



Ioana Marica

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Donath 67-103, 400293, Cluj-Napoca, Romania

WORK EXPERIENCE

02/03/2021 – CURRENT – Cluj-Napoca, Romania

RESEARCH ASSISTANT – NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT OF ISOTOPIC AND MOLECULAR TECHNOLOGIES

Research assistant in the project "Photoinduced ultrafast dynamics in hybrid metal-ZnO nanomaterials designed for amplified fluorescence and SERS performance"

16/11/2020 – 30/06/2021 – Cluj-Napoca, Romania

TUTOR FOR UNDERGRADUATE STUDENTS – BABEȘ-BOLYAI UNIVERSITY

ROSE Project, Faculty of Physics, Babeș-Bolyai University

EDUCATION AND TRAINING

28/09/2020 – CURRENT – Cluj-Napoca, Romania

MASTER STUDENT – Faculty of Physics, Babeș-Bolyai University

Field(s) of study

- Biophysics and Medical Physics

10/2016 – 06/2020 – Cluj-Napoca, Romania

ENGINEER – Faculty of Physics, Babeș-Bolyai University

Field(s) of study

- Technological Physics

19/04/2021 – 06/06/2021 – Cluj-Napoca, Romania

TRAINING – National Institute for Research and Development of Isotopic and Molecular Technologies

01/07/2019 – 14/07/2019 – Cluj-Napoca, Romania

TRAINING – "Ioan Ursu" Physics Institute, Faculty of Physics, Raman-AFM Laboratory

08/07/2018 – 28/07/2018 – Dubna, Moscow Region, Russia

TRAINING – Joint Institute for Nuclear Research (JINR)

09/2012 – 06/2016 – Sîngeorz-Băi, Romania

HIGH SCHOOL DIPLOMA – Mathematics and computer science specialization

● LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	C1	C1

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

● PUBLICATIONS

The Management and Stewardship of Medical Plastic Waste using Raman Spectroscopy to Sustain Circular Economy

2019

I. Marica, M. Aluaş and S. C. Pînzaru, „The Management and Stewardship of Medical Plastic Waste using Raman Spectroscopy to Sustain Circular Economy,” IEEE Xplore, pp. 1-4, 2019, DOI: 10.1109/EHB47216.2019.8970076.

● CONFERENCES AND SEMINARS

22/09/2021 – 24/09/2022 – Cluj-Napoca, Romania

International Conference “Processes in Isotopes and Molecules” (PIM)

Poster: I. Marica, I. Nesterovschi, M. Aluaş, S. Cîntă Pînzaru, "Environmental degradation and pigments influence on plastics waste determined by Raman Spectroscopy: sorting algorithm and plastic Raman database".

23/09/2021 – 24/09/2021 – Cluj-Napoca, Romania

International Conference “Life sciences for sustainable development”

Poster: Ioana MARICA, Mihaela ALUAŞ and Simona CÎNTĂ PÎNZARU, "Sorting of mixed plastic waste using the Raman spectroscopy technique as a sustainable solution".

20/10/2021 – Online

Second International Workshop “Blue bioeconomy approach to wasted marine biomass: innovative ideas, techniques and translational sciences”

Presented paper: I. Marica & I. Nesterovschi, "Macro- and microplastics in aquatic and terrestrial environment: identification and characterization using Raman spectroscopy techniques".

The workshop was hosted by University of Dubrovnik, Applied Marine Ecology Department and organized by researchers from Babeş-Bolyai University, Faculty of Physics.

24/06/2021 – 24/06/2021 – RDI Institute of Applied Natural Sciences – Babeş-Bolyai University, Cluj-Napoca, Romania

International Workshop "Blue bioeconomy approach to wasted marine biomass: innovative ideas, techniques and translational sciences"

Presented Paper: [I. Marica](#) & I. Nesterovschi, "From macro- to microplastics identification and sorting using Raman technology"

Event organized by RDI Laboratory of applied Raman spectroscopy and services towards the society, within the RDI Institute of Applied Natural Sciences – Babeş-Bolyai University, and the "Ioan Ursu" Institute of the Faculty of Physics and with participation of the company METROHM Romania & BWTEK.

21/11/2019 – 23/11/2020 – Iaşi, Romania

E-Health and Bioengineering-EHB

Presented Paper: [I. Marica](#), M. Aluaş and S. C. Pînzaru, "The Management and Stewardship of Medical Plastic Waste using Raman Spectroscopy to Sustain Circular Economy."

● **PROJECTS**

2021 – CURRENT

Sorting environmental plastics for recycling using Raman spectroscopy with portable instruments

The project is conducted within the scholarship offered by the World Federation of Scientists.

28/09/2020 – 30/09/2021

Study of the natural plastic degradation to streamline a sorting technique based on Raman technology in order to recycle and apply data according to the FAIR principle

Babeş-Bolyai University

30/09/2019 – 30/09/2020

The prospect of FAIR principle applied on Raman spectroscopic data for plastic waste management

The project was conducted within the College for Advanced Performance Studies, Babeş-Bolyai University

● **WORKSHOPS AND COURSES**

08/11/2021 – 11/11/2021

18th International Course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy"

Virtual Meeting

The course was organized by PicoQuant and held in cooperation with Prof. J.R. Lakowicz.

05/07/2021 – 09/07/2021

EUGLOH summer school - Lasers in Medicine and Life Sciences (LAMELIS)

Virtual Meeting

Organised by the University of Szeged | Hungary

● HONOURS AND AWARDS

23/06/2021

Excellentia Award – Student council from Babeş-Bolyai University
