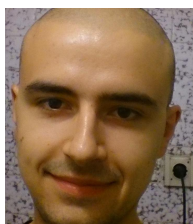



PERSONAL INFORMATION

Marić Ivan



 A. Stepinca 56A, 32252 Otok (Croatia)

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 imaric@irb.hr

Sex Male | Date of birth 28/08/1993 | Nationality Croatian

WORK EXPERIENCE

01/08/2018–Present

Research assistant/PhD student at the Laboratory for radiation chemistry and dosimetry

Ruđer Bošković Institute, Zagreb (Croatia)

Synthesis of magnetic nanoparticles by gamma irradiation in the presence of various polymers, characterization of nanoparticles with several instrumental methods.

Mentor: Dr. Tanja Jurkin

02/2018–07/2018

Volunteer work at the Laboratory for molecular physics and synthesis of new materials

Ruđer Bošković Institute, Zagreb (Croatia)

Synthesis and characterization of various metal oxides and oxyhydroxides (TiO_2 , manganese oxides with various oxidation states, Fe_3O_4 , d-FeOOH).

Catalytic testing of synthesized materials for organic dye degradation.

Mentor: Dr. Marijan Gotić

09/2017–12/2017

Total Research & Technology, Feluy (Belgium)

Data analysis and descriptive statistics, analysis of scientific articles and patents relevant to the energy sector and projects within Total.

EDUCATION AND TRAINING

2018–Present

PhD in Chemistry

University of Zagreb, Faculty of Science, Zagreb (Croatia)

2015–2018

Master of Science (Chemistry)

University of Zagreb, Faculty of Science, Department of chemistry, Zagreb (Croatia)

Master's degree with a focus on inorganic and analytical chemistry.

Graduated with a GPA of 4.789 and made a master's thesis titled "Hydrothermal synthesis and photocatalytic activity of nanocrystalline solid solutions of the $\text{TiO}_2\text{-Fe}_2\text{O}_3$ system."

2012–2015

Bachelor of Science (Chemistry)

University of Osijek, Department of chemistry, Osijek (Croatia)

Graduated with a GPA of 4.553 and made a thesis titled "Solution and refinement of crystal structures".

PERSONAL SKILLS

Mother tongue(s) Croatian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	B2	B2	C1

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

Quick adaptation to a multicultural work environment thanks to my work experience in Belgium.
Strong tendency for team work.

Job-related skills

Gamma-irradiation synthesis of metal oxide nanoparticles (iron oxides, manganese oxides)
Gamma-irradiation synthesis of PEO/Fe-oxide and PEO/Au nanocomposite hydrogels
Working knowledge of numerous instrumental techniques for nanoparticle characterization such as UV-Vis spectroscopy, differential scanning calorimetry, infrared spectroscopy, scanning electron microscopy, Raman spectroscopy, Mossbauer spectroscopy, specific surface area and porosity measurements by nitrogen adsorption and x-ray diffraction
Knowledge of various crystallographic software, both for single crystal and powder diffraction (WinGX, Ortep3, Olex2, Mercury, Match!, QualX, Maud)
Working knowlegde of Origin software for data analysis.
Experience in the synthesis of nanoparticles and measuring the photocatalytic activity of metal oxides.

Digital skills

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

Digital skills - Self-assessment grid

Good knowledge of Microsoft Office software suite.

ADDITIONAL INFORMATION

Honours and awards

Received an award for the best student of the 2nd year during my undergraduate studies.
Received a medal for excellence in studies from the University of Zagreb, Faculty of Science, Department of Chemistry.

Publications

1. I. Marić, G. Štefanić, M. Gotić, T. Jurkin, The impact of dextran sulfate on the radiolytic synthesis of magnetic iron oxide nanoparticles, *J. Mol. Struct.* **1183** (2019) 126-136.
2. L. Mikac, I. Marić, G. Štefanić, T. Jurkin, M. Ivanda, M. Gotić, Radiolytic synthesis of manganese oxides and their ability to decolorize methylene blue in aqueous solutions, *Appl. Surf. Sci.* **476** (2019) 1086-1095.
3. I. Marić, G. Dražić, M. Ivanda, T. Jurkin, G. Štefanić, M. Gotić, Impact of Fe(III) ions on the structural and optical properties of anatase-type solid solutions, *J. Mol. Struct.* **1179** (2019) 354-365.
4. I. Marić, M. Gotić, T. Jurkin, L. Mikac, É. Tronc, M. Ivanda, Structural properties of iron/titanium oxide nanoparticles synthesized by sol-gel method in the presence of poly(ethylene glycol), *Croat. Chem. Acta* **91** (2018) 1-12.

Conferences

Participated at the 25th Slovenian-Croatian Crystallographic Meeting in Ljubljana from 15.6.2017.-17.6.2017. and held a presentation titled "Structural and photocatalytic properties of hydrothermally synthesized iron/titanium oxide nanoparticles".

Co-author of a poster titled "Structural and Optical Properties of Hydrothermally Synthesized Iron/Titanium Nanoparticles" authored by I. Marić, G. Dražić, M. Ivanda, T. Jurkin, G. Štefanić, M. Gotić displayed at XXXIV European Congress on Molecular Spectroscopy - EUCMOS 2018 held from 19.8.2018. to 24.8.2018.

Co-author of a poster titled "The Impact of Dextran Sulfate on the Radiolytic Synthesis of Magnetic Iron Oxide Nanoparticles" authored by T. Jurkin, I. Marić, G. Štefanić, M. Gotić displayed at XXXIV European Congress on Molecular Spectroscopy - EUCMOS 2018 held from 19.8.2018. to 24.8.2018.

**Presentations / Science
popularization**

Participated at a science popularization event at Ruđer Bošković Institute in 2017. at a presentation of SEM (scanning electron microscope) "A look into the nano world".

Projects

Collaborator at Installation Research Projects of Croatian Science Foundation: UIP-2017-05-7337 The impact of polymers on the radiolytic synthesis of magnetic nanoparticles (POLRADNANOP)

Interests

materials chemistry, radiation chemistry, metal oxides, polymer chemistry, nanotechnology.