



## PERSONAL INFORMATION

Surname(s) / First name(s) E-mail(s), Web address Nationality

Prof. dr. sc. Marta Žuvić marta.zuvic@uniri.hr Croatian

## **WORK EXPERIENCE**

VVORK EXPERIENCE	
Dates (from – to)	01. February 2020 - (current)
Name and address of employer	University of Rijeka
Type of business or sector	Vice-Rector for Students, Studies and Quality Assurance
Occupation or position held	Management
Dates (from – to)	01. February 2019 – 31 January 2020
Name and address of employer	University of Rijeka
Type of business or sector	Vice-Rector for Quality Assurance and Enhancement
Occupation or position held	Management
Dates (from – to)	20182019.
Name and address of employer	University of Rijeka, Department of Biotechnology
Type of business or sector	Academic
Occupation or position held	Head of the Department
Main activities and responsibilities	Management
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Dates (from – to)	01.Dec 2012 (current)
Name and address of employer	University of Rijeka, Department of Biotechnology
Type of business or sector	Academic
Occupation or position held	Full Professor (2020), Assist. Prof (2014-2019)
Main activities and responsibilities	Teaching and research; Statistics and Data Analysis, Biophysics, Physics (general)
• Dates (from – to)	01.Feb 2010 - 01 Feb 2015
Name and address of employer	University of Rijeka
Type of business or sector	Teaching and Learning Support Centre / Continuing Education (CE)
Occupation or position held	Head
Main activities and responsibilities	Organization and program management; teaching in CE (E-Learning)

Name and address of employer	University of Rijeka
Type of business or sector	Teaching and Learning Support Centre / Continuing Education (CE)
Occupation or position held	Head
Main activities and responsibilities	Organization and program management; teaching in CE (E-Learning)

<ul> <li>Dates (from – to)</li> </ul>	01.Jan 2008 - 30. Nov 2012
Name and address of employer	Faculty of Engineering, University of Rijeka
Type of business or sector	Academic
Occupation or position held	Associate professor
Main activities and responsibilities	Teaching (Physics, Biomedical physics, Imaging Techniques)

<ul> <li>Dates (from – to)</li> </ul>	01.Oct 2005 - 01. Feb.2010
Name and address of employer	Faculty of Engineering, University of Rijeka
Type of business or sector	Information Technology Academy / Continuing Education
Occupation or position held	Head
Main activities and responsibilities	Organization and program management
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Main activities and responsibilities	Organization and program management
• Dates (from – to)	01.Oct 1989 – 01 March 2004.
Name and address of employer	Medical faculty, University of Rijeka
Type of business or sector	Teaching and research
Occupation or position held	Teaching and research assistant
Main activities and responsibilities	Teaching and research (Biophysics, Medical Physics, Biostatistics)

	ED	UC	ATION
			Date
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25.January 2002.

Place of education Name and type of organization Zagreb University of Zagreb, Faculty of Natural Sciences and Mathematics

Title or qualification awarded

PhD (Physics / MolecularBiophysics)

Date

09.May 1995.

Place of education

Zagreb

Name and type of organization providing education

University of Zagreb, Faculty of Natural Sciences and Mathematics

Title or qualification awarded

B.Sc (Physics / MolecularBiophysics)

Date

04.December 1988.

Place of education

Rijeka

Name and type of organization

University of Rijeka

Title or qualification awarded

Professor of mathematics and physics

## **TRAINING**

Year 2015.

Place of training Ajdovščina, Slovenija

Name and type of organization

Centre of Excellence for Biosensors Instrumentation and Process Control (COBIK) within Platform for trans-Academic Cooperation in Innovation (PACINNO) IPA project

Principal subjects/Occupational skills covered

Managerial-Enterpreneurial Skills Development for Researchers Programme

Year

2005

Place of training

Zagreb

Name and type of organization

CARNet & University of British Columbia, Canada

Principal subjects/Occupational skills covered

Year

2004

Place of training

Rijeka

Name and type of organization Principal subjects/Occupational skills Teched - Microsoft gold partner

E-Learning manager certificate

Project management certificate of achievement - Microsoft Solutions Framework Methodology

Year

2002

Place of training

Rijeka

Name and type of organization

Universitas - University of Rijeka

Principal subjects/Occupational skills

Quality management in higher education

Year

2001

Place of training

Rijeka

Name and type of organization

Universitas - University of Rijeka

Principal subjects/Occupational skills covered

Workshop and seminar program lead by dr. D. Baume, Open University London: Supporting staff development to improve teaching and learning through a national network; Methods for assessing learning; Effective teaching for active learning

PERSONAL SKILLS AND COMPETENCIES

Mother tongue(s)

Croatian

Other language(s)

Writing Understanding Speaking Spoken interaction Listening Reading Spoken production Independent Experienced Experienced Experienced Experienced C2 C1 C2 C1 B2 user user user user user A2 Basic user A2 Basic user Α1 Basic user Α1 Basic user Α1 Basic user Italian A2 Basic user Basic user Α1 Basic user Α1 Basic user Α1 Basic user

**English** German

#### SOCIAL SKILLS AND COMPETENCIES

Able to effectively lead a team, work in a team, very good in communication with colleagues; able to make decisions quickly; prefer dynamic environment

# ORGANIZATIONAL SKILLS AND COMPETENCIES

Heading a team (ref. head of the project team for larger projects: *Digital Competence Framework* for educators in Croatia, *European Joint Tempus EQIBELT project* for University of Rijeka, *Partners in learning* – collaboration of University of Rijeka and Microsoft Croatia), Project management, Follow up and Quality Assurance (10 ys heading a University unit - IT Academy and Centre for teaching and Learning support).

# TECHNICAL SKILLS AND COMPETENCIES

PC skills and competencies: OS Windows, Linux. Desktop applications: Ms Office, Corel; LMS: Moodle, WebCT; Software packages: Statistica, MedCalc, SPSS

#### ARTISTIC SKILLS AND COMPETENCIES

Completed elementary music school (6 years), instrument: piano

#### OTHER SKILLS AND COMPETENCIES

Excellent skier, able to sail a 10m boat, like mountain hiking.

#### DRIVING LICENSE

Licensed for driving a car

#### ADDITIONAL INFORMATION

 Member of European University Association Learning & Teaching Steering Committee, mandate 1<sup>st</sup> March 2020 – 28<sup>th</sup> February 2022
 Scientific publications:

- ResearcherID http://www.researcherid.com/rid/G-7443-2012
- ORCID ID: http://orcid.org/0000-0001-9709-1508
- Google Scholar https://scholar.google.com/citations?hl=en&user=SX6IQYoAAAAJ
- SCOPUS ID: http://www.scopus.com/authid/detail.url?authorld=6507785312
- Research Gate https://www.researchgate.net/profile/Marta\_Zuvic
- Research Gate https://www.researchgate.net/profile/Marta\_Zuvic\_Butorac2
   Social media: LinkedIn https://www.linkedin.com/in/martazuvicbutorac/
- Collaborator on 10 scientific projects; collaborated with a number of research teams in Clinical Centers (Rijeka, Zagreb, Ljubljana), as well as Research Centers (Forschungszentrum Juelich, Germany, Institute J.Štefan, Ljubljana, Institute for Medical Research Zagreb)
- Participated actively on 13 Scientific Conferences
- Reviewer to 5 internationally recognized scientific journals
- Member of University Committees (E-Learning Committee president, Committee for recognition of prior learning)
- Member of task force appointed by Ministry of Science and Education for Recognition of informal and nonformal learning (2014.; 2019.)
- Founder and president of "Golden Section", society for development of science and mathematics education, since 2004.; founder and past president of "Universitas", society for the development of higher education
- Science Festival in Rijeka organization committee member for 10 years, 2003-2012

## **ANNEXES**

- A. Publication list
- B. List of scientific and professional references

**SIGNATURE** 

# ANNEX Publication list Original Scientific Papers

- 1. Viktor Peršić, Damir Raljević, Elitza Markova-Car, Leon Cindrić, Rajko Miškulin, Marta Žuvić, Sandra Kraljević Pavelić: Vitamin D-binding protein (rs4588) T/T genotype is associated with anteroseptal myocardial infarction in coronary artery disease patients, Ann Transl Med, Accepted for publication Jun 17, 2019.doi: 10.21037/atm.2019.07.49 2019
- Jasminka Giacometti, Gordana Žauhar, <u>Marta Žuvić</u>: Optimization of Ultrasonic-Assisted Extraction of Major Phenolic Compounds from Olive Leaves (Olea europaea L.) Using Response Surface Methodology, Foods 2018, 7(9), 149; doi: 10.3390/foods7090149.
- 3. F. Anic, M. Žuvić, D. Štimac, S. Novak: Damage Index in 110 Systemic Lupus Erythematosus Patients. West Indian Medical Journal, December 2017, DOI: 10.7727/wimj.2017.151.
- Snjezana Kraljic, <u>Marta Zuvic</u>, Kristian Desa, Ana Blagaic, Vlatka Sotosek, Dragana Antoncic, Robert Likic: Evaluation of nurses' workload in intensive care unit of a tertiary care university hospital in relation to the patients' severity of illness: A prospective study. International Journal of Nursing Studies, Vol 76, November–December 2017, p. 100-105. https://doi.org/10.1016/j.ijnurstu.2017.09.004
- 5. Lah Tomulic, K., Mestrovic, J., <u>Zuvic, M.</u>, Rubelj, K., Peter, B., Bilic Cace, I., Verbic, A.: Neonatal risk mortality scores as predictors for health-related quality of life of infants treated in NICU: a prospective cross-sectional study. Qual Life Res (2017) 26:1361-1369 DOI 10.1007/s11136-016-1457-5
- Duletić-Načinović A, Gačić V, Valković T, Lučin K, Fišić E, <u>Žuvić-Butorac M</u>, Seili-Bekafigo I, Jonjić N: Concurrent Elevations of VEGF, Osteopontin and MCP-1 Serum Levels Are Independent Predictors of Survival in Patients with Diffuse Large B-Cell Lymphoma, Acta Haematol 2016;136:52-6. DOI:10.1159/000444624.
- 7. Alen Protic, Igor Barkovic, Aldo Ivancic, Ozren Kricka, Marta Zuvic Butorac, Alan Sustic: Accuracy of targeted wire guided tube thoracostomy in comparison to classical surgical chest tube placement a clinical study, Injury 03/2015; 86. DOI:10.1016/j.injury.2015.03.025
- 8. Juraj Kunisek, Luka Zaputovic, Zlatko Cubranic, Leon Kunisek, <u>Marta Zuvic Butorac</u>, Ksenija Lukin-Eskinja, Rade Karlavaris. Influence of the left ventricular types on QT intervals in hypertensive patients. Anatol J Cardiol 15(1):33-9. (2015) DOI:10.5152/akd.2014.5134
- 9. Anic, F; <u>Zuvic-Butorac M</u>; Stimac, D; Novak, S. New classification criteria for systemic lupus erythematosus correlate with disease activity. Croat. Med. J. 55 (5), pp. 514-519 (2014), DOI: 10.3325/cmj.2014.55.514
- 10. Mačukat IR, Spanjol J, Orlič ZC, Butorac MZ, Marinovič M, Ćupič DF. The effect of 5alpha-reductase inhibition with finasteride and dutasteride on bone mineral density in older men with benign prostatic hyperplasia. Coll Antropol. 2014 Sep;38(3):835-9.
- 11. Pavlovic-Ruzic, I; Jonjic, N; Zamolo, G; <u>Zuvic-Butorac, M</u>; Katunaric, M; Pecanic, S. The Patterns of Melanoma Presentation in Rijeka Region, Acta Dermatovenerologica Croatica (2013), vol 21 (3), p.174-179
- 12. A. Ljubačev, I. Medved, M. Oštrić, M. Zuvić-Butorac, J. Sokolić. Mitral Regurgitation and Coronary Artery Bypass Surgery: Comparison of Mitral Valve Repair and Replacement, Acta Chirurgica Belgica (2013) 113, pp. 187-191.
- 13. Alebić, M, Stojanović, N & <u>Žuvić-Butorac, M</u>: The IVF Outcome Counseling Based on the Model Combining DHEAS and Age in Patients with Low AMH Prior to the First Cycle of GnRH Antagonist Protocol of Ovarian Stimulation, International Journal of Endocrinology, (2013) vol. 2013, pp. 1-7. DOI: 10.1155/2013/637919, http://www.hindawi.com/journals/ije/2013/637919/
- Asja Legovic, Barbara Mady Marcic, Ana Skrinjaric, <u>Marta Zuvic Butorac</u>, Senka Mestrovic, Marina Lapter Varga: Importance of Interincisal Index for Predicting Mesiodistal Crown Diameters of Canines and Premolars, Coll.Antropol.36(2012) 4:1287-1291. http://www.collantropol.hr/\_doc/Coll.%20Antropol.%2036%20%282012%29%204:%201287%E2%80%931291.pdf
- 15. Kristian Desa; Mladen Peric; Ino Husedzinovic; Alan Sustic; Andelko Korusic; Vjekoslav Karadza; Drazen Matlekovic; Branka Prstec-Veronek; Marta Zuvic-Butorac; Jadranko Sokolic; et al.: Prognostic performance of the Simplified Acute Physiology Score II in major Croatian hospitals: a prospective multicenter study, Croat. Med. J. 53, 442 (2012), http://www.ncbi.nlm.nih.gov/pubmed/23100206
- S. Rukavina, M. Zuvic-Butorac, J. Ledic, B. Milotic, R. Jurdana-Sepic: Developing positive attitude towards science and mathematics through motivational classroom experiences, Science Education International (2012) 23(1):6-19 http://www.icaseonline.net/sei/march2012/p1.pdf
- 17. A.Dekanic, R. D. Dintinjana, I. Budisavljevic, S. Pecanic, M. Zuvic Butorac, N. Jonjic: Strong nuclear EGFR expression in colorectal carcinomas is associated with cyclin-D1 but not with gene EGFR amplification, Diagnostic Pathology (2011) 6:108. http://www.diagnosticpathology.org/content/6/1/108
- M. <u>Žuvic-Butorac</u>, N. Rončević, D. Nemčanin, Z. Nebić: Blended E-Learning in Higher Education: Research on Students' Perspective, Issues in Informing Science and Information Technology (2011), 8:409-429. http://iisit.org/Vol8/IISITv8p409-429Zuvic247.pdf
- 19. <u>M.Zuvic-Butorac</u>, Z. Nebić, D. Nemčanin, T. Mikac, P. Lučin: Establishing an Institutional Framework for an E-learning Implementation Experiences from the University of Rijeka, Croatia, Journal of Information Technology Education (2011), 10: IIP 043-056., http://www.jite.org/documents/Vol10/JITEv10IIPp043-056Zuvic946.pdf
- Protic Alen; Horvat Mladen; Komen-Usljebrka Helga; Frkovic Vedran; <u>Zuvic-Butorac Marta</u>; Bukal Krešimir; Sustic Alan: Benefit
  of the minimal invasive ultrasound-guided single shot femoro-popliteal block for ankle surgery in comparison with spinal
  anesthesia. Wiener klinische Wochenschrift (2010) 122(19-20):584-7. http://www.researchgate.net/publication/46414722

- Protic A. Bobinac Mirna; Ivancic Aldo; <u>Zuvic-Butorac Marta</u>; Sustic Alan; Jakljevic Tomislav: Effect of preoperative feeding on gallbladder size and peristaltic of the small bowel following spinal anesthesia for the hip surgery. Collegium antropologicum 2010;34 Suppl 2():195-8. http://hrcak.srce.hr/51656
- 22. Alen Protic, Dean Turina, Dubravka Matanic, Josip Spanjol, <u>Marta Zuvic-Butorac</u>, Alan Sustic: Effect of preoperative feeding on gastric emptying following spinal anesthesia: a randomized controlled trial. Wiener Klinische Wochenschrift. 122 (2010): 1-4. http://www.researchgate.net/publication/41533129
- 23. B. Mady Maričić, M. Legović, M. Šlaj, M. Lapter Varga, M. Žuvić Butorac and M. Kapović: Presence of Third Molar Germs in Orthodontic Patients with Class II/2 and Class III Malocclusions. Collegium antropologicum 33 (2009) 4: 1171-1175 http://hrcak.srce.hr/51490
- 24. <u>M.Žuvić-Butorac</u>, Z.Nebić: Institutional Support for E-learning Implementation in Higher Education Practice: a Case Report of University of Rijeka, Croatia. Proceedings of the International Conference on Information Technology Interfaces ITI 2009, art.no. 5196130, (2009) pp.479-484 http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5196130
- 25. Batičić L., Varljen N., <u>Žuvić-Butorac M.</u>, Kapović M., Varljen J. Potential Value of Hepatic Lipids from White Sea Bream (Diplodus sargus, L.) as a Good Source of Biomedical Components: Seasonal Variations. Food Technol. Biotechnol. 47 (3) 260-268 (2009). http://hrcak.srce.hr/index.php?show=clanak&id\_clanak\_jezik=62476
- 26. Kunišek, Juraj; Zaputović, Luka<u>; Žuvić-Butorac Marta;</u> Kunišek Leon; Lukin-Eškinja, Ksenija; Karlavaris, Rade; Bruketa-Markić, Irena. The prevalence of supraventricular arrhythmias with regard to the type and degree of left ventricular hypertrophy in patients with hypertensive heart disease. // Wiener Klinische Wochenschrift. 120 (2008), 5-6; 171-177 <a href="http://link.springer.com/article/10.1007%2Fs00508-008-0939-z">http://link.springer.com/article/10.1007%2Fs00508-008-0939-z</a>
- 27. Stimac D., Krznaric Zrnic I., Radic M., <u>Zuvic-Butorac M.</u> Outcome of the biliary acute pancreatitis is not associated with body mass index. Pancreas. 34(1)(2007):165-167. http://www.ncbi.nlm.nih.gov/pubmed?term=12.
- 28. <u>Žuvić-Butorac M.</u> Characteristics of categorical data analysis. Acta Medica Croatica, (2006) 60 Suppl 1, pp.63-79 http://www.ncbi.nlm.nih.gov/pubmed?term=%C5%BDuvi%C4%87-Butorac%2C%20M.%20Characteristics%20of%20categorical%20data%20analysis
- 29. <u>Žuvić-Butorac, Marta</u>; Herak-Kramberger, Carol M.; Krilov, Dubravka; Sabolić, Ivan; Herak, Janko N. EPR study of lipid phase in renal cortical membrane organelles from intact and cadmium-intoxicated rats. Biochimica Biophysica Acta Biomembranes. 1718 (2005), 1-2; 44-52. http://www.sciencedirect.com/science/article/pii/S0005273605003135
- 30. Brajenović-Milić, Bojana; Tišlarić, Dubravka; <u>Žuvić-Butorac, Marta</u>; Bačić, Josip; Petrović, Oleg; Ristić, Smiljana; Mimica, Marko; Kapović, Miljenko. Elevated Second-trimester Free beta-hCG as an Isolated Finding and Pregnancy Outcomes. Fetal Diagnosis and Therapy. 19 (2004), 6; 483-487. http://content.karger.com/ProdukteDB/produkte.asp?Doi=80159
- 31. Krilov D., Herak J.N., Zuvić-Butorac M., Stojanović N. Oxidation-induced spin probes in low-density lipoproteins. Croatica Chemica Acta. 77 (2004); 307-311. http://public.carnet.hr/ccacaa/CCA-PDF/cca2004/v77-n1\_n2/CCA\_77\_2004\_307-311\_krilov.pdf
- 32. Baumgaertner A, <u>Žuvić-Butorac M</u>, Grudinin S: Recent results from computer simulations of membrane channels and pumps, u S.G. Pandalai (urednik) Recent Research Developments in Biophysics, Vol.2, Transworld Research Network, Trivandrum, India 2003
- 33. Tišlarić, Dubravka; Brajenović-Milić, Bojana; Ristić, Smiljana; Latin, Višnja; <u>Žuvić-Butorac, Marta</u>; Bačić, Josip; Petek, Marjan; Kapović, Miljenko. The influence of smoking and parity on serum markers for Down's syndrome screening. Fetal Diagnosis and Therapy. 17 (2002), 1; 17-21 <a href="http://content.karger.com/ProdukteDB/produkte.asp?Aktion=ShowAbstractBuch&ArtikelNr=47999&ProduktNr=227537">http://content.karger.com/ProdukteDB/produkte.asp?Aktion=ShowAbstractBuch&ArtikelNr=47999&ProduktNr=227537</a>
- 34. Uhač, Ivone; Kovač, Zoran; Vukovojac, Stanislav; <u>Žuvić-Butorac, Marta</u>; Gržić, Renata; Delić, Zdravko. The effect of occlusal relationships on the occurrence of sounds in the temporomandibular joint. Collegium Antropologicum. 26 (2002); 285-292. http://www.collantropol.hr/?id 0=2&year id=85&vol id=138
- 35. Zuvić-Butorac M., Križ J., Simonić A., Schara M. Fluidity of the myelin sheath in peripheral nerves of diabetic rats. Biochimica et Biophysica Acta. 1537 (2001), 2; 110-116. http://www.sciencedirect.com/science/article/pii/S0925443901000631
- 36. <u>Zuvić-Butorac M.</u>, Batista U., Schara M. EPR spectra of cell membranes: A comparative study of erythrocytes and fibroblasts. // Periodicum Biologorum. 103 (2001), 3; 235-240. http://www.worldcat.org/title/epr-spectra-of-cell-membranes-a-comparative-study-of-erythrocytes-and-fibroblasts/oclc/441701278
- 37. <u>Žuvić-Butorac, Marta;</u> Mueller, Peter; Pomorski, Tomas; Libera, Janette; Herrmann, Andreas; Schara, Milan. Lipid domains in the exoplasmic and cytoplasmic leaflet of human erythrocyte membrane; a spin label approach. European Biophysics Journal. 28 (1999); 302-311. http://link.springer.com/article/10.1007%2Fs002490050212#page-1
- 38. Marta Zuvic-Butorac, Milan Schara, Urska Batista: Lateral heterogeneity of biomembranes. An EPR study on erythrocytes and fibroblasts, Pfluegers Archiv European Journal of Physiology vol. 431, br. 6, suppl.2, str. R169 (1996)
- Bratanic, B.; Zuvic-Butorac, M.; Batista, U.; Nemec, M.; Schara, M.: Toxic effects of bilirubin on V-79 cells: II. EPR study of membrane structuring, Pfluegers Archiv European Journal of Physiology Volume: 431 Issue: 6 SUPPL. 2 Pages: R170 (1996) BCI:BCI199699074936
- Radenovic C; Schara M; Stipcic-Solic N; Solic F; Zauhar G; Zuvic M: International Conference On The Biophysics of Membrane Transport Processes Opatija Yugoslavia May 14-18, Studia Biophysica, Vol138 Issue 1-2 p:8-196 (1990) BCI:BCI199141011454
- 41. Šolić, Franjo; Žuvić, Marta. Influence of ouabain on the resting potential of plant cell and isolated protopasmic droplet. Studia Biophysica (1990) 138:169-173 WOS:A1990ER53000020+

#### Papers in Conference Books

- 1. Anic, F; Zuvic-Butorac M; Stimac, D; Novak, S. New classification criteria for systemic lupus erythematosus correlate with disease activity. Clinical and Experimental Rheumatology Volume: 33 Issue: 3 Pages: S76 Published: MAY-JUN 2015
- Z Madzar, Z Cubranic, S Matijevic, V Tomulic, S Dvornik, M Zuvic Butorac, L Zaputovic. Uric acid as a predictive biomarker of 30-day outcomes after acute myocardial infarction: A retrospective cohort study. European Journal of Heart Failure, Vol.11, Supplement (2012)
- 3. Kunišek, J; Zaputovic, L; <u>Butorac, Zuvic M.</u>; Kunisek, L; Rapaic, SV:. The Impact of Individual Blood Pressure Components on the Type and Degree of the Left Ventricular Hypertrophy, Kidney & Blood Pressure Research (2010) vol 35. p. 422
- 4. Jurdana-Sepic, R., Milotic, B., <u>Zuvic-Butorac, M.</u>, Assessment of scientific literacy on basic concepts in mechanics, Frontiers in physics education, Selected contributions, Jurdana-Sepic, R; Labinac V, Zuvic Butorac M., Susac A. (ed), Rijeka; Golden Section Society, Rijeka, 2008, p. 481
- 5. Jurdana-Šepić, Rajka; Milotić, Branka; <u>Žuvić-Butorac, Marta</u>: Projekti udruga u popularizaciji i unaprjeđivanju učenja i poučavanja fizike (NGO projects in physics communication and development of physics teaching and learning), Interaktivna nastava fizike / Pećina, Planinka (ed). Zagreb : Hrvatsko fizikalno društvo , 2009. 94-98 (ISBN: 978-953-7178-13-0).
- 6. B. Milotić, M. Žuvić-Butorac, S. Rukavina, R. Jurdana-Šepić, J. Ledić: Promocija održivog razvoja kroz Festival znanosti u Rijeci, Cjeloživotno učenje za održivi razvoj, Učiteljski fakultet Sveučilišta u Rijeci, Rijeka, 2008., svezak 2, str. 321- 326.
- 7. <u>M.Žuvić-Butorac</u>: Education Quality Improvement by E-learning technology, Quality Management and Communication in Higher Education, 2007, p.83-94
- 8. <u>Žuvić-Butorac, Marta</u>: University of Rijeka e-university, Tempus EQIBELT 1st Policy Workshop on Creating University E-Learning Vision and Strategy, Dubrovnik, 2006.
- 9. R.Jurdana-Šepić, M. Žuvić-Butorac, B.Milotić, B.Šaina: Modelling of early physical concepts in classrom and e-environment. GIREP Conference Modelling in Physics and Physics Education, Amsterdam, Netherlands, August. 2006, p. 124
- 10. Jurdana-Šepić, Rajka; Milotić, Branka; <u>Žuvić-Butorac, Marta.</u> Physics communication through science festival –from bottom to the top of the educational pyramid // Third INTERNATIONAL GIREP Seminar on Informal Learning and Public Understanding of Physics / Planinšič, Gorazd; Čepič, Mojca (ur.).Ljubljana, 2005.
- 11. <u>Žuvić-Butorac, Marta</u>; Milotić, Branka; Jurdana-Šepić, Rajka.Workshops in physics ; from kitchen to www // International Conference: Teaching Physics in Europe ; exchanging experiences between EU-countries and their neighbours / G.Pohl (ur.).Linz, Austria, 2005
- 12. <u>Žuvić-Butorac, Marta</u>; Milotić, Branka. Konstruktivističke radionice za nastavnike // Zbornik radova sa sedmog simpozija o nastavi fizike HFD / Buljubašić, Mladen ; Knežević, Stjepan (ur.).Split : HFD, 2005., 165-170.
- 13. <u>Žuvić-Butorac, Marta</u>; Jurdana-Šepić, Rajka; Milotić, Branka.Constructivistic workshops for children in physics teacher education // / Michelini, Marisa (ur.).Udine, Italia: Forum Editrice Universitaria Udinese, 2004. 409-413
- Milotić, Branka; <u>Žuvić-Butorac, Marta</u>; Jurdana-Šepić, Rajka, Mandić, Magda. Konstruktivističke radionice za djecu u obrazovanju nastavnika fizike // 4. znanstveni sastanak HFD, knjiga sažetaka / Kumerički, Krešimir (ur.). Zagreb: HFD, 2003. 96
- 15. <u>Žuvić-Butorac, Marta</u>; Jurdana-Šepić, Rajka; Milotić, Branka.Constructivistic workshops for children in physics teacher education // Second INTERNATIONAL GIREP Seminar on Quality Development in Teacher Education and Training Preseminar book / Longhetto, C.; Michelini, M., Pugliese Jona, S.; Stefanel, A (ur.).Udine: Physics department University of Udine. 2003. 63

## Papers in Conference Abstract Books

- 16. Lara Batičić, Neven Varljen, <u>Marta Žuvić-Butorac</u>, Miljenko Kapović, Jadranka Varljen: Seasonal variations in the hepatic fatty acid compositions of *Diplodus Sargus* captured in the North Adriatic Sea, Croatia. Congress of the Croatian Society fof Biochemistry and Molecular Biology 2008, Osijek, 17-20.Sept 2008, Book of Abstracts, p.65.
- 17. Krznarić-Zrnić, Irena; Radić, Mladen; Milić, Sandra; Šimin, Marija; <u>Žuvić-Butorac, Marta</u>; Štimac, Davor. Da li je debljina čimbenik rizika za razvoj teškog akutnog pankreatitisa? // Knjiga sažetaka. 2006. P2-P2 (poster,sažetak,znanstveni).
- 18. <u>Žuvić-Butorac, Marta</u>; Herak-Kramberger, Carol-Mirna; Sabolić, Ivan; Krilov, Dubravka; Herak, Janko.EPR spectroscopic parameters for membrane organelles from rat kidney cortex // Book of Abstracts "Spectroscopy in Theory and Practice" / Spectroscopic Section of the Slovenian Chemical Society (ur.).Nova Gorica, Slovenia: Politehnika, Nova Gorica, Slovenija, 2003. 60-60
- Batista, Urška; <u>Žuvić-Butorac, Marta</u>; Nemec, Marjana; Schara, Milan. Experimental reasons for the scattering and drifts of measured reaction rates of nitroxides in cellular suspensions. T V-79 fibroblast problem // 12th International Symposium "Spectroscopy in theory and practice", Bled 2001. 111
- 20. <u>Žuvić-Butorac, Marta;</u> Križ, Jasna; Simonić, Ante; Schara, Milan.Structure and dynamics of myelin sheath in the peripheral nerves of diabetic rats an ESR study // 3rd European Biophysics Congress / Bayley, P.M.; Devaux, P.F.; Go, N.; Janmey, P.; Parak, F.G.; Rigler, R.; Su (ur.).Muenchen, Germany: Springer Verlag, 2000. 354
- 21. Schara, Milan; Bratanič, Borut; <u>Žuvić-Butorac, Marta</u>; Nemec, Marjana; Batista, Urška.Membrane lateral domain structure involvment in scavenging of radicals // 3rd meeting of the slovenian biochemical society with international participation.Portorož, 1999. 86

- 22. <u>Žuvić-Butorac, Marta</u>; Križ, Jasna; Simonić, Ante; Schara, Milan.Fluidity of the myelin sheath is changed in the peripheral nerves of diabetic rats. // Life sciences conference 1999.Gozd Martuljek, Slovenija, 1999. 71
- 23. Bratanič, Borut; <u>Žuvić-Butorac, Marta</u>; Batista, Urška; Nemec, Marijana; Schara, Milan.The effect of bilirubin on the membrane lateral domain structure of mouse neuroblastoma cells // Spectroscopy in Theory and Practice / Veber, M. (ur.).Ljubljana: Slovenian Chemical Society, 1997. 239-239
- Bratanič, Borut; <u>Žuvić-Butorac, Marta</u>; Batista, Urška; Nemec, Marjana; Schara, Milan.Bilirubin affects the V-79 cell membrane lateral domain structure which is coupled with the molecular permeability. // Spectroscopy in theory and practice.Bled, Slovenija, 1997. 71
- 25. Bratanič, Borut; <u>Žuvić-Butorac, Marta</u>; Batista, Urška; Nemec, Marjana; Schara, Milan.The effect of bilirubin on membrane lateral domain structure of mouse neuroblastoma cells // Spectroscopy in theory and practice.Bled, 1997. 239
- <u>Žuvić-Butorac, Marta;</u> Schara, Milan; Nemec, Marjana.Lateral and transversal heterogeneity of human erythrocyte membrane // Supramolecular Strucutre and Function / Pifat-Mrzljak, Greta (ur.).Zagreb : Croatian Society of Natural Sciences, 1997. 153-153
- 27. <u>Žuvić-Butorac, Marta</u>; Schara, Milan.EPR spectra of cell membranes: A comparative study on erythrocytes and fibroblasts // 9th Symposium "Spectroscopy in theory and practice".1995. 61
- 28. <u>Žuvić-Butorac, Marta</u>; Schara, Milan.Lateral heterogeneity of biomembranes: an EPR study on erythrocytes and fibroblasts // Life Sciences 1995 / Ribarič, Samo ; Zorec, Robert (ur.).Ljubljana : Physiological Society of Slovenia, 1995. 70

#### **Book Chapter**

- 1. <u>M.Žuvić-Butorac</u>: *Education Quality Improvement by E-learning Technology,* in Quality Management and Communication in Higher Education, p. 83-94, AZP Grafis, Zagreb 2007, ISBN 978-953-7571-01-6
- 2. Baumgaertner A, <u>Žuvić-Butorac M</u>, Grudinin S: Recent results from computer simulations of membrane channels and pumps, in S.G. Pandalai (ed) Recent Research Developments in Biophysics, Vol.2, Transworld Research Network, Trivandrum, India (2003), p. 1-37

### **Textbooks**

- 1. Ažman, Josip, ..., Žuvić-Butorac, Marta. Medicinska informatika / Medical Informatics (eds. Kern, J., Petrovečki, M.) Zagreb: Medicinska naklada. 2009.. ISBN 978-953-176-418-6
- 2. Marta Žuvić-Butorac, Gordana Brumini: FIZIKA/PHYSICS, textbook, ISBN 978-953-6911-28-8, Veleučilište u Rijeci, Rijeka 2008.

## Professional book

 Sanja Rukavina, Branka Milotić, Rajka Jurdana-Šepić, Marta Žuvić-Butorac, Jasminka Ledić: Razvoj prirodoznanstvene i matematičke pismenosti aktivnim učenjem, Udruga Zlatni rez Rijeka 2010, ISBN 978-953-55066-2-1.

## **Editor to Conference Proceedings**

- 1. GIREP-EPEC Conference Opatija 2007, Book of abstracts, Faculty of Arts and Sciences, Rijeka 2007, Jurdana-Sepic, R; Zuvic Butorac M., Labinac V., Susac A. (eds.) ISBN 978-953-6104-57-4
- 2. Frontiers of physics education, Selected contributions, Golden section Society, Rijeka, 2008, Jurdana-Sepic, R; Labinac V, <a href="Zuvic-Butorac M">Zuvic-Butorac M</a>., Susac A. (eds), ISBN 978-953-55066-1-4

### Other selected contributions

- 1. Strategy of E-learning development on University of Rijeka 2011-2015 (team leader)
- 2. Strategy of E-learning implementation on University of Rijeka 2006-2010 (team leader)
- 3. M. Žuvić-Butorac, 2005: A research on current level of IT use in School of Medicine, University of Rijeka (Preparational document for Strategy of University of Rijeka 2007-2013) (paper, not published)

## List of scientific and professional references

#### **Higher Education TEACHING**

#### Graduate and undergraduate programs

Lectures

STATISTICS AND DATA ANALYSIS IN SCIENTIFIC RESEARCH, graduate studies of Drug research and development,

BIOPHYSICS, undergraduate study of Biotechnology and drug research, Department of Biotechnology, University of Rijeka

Biotechnology in medicine and Medicinal chemistry, Department of Biotechnology, University of Rijeka (2013.-)

(2013.-)

INTRODUCTION TO MODERN PHYSICS, undergraduate study of shipbuilding, Technical faculty, University of Rijeka,

2012.,- present

IMAGING TECHNIQUES, undergraduate study of computing, Technical faculty, University of Rijeka, 2011.,-2013. PHYSICS FOR BIOMEDICINE, undergraduate study of computing, Technical faculty, University of Rijeka, 2011.,-2013. INFORMATION SYSTEMS IN MEDICINE, undergraduate program of Management in medicine, Medical Faculty, 2005.-

2009.

PHYSICS AND ELECTRONICS occupational program for physiotherapists Medical Faculty Rijeka 1997-2004.

SCIENCE for primary school teachers, Faculty of Arts and Sciences, University of Rijeka 1993-1998.; 2014.

Seminars SEMINARS IN PHYSICS AND BIOPHYSICS study of Medicine, Medical Faculty Rijeka 2000-2004.

PRACTICALS IN EXPERIMENTAL CLASSROOM WORK students of mathematics and physics, 1995-2000. PRACTICALS IN PHYSICS I students of mathematics and physics Faculty of Arts and sciences, 2006. PRACTICALS IN PHYSICS II students of mathematics and physics Faculty of Arts and sciences, 2005.

Practicals PRACTICALS OF PHYSICAL MEASUREMENT occupational program for physiotherapists Medical Faculty Rijeka 2000-04.

PRACTICALS IN PHYSICS AND BIOPHYSICS study of Medicine, Medical Faculty Rijeka 1990-2004.

PRACTICALS IN BIOSTATISTICS study of Medicine, Medical Faculty Rijeka (1998-2000).

#### Postgraduate programs

**Doctoral Studies** 

Lectures

SCIENTIFIC RESEARCH METHODOLOGY IN MEDICINE, Doctoral study of Medicinal Chemistry, Department of

Biotechnology, University of Rijeka (20 hours, 5 ECTS), 2014./15. -

METHODS OF MEDICAL INFORMATICS IN RESEARCH, doctoral study program Biomedicine, University of Rijeka,

participation in Lectures (head: prof.dr.sc. Mladen Petrovečki), 6 hours (2012.-)

DDI in Donation and anti-time of the investor of Diales (and only and only

STATISTICAL METHODOLOGY OF SCIENTIFIC WORK, continuing education for MDs, 2004.-2006.

#### **Projects**

2019-2021	RPL in Practice, representative of University of Rijeka (academic project partner)
2016	Digital Competence Framework for educators in Croatia, project leader
2006-2009	Tempus EQIBELT- "Education Quality Improvement by E-learning Technology", project leader for University of Rijeka
2007-2008	Physics in public spaces, MZOS, role: collaborator, head of the project: dr.R.Jurdana-Šepić
2007-2009	Development of scientific and math literacy by active learning, role: collaborator, head of the project prof. Sanja Rukavina
2002-2004	Free radicals in biological systems, role: collaborator, head of the project: prof.dr. D.Krilov
2002-2004	Experiment in construction of physical models and concepts, role: collaborator, head of the project: dr.R.Jurdana-Šepić
2002-2004	Prenatal Down syndrom test prof. role: consultant for the statistical data analysis, head: dr.B.Brajenović-Milić
2003-2005	Hokus-pokus-physics, project within e-school of Croatian Physics Society, role: collaborator, head of the project: prof.
	Rajka Jurdana-Šepić, http://eskola.hfd.hr/hokus_pokus/index.htm
1998-2001	Environmental Influence to the biological membrane straucture and function, role: head
1997-2000	Different factors influence the cell membrane potential, role: collaborator, head of the project:prof. dr.F.Šolić
1995-1998	Influence of the chemical factors to cell membrane potential MZT, role: collaborator, head of the project:prof. dr.F.Šolić

### Laboratory work – collaborations:

2003-2004	Institute for medical	l research and	l occupational	l medicine,	head of the	team: prof.dr.l.Sabolić
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2002 Forschungszenturm Juelich, Germany, Modelling and simulations in molecular biophysics, head of the team: dr.

A.Baumgaertner

2001 Departmernt of Pharmacology, Medical Faculty Rijeka collaboration witth dr J.Križ, head of the team: prof.dr.A.Simonić 1993-2003 Biophysical Laboratory, Institute J.Stefan, Ljubljana, Slovenia, head of team and mentor of PhD: prof.dr.M.Schara 1991 Patch-clamp laboratory, Botanical Institute University of Bonn, Germany head of the team: prof.dr. Kurt Koehler

## Active participation on Conferences

2011	Informing Science and IT Education InSITE 2011, Novi Sad, Serbia
2009	Information Technology Interfaces ITI 2009 Cavtat, Croatia
2008	Congress of the Croatian Society for Biochemistry and Molecular Biology Osijek, Croatia
2007	Quality Management and Communication in Higher Education, Korčula, Croatia

	GIREP EPEC Conference Frontiers of Physics Education, Opatija, Croatia
2006	GIREP Conference on Modelling in Physics and Physics Education, Amsterdam; Netherlands
2005	3rd International GIREP Seminar on Informal Learning and Public Understanding of Physics, Ljubljana, Slovenia
	International Conference: Teaching Physics in Europe – exchanging experiences between EU-countries and their
	neighbours, Linz, Austria2003 - 13th International Symposium Spectroscopy in Theory and Practice, Nova Goriza,
	Slovenija
	Quality Development in Teacher Education and Training, 2nd International Girep Seminar, Udine, Italija
2002	International workshop on lipid-protein interactions, Gomadigen, Germany
2001	12th International Symposium "Spectroscopy in theory and practice", Bled, Slovenia
2000	3 <sup>rd</sup> European Biophysics Congress, Muenchen, Germany
	3 <sup>rd</sup> international Dubrovnik NMR course/conference, Dubrovnik
1999	3 <sup>rd</sup> Meeting of the slovenian biochemical society, Portorož, Slovenia
	Life Sciences Conference 1999, Gozd Martuljek, Slovenia
1997	10 <sup>th</sup> Symposium "Spectroscopy in theory and practice", Bled, Slovenia
	4thInternational Summer School on Biophysics Supramolecular Structure and Function
1995	Life sciences 95, Gozd Martuljek, Slovenia
	9th Symposium "Spectroscopy in theory and practice", Bled, Slovenia
1990	Biophysics of membrane processes, Opatija, Croatia

#### Reviewer

International journal of science and technology education research Jordanian Journal of Computers and Information Technology Journal of Pharmacy and Farmacology Biochimica Biophysica Acta Biochemia Medica Medicina Fluminensism Ministry of Science, Education and Sports, reviewer for IT-projects. MIPRO Conference

## Membership

Golden Section, society for development of science and mathematics education, founder and president 2004.-2016. *Universitas*, society for the development of higher education, founder (in 2000.) and board member (2007-2015), president 2015.-2017.

Society of Mathematicians and Pyhysicsts Rijeka, member since 1990., board member 1998-2000.

Croatian Physical Society, member since 1998.

Croatian Biophysical Society, member since 1991., board member 1998-2002.

Informing Science Institute, member since 2011.