymer biocompatibility and specific assays, Interfacial processes in polymeric implants.

Address no. 313, Splaiul Independenței, 060042, Bucharest, Romania | **Website** www.upb.ro |

Field of study Applied engineering sciences | **Final grade** 10 | **Level in EQF** EQF level 6 | **Type of credits** Transferable credits |

Number of credits 240 | **Thesis** Technologies for obtaining and purifying hypericin

Main subjects covered:

- Mathematics, Informatics.
- Physics, Chemistry, Biology.
- English, French.

Address no.167, Calea Șerban Vodă, 040214, Bucharest, Romania | **Website** www.cnghsincai.ro |

Field of study Mathematics - Informatics | **Final grade** 9,20 | **Level in EQF** EQF level 4

● **VOLUNTEERING**

30/11/2016 – 30/12/2016 Bucharest

Photographer for "Gheorghe Șincai" National College Theater Group

Responsibilities:

- Photographing school events in which members of the theatre group are involved;
- Publishing pictures containing members of the theatre group and/or associated staff in suitable spaces.

14/01/2015 – 29/01/2015 Bucharest

Voluteer for "Gheorghe Șincai" National College School Library

Responsibilities:

- Organising books according to the Dewey Decimal System.
- Maintenance of the photographic and video archives of the library.

● **LANGUAGE SKILLS**

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
FRENCH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **DIGITAL SKILLS**

Microsoft Office | Alternative Office (LibreOffice, Google Docs - Sheets - Slides - Forms etc) | Edraw Max | AutoCAD (2D) | OriginLab | Zoom | Microsoft Teams | Google suite (Gmail, Google Drive, Google Slide, Google Docs, Google Sheets, Google Forms, Google) | Skype | ACDSsee | JASCO Spectra Manager

● **ORGANISATIONAL SKILLS**

Information synthesis and analysis

I have good skills in information synthesis and analysis due to my background as a research assistant.

Decision making

Hyerarchical task analysis & implementation

I have very good hyerarchical task analysis skills, due to the fact that I have been in charge of the Finance Department of an exercise firm. My tasks included overseeing and managing the work of a group of three people that were in charge of doing the paperwork required for sales, aquisitions, the monthly payroll and all the other financial aspects related to running the firm.

● **COMMUNICATION AND INTERPERSONAL SKILLS**

General communication

I have good communication skills, due to my activity as a freelance photographer shooting at various school, cultural and sports events.

Creativity

I am a creative person, as highlighted by my photography portfolio and hobbies.

Teamwork

I have good teamwork skills, as highlighted per my work experience and education background in various research groups.

Proactive attitude

I am considered to be a person with a proactive attitude due to being tolerant and flexible to multiple points of view while keeping to rigour and correctness.

● **WORKPLACE SKILLS**

Knowledge of specific legislation

I have good knowledge of specific environmental protection regulations due to my work as a research assistant in the field of environmental protection and analysis.

Labwork

I have very good labwork skills due to my background as a biomaterials engineer and as an environmental analysis technician.

Knowledge regarding the use of spectrophotometry, extraction and separation equipments

I have very good knowledge regarding the use of spectrophotometry, extraction and separation equipments, due to my specific education in these fields.

● **PROJECTS**

01/07/2015 – 31/12/2015

POSDRU/175/2.1/S/149902 "Top Management SV-BI – Firme de exercițiu pentru accesul elevilor la poziții de top management, cercetare și inovare în viața profesională"

Position: leader of the Financial Department of FE Work4U SRL exercise firm.

Responsibilities:

- Leading the activity of the Financial Department.
- Checking and validating the work of the aforementioned group.
- Writing the necessary paperwork for the various payrolls that were used during the activity of the firm.

● **COURSES**

Specialization: Anatomy

On-line course, facilitated by the coursera.com platform. The course was taught by professors currently working for the University of Michigan, USA. The contents and the grades obtained for each final exam are as follows:

- Human Neuroanatomy - 97,7%;
- Cardiovascular, Respiratory and Urinary Systems - 95,9%;
- Gastrointestinal, Reproductive and Endocrine Systems - 97,5%;
- Musculoskeletal and Integumentary Systems - 93,1%.

An electronic certificate was released for every finalised chapter and every passed exam.

● HONOURS AND AWARDS

05/2023

Second place – Facultatea de Inginerie Chimică și Biotehnologii

Prize awarded at the Student Scientific Communications Session for the paper "Optimization of hypericin ultrasound-assisted extraction".

05/2022

First place – Facultatea de Inginerie Chimică și Biotehnologii

Prize awarded at the Student Scientific Communications Session for the paper "Hypericin: isolation, characterisation, applications".