

PERSONAL INFORMATION



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Sex M | Date of birth 30/10/1981 | Nationality Croatian

WORK EXPERIENCE

(July 2022 - present)

Associate professor

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Rudera Boskovic bb, 21000 Split

- Associate professor on undergraduate courses on Fundamentals of Electrical Engineering, postgraduate courses on Advanced Mathematical Modeling of Biomedical Applications of Electromagnetic Fields, Electromagnetic Field Interaction and Human Body, Numerical Modeling of Heat Transfer;
- Member of the IEEE International Committee on Electromagnetic Safety (ICES) Technical Committee 95 (TC95), Member of the Working Group 7 (EMF Dosimetry Modeling) of IEEE/ICES TC95 SC6 .

University

(July 2017 – July 2022)

Assistant professor

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Rudera Boskovic bb, 21000 Split

- Assistant professor on courses Fundamentals of Electrical Engineering 1 and 2,
- Collaborator on projects: COST Action BM1309 "European network for innovative uses of EMFs in biomedical applications – EMF-MED", Slovenian-Croatian bilateral project "Development of an algorithm for a coupled simulation of flow and bioelectromagnetics".
- Member of the Working Group 2 (EMF Dosimetry Modeling) of IEEE/ICES TC95 SC6.

University

(January 2014 - June 2017)

Postdoc

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Rudera Boskovic bb, 21000 Split

- Senior assistant on courses Fundamentals of Electrical Engineering 1 and 2, collaborator on projects COST Action BM1309 "European network for innovative uses of EMFs in biomedical applications – EMF-MED", EuroFusion WP-CD "Code development for integrated modelling", COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar".

University

(January 2008 – January 2014)

Assistant

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Rudera Boskovic bb, 21000 Split

- Project "Modeling and Environmental Aspects of ELF Electromagnetic Fields, assistant work on courses Basics of electrical engineering 1 and 2.

University

(April 2007 – October 2007)

Lecturer

EdukaCentar, Domovinskog rata 46, 21000 Split

- Seminar Leader.

Education

(October 2005 – February 2007)

Subcontractor

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Rudera Boskovic bb, 21000 Split

- Assistant work on courses Electrical elements and Electrical circuits.

University

(November 2005 – July 2006)

Assistant at Computational Center

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Rudera Boskovic
bb, 21000 Split

- Informatics, various.

University

EDUCATION AND TRAINING

(2009 - 2013)

PhD

Replace with
European
Qualification
Framework (or other)
level if relevant

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split

- Electromagnetic Modelling, Numerical Methods, Application to Biomedical Engineering

(2005 – 2009)

Mphil (Master of Philosophy)

Replace with
European
Qualification
Framework (or other)
level if relevant

*Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split – Wessex
Institute of Technology, University of Wales, UK.*

- Environmental Electromagnetic Compatibility

(2000 - 2005)

BSc

dipl.ing.

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split

- Electrical Engineering

PERSONAL SKILLS

Mother tongue(s)

Croatian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
	Replace with name of language certificate. Enter level if known.				
German	B2	B1	A2	A1	A1
	Replace with name of language certificate. Enter level if known.				

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good communication skills gained through my experience as a technical and contact person for various international symposiums, workshops, etc. Also, verbal and written communication acquired through the work in community associations, as an editor and leader of the student newspapers during university education and as associate in the organization of international scientific symposiums.

Organisational / managerial skills

Decision making skill acquired through the work in community associations and as an editor and leader of the student newspapers during university education as well as a technical person for various workshops.

- Job-related skills**
- The ability to participate in a team
 - The ability to lead a team
 - Readiness for working in a team
 - Sense of ethics
 - Identification and solving scientific and research problems
 - Managing ICT tools
 - Knowledge of numerical field calculations
 - Written presentation of research results
 - Oral presentation of research results
- Computer skills**
- MATLAB, Python, C/C++, LaTeX, HTML/PHP, Office, Adobe CS, GiD, etc...
- Other skills**
- Graphics design, digital photography, scuba diving (diver one star)
- Driving licence**
- B

ADDITIONAL INFORMATION

Honours and awards	2012 Recognition for previous scientific achievements at the Scientific Novices Seminar 2008 Best Student Paper Award at the 16th edition of the International Conference SoftCOM 2008
Publications (books)	2019 Poljak, Dragan; Cvetković, Mario. Human Interaction with Electromagnetic Fields: Computational Models in Dosimetry. St. Louis, USA: Elsevier, Academic Press, 2019
Publications (papers)	2024 Cvetković, Mario; Dodig, Hrvoje; Poljak, Dragan A Method for Determining the Envelope of Induced Electric Field on a Simple Human Head Model by Peaks Detection // Journal of communications software and systems, 20 (2024), 1; 125-136. doi: 10.24138/jcomss-2023-0180 2024 Cvetković, Mario; Sučić, Bruno Analysis of Magnetotherapy Device-Induced Fields Using Cylindrical Human Body Model // Electronics (Basel), 13 (2024), 5:849; 1-19. doi: 10.3390/electronics13050849 2023 Cvetković, Mario ; Šušnjara, Anna ; Poljak, Dragan Deterministic-Stochastic Modeling of Transcranial Magnetic Stimulation featuring the Use of Method of Moments and Stochastic Collocation // Engineering analysis with boundary elements, 150 (2023), May; 662-671. doi: 10.1016/j.enganabound.2023.02.036 2023 Petrović, Goran ; Cvetković, Mario ; Garma, Tonko ; Kilić, Tomislav An Approach to Thermal Modeling of Power Cables Installed in Ducts // Electric power systems research, 214 (2023), Part B; 108916, 15. doi: 10.1016/j.epsr.2022.108916 2022 Cvetković, Mario ; Poljak, Dragan ; Lojić-Kapetanović, Ante ; Dodig, Hrvoje On the Applicability of Numerical Quadrature for Double Surface Integrals at 5G Frequencies // Journal of communications software and systems, 18 (2022), 14; 42-53. doi: 10.24138/jcomss-2021-0183 2022 Šušnjara, Anna ; Verhnjak, Ožbej ; Poljak, Dragan ; Cvetković, Mario ; Ravnik, Jure Uncertainty quantification and sensitivity analysis of transcranial electric stimulation for 9-subdomain human head model // Engineering analysis with boundary elements, 135 (2022), 1-11. doi: 10.1016/j.enganabound.2021.10.026 2021 Šušnjara, Anna ; Dodig, Hrvoje ; Poljak, Dragan ; Cvetković, Mario Stochastic-Deterministic Thermal Dosimetry Below 6 GHz for 5G Mobile Communication Systems // IEEE transactions on electromagnetic compatibility, 63 (2021), 5; 1667-1679. doi: 10.1109/TEM.2021.3098431 2021 Dodig, Hrvoje ; Poljak, Dragan ; Cvetković, Mario On the edge element boundary element method/finite element method coupling for time harmonic electromagnetic scattering problems // International journal for numerical methods in engineering, 122 (2021), 14; 3613-3652. doi: 10.1002/NME.6675 2021 Šušnjara, Anna ; Verhnjak, Ožbej ; Poljak, Dragan ; Cvetković, Mario ; Ravnik, Jure Stochastic-deterministic boundary element modelling of transcranial electric stimulation using a three layer head model // Engineering analysis with boundary elements, 123 (2021), 2021; 70-83. doi: 10.1016/j.enganabound.2020.11.010 2020 Cvetković, Mario ; Dodig, Hrvoje ; Poljak, Dragan On the use of Compound and Extracted Models in Thermal Dosimetry Assessment // Mathematical problems in engineering, 2020 (2020), 2020; 8598010, 18. doi: 10.1155/2020/8598010 2020 Šušnjara, Anna ; Dodig, Hrvoje ; Cvetković, Mario ; Poljak, Dragan Stochastic Dosimetry of a Three Compartment Head Model // Engineering analysis with boundary elements, 117 (2020), 332-345. doi: 10.1016/j.enganabound.2020.04.010

Publications (papers) cont.	2019 Ravnik, Jure; Šušnjara, Anna; Poljak, Dragan; Tibaut, Jan; Cvetković, Mario. Stochastic modelling of nanofluids using the fast Boundary-Domain Integral Method. // Engineering analysis with boundary elements. 107 (2019) ; 185-197 2018 Poljak, Dragan; Cvetković, Mario; Bottauscio, Oriano; Hirata, Akimasa; Laakso, Ilkka; Neufeld, Esra; Reboux, Sylvain; Warren, Craig; Giannopolous, Antonis; Costen, Fumie. On the use of Conformal Models and Methods in Dosimetry for Non-Uniform Field Exposure. // IEEE Transactions on Electromagnetic Compatibility. 60 (2018) , 2; 328-337 2018 Poljak, Dragan; Šesnić, Silvestar; Cvetković, Mario; Šušnjara, Anna; Dodig, Hrvoje; Lallechere, Sebastien; Drissi, Khalil El Khamlichi. Stochastic Collocation Applications in Computational Electromagnetics. // Mathematical problems in engineering. (2018), doi: 10.1155/2018/1917439 2017 Cvetković, Mario; Dodig, Hrvoje; Poljak, Dragan. A Study on the use of Compound and Extracted Models in the High Frequency Electromagnetic Exposure Assessment. // Mathematical problems in engineering. (2017), doi: 10.1155/2017/7932604 2016 Cvetković, Mario; Lallechere, Sebastien; Drissi, Khalil El Khamlichi; Bonnet, Pierre; Poljak, Dragan. Stochastic Sensitivity in Homogeneous Electromagnetic-Thermal Dosimetry Model of Human Brain. // Applied Computational Electromagnetics Society journal. 31 (2016) , 6; 644-652 2016 Cvetković, Mario; Poljak, Dragan; Hirata, Akimasa. The electromagnetic-thermal dosimetry for the homogeneous human brain model. // Engineering analysis with boundary elements. 63 (2016) ; 61-73 2016 Cvetković, Mario; Poljak, Dragan; Rogić Vidaković, Maja; Đogaš, Zoran. Transcranial magnetic stimulation induced fields in different brain models. // Journal of electromagnetic waves and applications. 30 (2016) , 14; 1820-1835 2015 Cvetković, Mario; Poljak, Dragan. Electromagnetic-thermal dosimetry comparison of the homogeneous adult and child brain models based on the SIE approach. // Journal of electromagnetic waves and applications. 29 (2015) , 17; 2365-2379 2015 Cvetković, Mario; Poljak, Dragan; Haueisen, Jens. Analysis of Transcranial Magnetic Stimulation Based on the Surface Integral Equation Formulation. // IEEE transactions on biomedical engineering. 62 (2015) , 6; 1535-1545 2011 Cvetković, Mario; Poljak, Dragan; Peratta, Andres. FETD computation of the temperature distribution induced into a human eye by a pulsed laser. // Progress in electromagnetics research-pier. 120 (2011) ; 403-421
Publications (book chapters)	Poljak, Dragan; Šesnić, Silvestar; Cvetković, Mario; Šušnjara, Anna; Bonnet, Pierre; El Khamlichi Drissi, Khalil; Lallechere, Sebastien; Paladian, Francoise. "On the Various Applications of Stochastic Collocation in Computational Electromagnetics" in "Uncertainty Modeling for Engineering Applications" / Canavero, Flavio (ed.). Cham, Switzerland : Springer International Publishing, pp. 135-155, 2019. 2016 Cvetković, Mario; Poljak, Dragan, "The Electromagnetic-Thermal Dosimetry Model of the Human Brain", in "Engineering Mathematics in electromagnetics, fluid mechanics, material physics and financial engineering", Sergei Silvestrov, Milica Rančić (eds.), Springer International Publishing AG, Cham, Switzerland, pp. 99-113, 2016. 2012 Cvetković, Mario; Poljak, Dragan; Peratta, Andres, "Modeling of Human Eye Exposed to Laser Radiation", in "Human Eye Imaging and Modeling", Ng, E. Y. K.; Tan, Jen Hong; Acharya, U. Rajendra; Suri, Jasjit S. (eds.), Boca Raton, CRC Press, Taylor & Francis Group, pp. 279-309, 2012.

Seminars/Tutorials	2024 Poljak, Dragan; Cvetković, Mario. Tutorial: Exposure of the Human Body to Electromagnetic Fields, held within 9th International Conference on Smart and Sustainable Technologies, SpliTech 2024, 28. June 2024. 2023 Poljak, Dragan; Cvetković, Mario. Tutorial: Human Exposure to Electromagnetic Fields, held within 8th International Conference on Smart and Sustainable Technologies, SpliTech 2023, 23. June 2023. 2023 Cvetković, Mario: Modeling of Transcranial Electric Stimulation (TES) and Transcranial Magnetic Stimulation (TMS), Interdisciplinary Scientific Symposium, Nagoya Institute of Technology, Nagoya, Japan, 28. August, 2023. 2022 Poljak, Dragan; Cvetković, Mario. Tutorial: Humans Exposure to Non-ionizing Radiation, held within The 30th International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2022, 24. rujna 2022. 2021 Poljak, Dragan; Cvetković, Mario. Tutorial: Human Exposure to Electromagnetic Fields, held within The 29th International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2021, 23. rujna 2021. 2019 Poljak, Dragan; Cvetković, Mario. Tutorial: Interaction of Humans with Electromagnetic Fields, held within 5th International Conference on Smart and Sustainable Technologies, SpliTech 2020, virtual, 24. rujna 2019. 2019 Poljak, Dragan; Cvetković, Mario. Tutorial: Human Exposure to Electromagnetic Fields, held within The 27th International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2019, 19. rujna 2019. 2019 Cvetković, Mario. Human Interaction with Electromagnetic Fields, Univerza v Mariboru, Fakulteta za strojništvo, Maribor, Slovenija, 12. rujna 2019. 2019 Poljak, Dragan; Cvetković, Mario. Tutorial: Interaction of Humans with Electromagnetic Fields, held within 4th International Multidisciplinary Conference on Computer and Energy Science, SpliTech 2019, 21. lipnja 2019. 2018 Cvetković, Mario. The (Not So) Ultimate Hitchhikers Guide to the Numerical Methods in Engineering, Trilogy in Five Parts: FDTD, FEM/BEM, Method of Moments (MoM), Intensive Seminar on Numerical Analysis for Engineers, Mälardalen University, UKK, Division of Applied Mathematics, Västerås, Švedska, 08. studenog 2018. 2018 Šušnjara, Anna; Cvetković, Mario. Time Domain Finite Element Method. Intensive Seminar on Numerical Analysis for Engineers, Mälardalen University, UKK, Division of Applied Mathematics, Västerås, Švedska, 07. studenog 2018. 2018 Cvetković, Mario. Stochastic Dosimetry Applied to Transcranial Magnetic Stimulation and High Frequency Electromagnetic Exposure, Univerza v Mariboru, Fakulteta za strojništvo, Maribor, Slovenija, 22. kolovoza 2018. 2018 Cvetković, Mario: "Modeling Aspects and Parameter Uncertainty in Computational Dosimetry", tutorial "Advanced Topics in Bioelectromagnetics", SpliTech 2018, 28. June, 2018. 2017 Cvetković, Mario: "Stochastic Dosimetry Applied to High Frequency Electromagnetic Exposure and Transcranial Magnetic Stimulation", seminar to Master students at Nagoya Institute of Technology, Nagoya, Japan, 2. August, 2017. 2017 Cvetković, Mario: "Stochastic Dosimetry of Human Brain: Application to Transcranial Magnetic Stimulation and High Frequency Electromagnetic Exposure", tutorial "Interaction of Humans with Electromagnetic Fields", SpliTech 2017, 13. July, 2017. 2017 Cvetković, Mario: "Stochastic-Deterministic Approach in Electromagnetic-Thermal Dosimetry", Workshop on Numerical Analysis in Electrical Engineering and Electromagnetics, Mälardalen University, Vasteras, Sweden, 24. March, 2017.
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Seminars/Tutorials cont.	2016 Cvetković, Mario; Rogić-Vidaković, Maja: "Biomedical application of Transcranial Magnetic Stimulation from two perspectives", tutorial "Various Aspects of Interaction of Humans with Electromagnetic Fields", SpliTech 2016, 14. July, 2016. 2014 Cvetković, Mario; Poljak, Dragan: "Electromagnetic-Thermal Dosimetry of the Human Brain", Workshop on Engineering Mathematics for Life and Health Sciences, Natural Science and Technology, Malardalen University, Vasteras, Sweden, 5. September, 2014. 2010 Cvetković, Mario: "Time Domain Finite Element Modeling of the Human Eye Exposed to Laser Radiation", seminar to PhD students at Institute of Biomedical Engineering and Computer Sciences, TU Ilmenau, Germany, 15. December 2010.
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