

Marija Majer, Ph.D  
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Radiation Chemistry and Dosimetry Laboratory (RCDL)  
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## Curriculum vitae

### **Personal data**

Name and surname: Marija Majer  
Date and place of birth: 22<sup>nd</sup> April 1972, Dubrovnik, Croatia  
Nationality: Croatian  
Personal website: <https://www.irb.hr/eng/About-RBI/People/Marija-Majer>  
Female, married, two children

### **Education**

2008	PhD in physics Faculty of Science, University of Zagreb, Croatia
2000	MSc in physics Faculty of Science, University of Zagreb, Croatia
1996	BSc in Physics Faculty of Science, University of Zagreb, Croatia

### **Employment**

2018 - present	Senior Ressearch Associate Radiation Chemistry and Dosimetry Laboratory, Ruđer Bošković Institute, Zagreb, Croatia
2011 - 2018	Ressearch Associate Radiation Chemistry and Dosimetry Laboratory, Ruđer Bošković Institute, Zagreb, Croatia
2008 - 2011	Research/teaching senior assistant Faculty of Science, University of Zagreb, Croatia
2000 - 2008	Research/teaching assistant Faculty of Science, University of Zagreb, Croatia

1997 - 2000      Research/teaching young assistant  
Faculty of Science, University of Zagreb, Croatia

### **Scientific work**

2011 – present      Research in the field of radiation dosimetry and medical physics with the emphasis on the use of thermoluminescent and radiophotoluminescent dosimetry in medical applications and radiation protection.

Member of research teams in several national and international projects. Within European Radiation Dosimetry Group (EURADOS) participating in the work of the Working Group 9 (Radiation dosimetry in radiotherapy) and Working Group 12 (Dosimetry in medical imaging).

2005 – 2011      Research in the field of experimental low-energy nuclear physics (studies of reactions and structure of light exotic nuclei)

1997 - 2005      Research concerning processes in atoms due to electromagnetic interaction with special emphasis on internal atomic shells (two photon decay, radiative electron capture, Compton profile)

### **Publications:**

Author of 39 scientific papers in peer reviewed international journals and over 60 different proceedings papers and abstracts:

[https://www.scopus.com/cto2/main.uri?ctoId=CTODS\\_1281225877&authors=57213455530&authors=9436436000&origin=AuthorNamesList#citationOverviewTable](https://www.scopus.com/cto2/main.uri?ctoId=CTODS_1281225877&authors=57213455530&authors=9436436000&origin=AuthorNamesList#citationOverviewTable)

<http://bib.irb.hr/lista-radova?autor=220105>

### **Leading and participation in international projects:**

2021 – 2025      IP-2020-02 5393 - Characterisation of RadioPhotoLuminescent dosimeters for measurements in Heavy Charged Particle field (RPLforHCP), founded by the Croatian Science foundation - principal investigator

2021 – 2022      IAEA TC project RER1021 *Enhancing the use of Radiation Technologies in Industry and Environment*, associate

2020 – 2023      EUROpeAn MEDical application and Radiation prOteCtion Concept: strategic research agenda aNd ROadmap interLinking to heaLth and digitisation aspects (EURAMED rocc-n-roll), H2020, associate

2017 – 2021      Metrology for mobile detection of ionising radiation following a nuclear or radiological incident (PREPAREDNESS) founded by The European Metrology Programme for Innovation and Research(EMPIR) under The

	European Assoc. of National Metrology Institutes (EURAMET), H2020, associate
2018 – 2020	Validation <i>and Estimation of Radiation Skin Dose in Interventional Cardiology</i> (VERIDIC) founded by the CONCERT - European Joint Programme for the Integration of Radiation Protection Research, H2020, associate
2015 – 2018	Work Package Early Neutron Source (WPENS) within EUROfusion, H2020
2016 – 2017	IAEA TC project RER/1/017 Using Advanced Radiat. Technol. for Materials Processing, associate
2014 – 2015	IAEA Technical cooperation (TC) project RER/1/014 Introducing and Harmonizing Standardized Quality Control Procedures for Radiation Technologies, associate
2014 – 2015	Croatian-China bilateral cooperation project, <i>Optimization of doses from computed tomography for paediatric population</i> , Science foundation, associate
2014 – 2015	IAEA TC CRO/1/006 <i>Upgrading of 60Co panoramic irradiation facility in Croatia</i> , associate
2011 – 2015	Physico-chemical effects of ionising radiation in materials, Croatian Ministry of science (MZOS), 098-0982904-2954, associate
2007 - 2011	Istraživanja hadronskih sustava upotrebom relativističkih projektila, MZOS, 119- 0982887-1006, associate
2002 - 2006	Processes in inner atomic shells, MZOS, 0119264, associate
1996 - 2002	Spacial electromagnetic processes in atoms, MZOS, 119208, associate

### **Invited lectures:**

2018	14 <sup>th</sup> International Workshops on Ionizing Radiation Monitoring, Oarai, Japan, Title: Dosimetry of stray radiation in photon radiotherapy and phantom studies
2017	13 <sup>th</sup> International Workshops on Ionizing Radiation Monitoring, Oarai, Japan, Title: Story about panoramic Co-60 gamma irradiation facility at the RBI
2016	12 <sup>th</sup> International Workshops on Ionizing Radiation Monitoring, Oarai, Japan, Title: Dosimetry studies in Ga,,a Knife radiosurgery – contribution of RBI and UHC collaboration

### **Teaching activities:**

Faculty of Science, University of Zagreb, Croatia:

2019 - present	Radiation protection in medicine (Doctoral study in physics, medical physics module)
2014 - 2020	Seminar in medical physics (Doctoral study in physics, medical physics module)
2016 - 2020	Medical Physics (graduate study)
2008 - 2011	Excercises for Fundamentals of Physics 1-4 (undergraduate study)

2000 - 2008      Excercises for Physics 1-2 (undergradudate study)  
2000 - 2011      Physics Lab (undergradudate study)  
1997 - 2000      Nuclear Physics Lab (gradudate study)

### **Supervision of graduate/doctoral students:**

Faculty of Science, University of Zagreb, Croatia:

2021              Alen Polović, diploma thesis  
2021              Ivan Veršić, diploma thesis  
2021              Franka Mikolaj, diploma thesis  
2020              Niko Jurlina, diploma thesis  
2019              Amelia Vidov, diploma thesis  
2016              Paula Tomić, diploma thesis  
2015              Hrvoje Hršak, PhD thesis  
2014              Atlantis Cobalt, diploma thesis

### **Organizational skills:**

International congresses:

2015              EURADOS Annual Meeting 9-12.02.2015, Dubrovnik, Croatia – member  
of the organization committee  
2016              7th Alpe-Adria Medical Physics Meeting, 19-21.05.2015, Zagreb, Croatia –  
member of the scientific committee  
2018              IAEA Technical meeting, Zagreb, Croatia - member of the organization  
committee

National congresses:

2019              12th Symposium of the Croatian Radiation Protection Association with  
international participation, 10-12.04.2019, Varaždin, Croatia – member of  
the scientific committee  
2015              10th Symposium of the Croatian Radiation Protection Association with  
international participation, 15-17.04.2015, Šibenik, Croatia – member of the  
scientific committee  
2013              9th Symposium of the Croatian Radiation Protection Association with  
international participation, 10-12.04.2013, Šibenik, Croatia – president of  
the organisation committee

### **Institutional responsibilities:**

2019 - present      Member of the Council, Croatian Association of Medical Physics  
2017 - present      Member of the Council, Croatian Radiation Protection Association  
2014 - 2020        Member of the Council and Medical Physics module coordinator, Doctoral  
studies in physics provided by the Faculty of Science, University of Zagreb

- 2012 - present    Coordinator of the IAEA/WHO postal dose audit for radiotherapy centres in Croatia
- 2009 - 2017     Member of the National Committee for Competition in Physics for primary and secondary school

**Membership in professional associations / societies:**

Croatian Physical Society (CPS), Croatian Radiation Protection Association (CRPA), European Radiation Dosimetry Group (EURADOS), International Radiation Protection Association (IRPA), International Radiation Physics Society (IRPS), Croatian Association of Medical Physics

**Reviewer:**

Radit. Phys. Chem., Radiat. Prot. Dosim., Radiat. Meas., Eur. Radiol., Radiat. Env. Biophys., Measurements.