

PERSONAL INFORMATION



Zdravko Siketic

📍 Josipa Hama 1, 10040 Zagreb (Croatia)

☎ (+385) 98 1945 307

✉ zsiketic@irb.hr

WORK EXPERIENCE

2018–Present

Senior Research Associate

Ruder Boskovic Institute, Zagreb (Croatia)

Development and application of nuclear analytical methods:

- Development of capillary MeV-SIMS
- Development of TOF-ERDA+Ar sputtering
- Application of TOF-ERDA
- Application of MeV TOF-SIMS
- Application of micro PIXE, RBS, STIM, Channeling

2013–2018

Research Associate

Ruder Boskovic Institute, Zagreb (Croatia)

Development and application of nuclear analytical methods:

- Development of TOF-ERDA+Ar sputtering
- Application of TOF-ERDA
- Development of Gas Ionization Detector for TOF-ERDA
- Development and application of MeV TOF-SIMS
- Application of micro PIXE, RBS, STIM, Channeling

2011–2013

Senior Assistant

Ruder Boskovic Institute, Zagreb (Croatia)

Development and application of nuclear analytical methods:

- Application of TOF-ERDA
- Development and application of MeV TOF-SIMS
- Application of micro PIXE, RBS, STIM, Channeling
- Development of C-C scattering

2010–2011

Senior Assistant (Postdoctoral Researcher)

Jozef Stefan Institute, Ljubljana (Slovenia)

- Development of MeV TOF-SIMS spectrometer

2004–2011

PhD Student

Ruder Boskovic Institute, Zagreb (Croatia)

- Development of TOF-ERDA spectrometer
- Development of position sensitive MCP detector

EDUCATION AND TRAINING

2010–2011 **Postdoctoral research**

Jozef Stefan Institute, Ljubljana (Slovenia)

- Development and application of MeV TOF-SIMS spectrometer

2004–2010 **PhD in physics**

Faculty of Mathematics and Natural Sciences, University of Zagreb, Zagreb (Croatia)

- Development and application of TOF-ERDA spectrometer
- PhD in experimental nuclear physics

1998–2003 **BSc in physics**

Faculty of Mathematics and Natural Sciences, University of Zagreb, Zagreb (Croatia)

- BSc in experimental physics
- Measurements of ${}^7\text{Li}({}^1\text{H}, {}^1\text{H}){}^7\text{Li}$ differential cross sections

PERSONAL SKILLS

Mother tongue(s) Croatian

Foreign language(s)

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

-Organisation of the Ruder Boskovic Institute "open days" (2004-today):

- Designing a checkpoints with interactive experiments for children (aiming to get them interested in science)

-Participation and organizing RBI's summer schools for undergraduate students:

- Working with students, performing experiments

-Organisation and designing the experiments for the primary school students under the project STEM.GROW.EXPLORE, Stifung Wissen am Werk:

- Working with different groups of students: from theory to experiment and data analysis

Organisational / managerial skills

Organisational skills:

- Organisation of ECAART13 Conference (Split, Croatia, 2019)-conference chair
- Local organiser of IAIEA Training Workshop on Ion Beam Analysis Techniques 2018, Zagreb, Croatia
- Organisation of PIXE 2017, Split, Croatia (Local Organising Committee)
- Organisation of IBA 2015, Opatija, Croatia (Local Organising Committee)
- Organisation of EXRS 2008, Dubrovnik, Croatia (Local Organising Committee)

- Organisation of International Symposium on Utilization of Accelerators 2005, Dubrovnik, Croatia (Local Organising Committee)
- Organisation of ICNMTA 2004, Cavtat, Croatia (Local Organising Committee)

Projects:

- Collaborator, TA and QA manager at Horizon 2020 project RADIATE (2019-2022)
- (2017-today) Collaborator at Center of Excellence for Advanced Materials and Sensing Devices
- (2017 – 2021) - COST Action 16101 “MULTI-modal imaging of FOREnsic SciEnce Evidence (MULTI-FORESEE)- tools for Forensic Science”, MC representatives for Croatia: dr.sc. Ivančica Bogdanović Radović i dr.sc. Zdravko Siketić
- (2017-2020) Collaborator at Croatian science funding project: „Development of the capillary microprobe for MeV SIMS with application on analysis of biological samples, BioCapSIMS“
- (2017-today) Collaborator at CERIC-ERIC project
- (2014-today) Collaborator at EuroFusion project through the Croatian Research Unit
- (2014-2018) IAEA CRP Project: “Development of molecular concentration mapping techniques using MeV focussed ion beams”-Project manager
- (2016-2017) Croatian-Austrian bilateral project “Application of TOF-ERDA and PIXE for characterization of corrosion processes in glass and silver cultural heritage objects”-Project manager
- (2014-2015) Bilateral project with Slovenia: “Molecular imaging of biological samples using MeV ions and keV clusters for TOF-SIM” spectrometry-Project manager
- (2013-2015) Collaborator at UKF project: “Study of modern paint materials and their stability using MeV SIMS and other analytical techniques”
- (2011-2012) Collaborator at Croatian-Serbian bilateral project: „Synthesis and modification of titanium based nanocomposite materials by ion and laser beam”
- (2011-2013) Collaborator at IAEA CRP project: „Assessment of Nuclear Data Needs for Particle Induced Gamma Ray Emission (PIGE)“
- (2010-2013) Collaborator at Croatian-Japanese bilateral project: „Enhanced molecular imaging with swift heavy ions“
- (2008-2010) IAEA CRP project: “Improvements of ERDA technique using TOF spectrometer”- Project manager

Membership in science organizations and bodies:

- Executive Councillor of IRPS (2019-today)
- Management Committee Member in COST action (CA16101 MULTI-modal Imaging of FOREnsic SciEnce Evidence - tools for Forensic Science) (2017-today)
- Member of International Radiation Physics Society (2015-today)
- Member of Croatian Vacuum Society (2004-today)

Management:

- Transnational Access (TA) Manager for RADIATE project (2019-2022)
- Quality Assurance (QA) Manager for RADIATE project (2019-2022)

Job-related skills**Mentorship:**

- Mentor of the PhD student Marko Barac
- Mentor of the BsC student Marko Brajković, Diploma thesis: “Application of the position sensitive

PIN diodes in EBS spectrometry”.

- Mentor of the graduate student Damjan Blazeka, Seminar work: „Combination of TOF-ERDA and Ar sputtering“.
- Mentor of the graduate student Marko Brajković, Seminar work: “Measurement of the focused ion beam halo using 2D position sensitive PIN diode”.
- Co-mentor of PhD student Valentina Stoytschewa (ITN Marie Curie scholarship)
- Mentor of the BsC student Nevena Obajdin, Diploma thesis: „Benchmarking of measured cross sections for $^{12}\text{C}(p,p)^{12}\text{C}$, $^{16}\text{O}(p,p)^{16}\text{O}$ and $\text{natSi}(p,p)\text{natSi}$ reactions”.
- Co-mentor of the BsC student Ivan Sudić, Diploma thesis: STIM using gas ionisation detector
- Co-mentor of PhD student Ivana Zamboni, PhD thesis: ”Development of the proton induced gamma ray emission technique for the analysis and three dimension profiling of light elements

Scientific papers:

- Author or co-author of **69 scientific papers** published in international scientific journals cited by Current Content (according to WoSCC). Total number of citations of those published papers is 442, h-index=10 (first/main author of 12 papers)

Conference contributions:

- Contribution to the over 20 International Conferences with Oral and Poster presentations (five Invited talks).

Refereeing:

- Referee for Nuclear Instruments and Methods B and AIP Conference Proceedings

Digital skills Good working experience with different versions of Windows and Office, Matlab, Origin, programs for data analysis and graphical presentation.

Driving licence B