

## BONO LUČIĆ - CURRICULUM VITAE

### PERSONAL INFORMATION

Name and surname **Bono Lučić**  
Academic title Ph. D., Chemistry  
Year and institution of PhD obtained 1997, Faculty of Science, University of Zagreb, Zagreb, Croatia  
Address Bijenička c. 54, HR-10000, Zagreb, Croatia  
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Personal web page <http://www.irb.hr/O-IRB-u/Ljudi/Bono-Lucic/>  
Citizenship Croatian  
Date and place of birth October 11, 1964, Turić, Bosnia and Herzegovina  
Marital and family status married; three children

### WORK EXPERIENCE

Date (from – until) 2009 - 2019  
Institution *Ruđer Bošković Institute, Zagreb, Croatia*  
Position Senior research associate  
Work field *Development of algorithms, Chemoinformatics, Structural bioinformatics of proteins*

Date (from – until) 2002 - 2009  
Institution *Ruđer Bošković Institute, Zagreb, Croatia*  
Position Research associate  
Work field *Development of algorithms, Chemoinformatics, Structural bioinformatics of proteins*

Date (from – until) 1997 - 2002  
Institution *Ruđer Bošković Institute, Zagreb, Croatia*  
Position Scientific researcher (post-doctoral student), senior assistant  
Work field *Theoretical chemistry, chemoinformatics and molecular biophysics*

Date (from – until) 1992 - 1997  
Position Scientific researcher (PhD student), assistant  
Institution *Ruđer Bošković Institute, Zagreb, Croatia*  
Work field *Theoretical chemistry and chemoinformatics*

Date (from – until) 1991 - 1992  
Institution *Faculty of Science and Education, University of Split, Split, Croatia*  
Position *Scientific researcher*  
Work field *Molecular biophysics*

### EDUCATION

Date, Place 1995 - 1997, Zagreb  
Institution Faculty of Science (Department of Chemistry), University of Zagreb, Croatia  
Title of qualification awarded Ph. D., Chemistry (theoretical chemistry)

Date, Place 1991 - 1994, Zagreb  
Institution Faculty of Science (Department of Physics), University of Zagreb, Croatia  
Title of qualification awarded Master of Science, Physics (molecular biophysics)

Date, Place 1984 - 1989, Zagreb  
Institution Faculty of Electrical Engineering and Computing (Department of Electronics), University of Zagreb, Croatia  
Title of qualification awarded Graduated Engineer of Electrical Engineering (microelectronics)

Date, Place 1979 - 1983, Gradačac, Bosnia and Herzegovina  
Institution High School (Gymnasium)

#### RESEARCH AND OTHER PROJECTS

Bioprospecting of Adriatic Sea, Croatian Government and the European Union through the European Regional Development Fund - the Competitiveness and Cohesion Operational Programme (KK.01.1.1.01) – The Scientific Centre of Excellence for Marine Bioprospecting -BioProCro granted to Rozelinda Čož-Rakovac, (2017-), associate/researcher

Investigation of chemism and antioxidant activity of complexes of polyphenols with essential metals, CRO-SRB project (2016-2017), Ministry of Science Education and Sports of the Republic of Croatia, researcher from the Croatian side

Developing methods for modeling properties of bioactive molecules and proteins (2012-2014), project leader, Ministry of Science, Education and Sports of the Republic of Croatia

Investigation of relationships between structure and biological activity of polyphenols, CRO-SRB project (2011-2012), project leader from the Croatian side, Ministry of Science Education and Sports of the Republic of Croatia

Developing methods for modeling properties of bioactive molecules and proteins (2007-2011), associate/researcher, Ministry of Science Education and Sports of the Republic of Croatia, researcher

Development and application of models in chemistry and bioinformatics (2002-2006), associate/researcher, Ministry of Science Education and Sports of the Republic of Croatia

Toxicity and carcinogenicity of organic molecules on living organisms in the environment, HR-SLO project (2001-2003), project leader from the Croatian side, Ministry of Science Education and Sports of the Republic of Croatia

IQ QSAR program (2001-2004), project co-leader, PLIVA, Zagreb

Predicting structure of proteins and bio-active molecules (1998-2001), project leader, Ministry of Science Education and Sports of the Republic of Croatia

Development and application of models in chemistry (1996-2002), associate/researcher, Ministry of Science Education and Sports of the Republic of Croatia

Development and application of models in chemistry (1992-1996), associate/researcher, Ministry of Science Education and Sports of the Republic of Croatia

Predicting structure and activity of membrane polypeptides (1991-1992), associate/researcher, Ministry of Science Education and Sports of the Republic of Croatia

#### TEACHING

Structural bioinformatics of proteins and bioactive molecules, PhD Study *Molecular Biosciences* (organized by: University of J. J. Strossmayer in Osijek, Ruđer Bošković Institute and University of Dubrovnik)

Models and methods in structural bioinformatics, PhD Study *Biophysics* organized by: University of Split, Ruđer Bošković Institute (Zagreb), Institute of Physics (Zagreb), and Mediterranean Institute for Life Sciences (Split)

#### MENTORSHIP OF DEFENDED DOCTORAL AND MASTER DISSERTATIONS AND BSC THESES

Lidija Papeš Šokčević (October 26, 2011) Improved algorithm for selection and validation of best multivariate structure-property molecular models, Master of science dissertation, Zagreb, University of Zagreb, Faculty of Electrical Engineering and Computing

Damir Nadramija (April 26, 2010) Modeling of pharmacological properties of molecules by linear and nonlinear ensembles of multivariate regression models, Doctoral dissertation, Zagreb, University of Zagreb, Faculty of Science

Jadranko Batista (January, 2018) Selection of representative set of membrane proteins of known structure: development of improved algorithms using the random model concept, Doctoral dissertation, Split, University of Split, Faculty of Science and Mathematics

Mentoring of doctoral students in progress (PhD dissertations will be completed/defended till October 2020):

(1) Viktor Bojović (Molecular biosciences – bioinformatics, University of J. J. Strossmayer in Osijek, Croatia), and (2) Mario Lovrić (University of Zagreb, Faculty of Science, Zagreb)

Co-leader (direct supervisor) of three BSc thesis all at the University of Zagreb, Zagreb: (1) Teuta Piližota (2002, Faculty of Science - Physics), Pavle Močilac (2002, Faculty of Pharmacy and Biochemistry), Dean Nasteski (2004, Faculty of Science - Chemistry)

#### ORGANIZATIONAL SKILLS AND COMPETENCES

Co-organizer of two home conferences of biophysicists (2003 and 2005)

Secretary and the member of Advisory Board of Croatian Biophysics Society (2002-2009)

Co-editor of special issue of *Croatica Chemica Acta* journal dedicated to Professor Douglas Jay Klein ([http://hrcak.srce.hr/index.php?show=toc&id\\_broj=9220&lang=en](http://hrcak.srce.hr/index.php?show=toc&id_broj=9220&lang=en)), Issue 4, Volume 86, 2013.

Co-editor of special issue of International Journal of Chemical Modeling dedicated to Professor Nenad Trinajstić, Issue 2-3, Volume 6, 2014.

Co-editor of special issue of *Croatica Chemica Acta* journal dedicated to Professor Nenad Trinajstić, member of Croatian Academy of Sciences and Arts ([https://hrcak.srce.hr/index.php?show=toc&id\\_broj=13598](https://hrcak.srce.hr/index.php?show=toc&id_broj=13598)), Issue 4, Volume 89, 2016.

#### MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

2000-present Croatian Society for Theoretical and Mathematical Biology, Zagreb

1993-present, Croatian Biophysical Society, Zagreb

1992-present, Croatian Chemical Society, Zagreb

#### COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS

Member of IUPAC Committee on Publications and Cheminformatics Data Standards (2012-2019), former name Committee for Printed and Electronic Publications (2012- 2014)

Member of Scientific Committee of International Scientific Conference MATH/CHEM/COMP 2015, 2016, 2017, 2018, 2019, and 2020.

Secretary of the Croatian Biophysical Society (2002-2009)

Member of the Steering Committee of the Croatian Biophysical Society (2002-2009)

#### PAPERS

Co-author of 10 articles as chapters in books

Co-author of 70 scientific papers published mostly in CC (and WoS) scientific journals

More than 50 scientific contributions (posters or lectures) at international scientific conferences

#### CITATIONS OF PAPERS

More than 1750 citations in *Web of Science* (2/2020).

H-index = 25 (2/2020)

Three papers cited more than 100 times (2/2020).

#### OTHER RESEARCH ACTIVITIES

Member of Editorial Board of *Croatica Chemica Acta* (2000–) and Editor (2011–)

Member of Advisory Board of *Internet Electronic Journal of Molecular Design* (2004–2008)

Member of Editorial Board of Referees of the *ARKIVOC* journal (2002–)

Member of the Editorial Advisory Board of the Book “*Quantitative Structure-Activity Relationships in Drug Design, Predictive Toxicology, and Risk Assessment*”, IGI Global, 2015

#### COMPUTER SKILLS

Knowledge needed for work with many computer programs from different fields (on daily basis)

Programming in Fortran.

#### OTHER IMPORTANT SKILLS AND COMPETENCES

Reviewer for more than 70 scientific journals from *Current Contents* (mostly) and *Web of Science*  
Reviewer of scientific projects (from Croatia and from The Republic of Macedonia)

### LIST OF PAPERS – Bono Lučić

#### A) Scientific papers published in the journals included in *Current Contents*

1. D. Juretić, B. Lučić, N. Trinajstić, Predicting Membrane Protein Secondary Structure - Preference Functions Method for Finding Optimal Conformational Parameters. *Croat. Chem. Acta* 66 (1993) 201-208.
2. D. Juretić, N. Trinajstić, B. Lučić, Protein Secondary Structure Conformations and Associated Hydrophobicity Scales. *J. Math. Chem.* 14 (1993) 35-45.
3. B. Lučić, S. Nikolić, N. Trinajstić, A. Jurić, D. Juretić, A Novel QSPR Approach to Physicochemical Properties of the  $\alpha$ -Amino Acids. *Croat. Chem. Acta* 68 (1995) 435-450.
4. B. Lučić, S. Nikolić, N. Trinajstić, A. Jurić, Z. Mihalić, A Structure-Property Study of the Solubility of Aliphatic Alcohols in Water. *Croat. Chem. Acta* 68 (1995) 417-434.
5. B. Lučić, S. Nikolić, N. Trinajstić, D. Juretić, The Structure-Property Models Can Be Improved Using the Orthogonalized Descriptors. *J. Chem. Inf. Comput. Sci.* 35 (1995) 532-538.
6. D. Juretić, B. Lučić, N. Trinajstić, Secondary Structure Prediction Quality for Naturally Occurring Amino Acids in Soluble Proteins. *J. Mol. Struct.-Teochem.* 338 (1995) 43-50.
7. D. Amić, D. Davidović-Amić, A. Jurić, B. Lučić, N. Trinajstić, Structure-Activity Correlation of Flavone Derivatives for Inhibition of cAMP Phosphodiesterase. *J. Chem. Inf. Comput. Sci.* 35 (1995) 1034-1038.
8. D. Amić, D. Davidović-Amić, D. Bešlo, B. Lučić, N. Trinajstić, The Use of the Ordered Orthogonalized Multivariate Linear Regression in a Structure-Activity Study of Coumarin and Flavonoid Derivatives as Inhibitors of Aldose Reductase. *J. Chem. Inf. Comput. Sci.* 37 (1997) 581-586.
9. N. Trinajstić, S. Nikolić, B. Lučić, D. Amić, The Detour-Matrix in Chemistry. *J. Chem. Inf. Comput. Sci.* 37 (1997) 631-638.
10. D. J. Klein, M. Randić, D. Babić, B. Lučić, S. Nikolić, N. Trinajstić, Hierarchical Orthogonalization of Descriptors. *Int. J. Quantum Chem.* 63 (1997) 215-222.
11. D. Amić, D. Davidović-Amić, D. Bešlo, B. Lučić, N. Trinajstić, A Simple QSAR Model for Trypsin Aminopeptidase Inhibitory Flavonoids. *Croat. Chem. Acta* 70 (1997) 905-911.
12. D. Juretić, D. Zucić, B. Lučić, N. Trinajstić, Preference Functions for Prediction of Membrane-Buried Helices in Integral Membrane Proteins. *Comput. Chem.* 22 (1998) 279-294.
13. D. Amić, D. Bešlo, B. Lučić, N. Trinajstić, The Vertex-Connectivity Index Revisited. *J. Chem. Inf. Comput. Sci.* 38: (1998) 819-822.
14. D. Amić, D. Davidović-Amić, D. Bešlo, B. Lučić, N. Trinajstić, QSAR of Flavylum Salts as Inhibitors of Xanthine Oxidase. *J. Chem. Inf. Comput. Sci.* 38 (1998) 815-818.
15. B. Lučić, N. Trinajstić, Multivariate Regression Outperforms Several Robust Architectures of Neural Networks in QSAR Modeling. *J. Chem. Inf. Comput. Sci.* 39 (1999) 121-132.
16. B. Lučić, N. Trinajstić, S. Sild, M. Karelson, A. R. Katritzky, A New Efficient Approach for Variable Selection Based on Multiregression: Prediction of Gas Chromatographic Retention Times and Response Factors. *J. Chem. Inf. Comput. Sci.* 39 (1999) 610-621.
17. D. Amić, D. Davidović-Amić, D. Bešlo, B. Lučić, N. Trinajstić, Prediction of pK Values, Half-Lives, and Electronic Spectra of Flavylum Salts from Molecular Structure. *J. Chem. Inf. Comput. Sci.* 39 (1999) 967-973.
18. A. R. Katritzky, K. Chen, Z. L. Wang, M. Karelson, B. Lučić, N. Trinajstić, T. Suzuki, G. Schüürmann, Prediction of Liquid Viscosity for Organic Compounds by a Quantitative Structure-Property Relationship. *J. Phys. Org. Chem.* 13 (2000) 80-86.
19. S. C. Basak, B. D. Gute, B. Lučić, S. Nikolić, N. Trinajstić, A Comparative QSAR Study of Benzamidines Complement-Inhibitory Activity and Benzene Derivatives Acute Toxicity. *Comput. Chem.* 24 (2000) 181-191.
20. B. Lučić, D. Amić, N. Trinajstić, Nonlinear Multivariate Regression Outperforms Several Concisely Designed Neural Networks on Three QSPR Data Sets. *J. Chem. Inf. Comput. Sci.* 40 (2000) 403-413.
21. D. Amić, B. Lučić, S. Nikolić, N. Trinajstić, Predicting Inhibition of Microsomal p-Hydroxylation of

- Aniline by Aliphatic Alcohols: A QSAR Approach Based on the Weighted Path Numbers. *Croat. Chem. Acta* 74 (2001) 237-220.
22. B. Lučić, I. Lukovits, S. Nikolić, N. Trinajstić, Distance-Related Indexes in the Quantitative Structure-Property Relationship Modeling. *J. Chem. Inf. Comput. Sci.* 41 (2001) 527-535.
  23. D. Amić, S. C. Basak, B. Lučić, S. Nikolić, N. Trinajstić, Structure-Water Solubility Modeling of Aliphatic Alcohols Using the Weighted Path Numbers. *SAR QSAR Environ. Res.* 13 (2002) 281-295.
  24. B. Lučić, I. Bašić, N. Nadramija, A. Miličević, N. Trinajstić, T. Suzuki, R. Petrukhin, M. Karelson, A. R. Katritzky, Correlation of Liquid Viscosity with Molecular Structure for Organic Compounds Using Different Variable Selection Methods. *Arkivoc* 4 (2002) 45-59.
  25. B. Lučić, A. Miličević, S. Nikolić, N. Trinajstić, Harary Index - Twelve Years Later. *Croat. Chem. Acta* 75 (2002) 847-868.
  26. B. Lučić, A. Miličević, S. Nikolić, N. Trinajstić, On Variable Wiener Index. *Indian J. Chem. Sect A-Inorg. Bio-Inorg. Phys. Theor. Anal. Chem.* 42 (2003) 1279-1282.
  27. B. Lučić, N. Nadramija, I. Bašić, N. Trinajstić, Toward Generating Simpler QSAR Models: Nonlinear Multivariate Regression Versus Several Neural Network Ensembles and Some Related Methods. *J. Chem. Inf. Comput. Sci.* 43 (2003) 1094-1102.
  28. T. Piližota, B. Lučić, N. Trinajstić, Use of Variable Selection in Modeling the Secondary Structural Content of Proteins from Their Composition of Amino Acid Residues. *J. Chem. Inf. Comput. Sci.* 44 (2004) 113-121.
  29. F. Supek, T. Šmuc, B. Lučić, A Prototype Structure-Activity Relationship Model Based on National Cancer Institute Cell Line Screening Data. *Period. Biol.* 107 (2005) 451-455.
  30. D. Amić, D. Davidović-Amić, D. Bešlo, V. Rastija, B. Lučić, N. Trinajstić, SAR and QSAR of Antioxidant Activity of Flavonoids. *Curr. Med. Chem.* 14 (2007) 827-845.
  31. D. Janežič, B. Lučić, A. Miličević, S. Nikolić, N. Trinajstić, D. Vukičević, Hosoya Matrices as the Numerical Realization of Graphical Matrices and Derived Structural Descriptors. *Croat. Chem. Acta.* 80 (2007) 271-276.
  32. D. Amić, B. Lučić, G. Kovačević, N. Trinajstić, Bond Dissociation Enthalpies Calculated by the PM3 Method Confirm Activity Cliffs in Radical Scavenging of Flavonoids. *Mol. Divers.* 13 (2009) 27-36.
  33. B. Lučić, N. Trinajstić, B. Zhou, Comparison Between the Sum-connectivity Index and Product-connectivity Index for Benzenoid Hydrocarbons. *Chem. Phys. Lett.* 475 (2009) 146-148.
  34. D. Amić, B. Lučić, Reliability of Bond Dissociation Enthalpy Calculated by the PM6 Method and Experimental TEAC Values in Antiradical QSAR of Flavonoids. *Bioorg. Med. Chem.* 18 (2010) 28-35.
  35. K. Tanabe, B. Lučić, D. Amić, T. Kurita, M. Kaihara, N. Onodera, T. Suzuki, Prediction of Carcinogenicity for Diverse Chemicals Based on Substructure Grouping and SVM Modeling. *Mol. Divers.* 14 (2010) 789-802.
  36. D. Vukičević, N. Trinajstić, S. Nikolić, B. Lučić, B. Zhou, Master Connectivity Index and Master Connectivity Polynomial. *Curr. Comput.-Aided Drug Des.* 6 (2010) 235-239.
  37. D. Juretić, D. Vukičević, D. Petrov, M. Novković, V. Bojović, B. Lučić, N. Ilić, A. Tossi. Knowledge-Based Computational Methods for Identifying or Designing Novel, Non-Homologous Antimicrobial Peptides. *Eur. Biophys. J.* 40 (2011) 371-385.
  38. Z. Marković, D. Milenković, J. Đorović, J. Dimitrić Marković, V. Stepanić, B. Lučić, D. Amić. PM6 and DFT Study of Free Radical Scavenging Activity of Morin. *Food Chem.* 134 (2012) 1754-1760.
  39. Z. Marković, D. Milenković, J. Đorović, J. Dimitrić Marković, V. Stepanić, B. Lučić, D. Amić. Free Radical Scavenging Activity of Morin 2<sup>-</sup>-O- Phenoxide Anion. *Food Chem.* 135 (2012) 2070-2077.
  40. J. Dimitrić Marković, Z. Marković, J. Krstić, D. Milenković, B. Lučić, D. Amić. Interpretation of the IR and Raman Spectra of Morin by Density Functional Theory and Comparative Analysis. *Vib. Spectrosc.* 64 (2013) 1-9.
  41. Z. Marković, D. Milenković, J. Đorović, J. Dimitrić Marković, B. Lučić, D. Amić. A DFT and PM6 Study of Free Radical Scavenging Activity of Ellagic Acid. *Monatsh. Chem.* 144 (2013) 803-812.
  42. D. Amić, V. Stepanić, B. Lučić, Z. Marković, J. Dimitrić Marković. PM6 Study of Free Radical Scavenging Mechanisms of Flavonoids: Why Does O-H Bond Dissociation Enthalpy Effectively Represent Free Radical Scavenging Activity? *J. Mol. Model.* 19 (2013) 2593-2603.
  43. V. Stepanić, K. Gall Trošelj, B. Lučić, Z. Marković, D. Amić. Bond Dissociation Free Energy as General Parameter for Flavonoid Radical Scavenging Activity. *Food Chem.* 141 (2013) 1562-1570.
  44. K. Tanabe, T. Kurita, K. Nishida, B. Lučić, D. Amić, T. Suzuki. Improvement of Carcinogenicity Prediction Performances Based on Sensitivity Analysis in Variable Selection of SVM Models. *SAR QSAR Environ. Res.* 24 (2013) 565-580.

45. B. Lučić, I. Sović, J. Batista, K. Skala, D. Plavšić, D. Vikić-Topić, D. Bešlo, S. Nikolić, N. Trinajstić, The Additive Variant of the Randić Connectivity Index. *Curr. Comput.-Aided Drug Des.* 9 (2013) 184-194.
46. B. Lučić, V. Stepanić, D. Plavšić, A. Amić, D. Amić. Correlation between <sup>13</sup>C NMR chemical shifts and antiradical activity of flavonoids. *Monatsh. Chem.* 145 (2014) 457-463.
47. J. Dimitrić Marković, D. Amić, B. Lučić, Z. Marković. Oxidation of kaempferol and its iron(III) complex by DPPH radical: spectroscopic and theoretical study. *Monatsh. Chem.* 145 (2014) 557-563.
48. A. Amić, Z. Marković, J. Dimitrić Marković, V. Stepanić, B. Lučić, D. Amić. Towards an improved prediction of the free radical scavenging potency of flavonoids: The significance of double PCET mechanisms. *Food Chem.* 152 (2014) 578-585.
49. M. Filipović, Z. Marković, J. Đorović, J. Dimitrić Marković, B. Lučić, D. Amić. QSAR of the free radical scavenging potency of selected hydroxybenzoic acids and simple phenolics. *C. R. Chim.* 18 (2015) 492-498.
50. A. Amić, Z. Marković, J. Dimitrić Marković, B. Lučić, V. Stepanić, D. Amić. The 2H+/2e<sup>-</sup> free radical scavenging mechanisms of uric acid: thermodynamics of N-H bond cleavage. *Comput. Theor. Chem.* 1077 (2016) 2-10.
51. A. Amić, Z. Marković, J. Dimitrić Marković, S. Jeremić, B. Lučić, D. Amić, Free radical scavenging and COX-2 inhibition by simple colon metabolites of polyphenols: A theoretical approach. *Comput. Biol. Chem.* 65 (2016) 45-53.
52. A. Amić, B. Lučić, V. Stepanić, Z. Marković, S. Marković, J. Dimitrić Marković, D. Amić. Free radical scavenging potency of quercetin catecholic colonic metabolites: thermodynamics of 2H+/2e<sup>-</sup> processes. *Food Chem.* 218 (2017) 144-151.
53. Matić, Sara; Jadrijević-Mladar Takač, Milena; Barbarić, Monika; Lučić, Bono; Gall Trošelj, Koraljka; Stepanić, Višnja The Influence of In Vivo Metabolic Modifications on ADMET Properties of Green Tea Catechins-In Silico Analysis // Journal of pharmaceutical sciences, 107 (2018), 11; 2957-2964 doi:10.1016/j.xphs.2018.07.026
54. Amić, Ana; Marković, Zoran; Dimitrić Marković, Jasmina M., Milenković, Dejan; Lučić, Bono, The role of guaiacyl moiety in free radical scavenging by 3, 5-dihydroxy-4-methoxybenzyl alcohol: Thermodynamics of 3H+/3e<sup>-</sup> mechanisms // Molecular physics, 117 (2019), 2; 207-217 doi:10.1080/00268976.2018.1508777
55. Stepanić, Višnja; Matić, Sara; Amić, Ana; Lučić, Bono; Milenković, Dejan; Marković, Zoran Effects of conjugation metabolism on radical scavenging and transport properties of quercetin – In silico study // Journal of molecular graphics & modelling, 86 (2019), 278-285 doi:10.1016/j.jmgm.2018.10.023
56. Lučić, Bono; Batista, Jadranko; Bojović, Viktor; Lovrić, Mario; Sović Kržić, Ana; Bešlo, Drago; Nadramija, Damir; Vikić-Topić, Dražen, Estimation of Random Accuracy and its Use in Validation of Predictive Quality of Classification Models within Predictive Challenges // Croatica Chemica Acta, 92 (2019), 3; 226865, 13 doi:10.5562/cca3551

**B) Other scientific, professional and review papers published in non-CC journals and as chapters in books**

**a) Scientific articles published in other journals**

1. B. Lučić, N. Trinajstić, New Developments in QSPR/QSAR Modeling Based on Topological Indices. *SAR QSAR Environ. Res.* 7 (1997) 45-62.
2. D. Janežič, B. Lučić, S. Nikolić, A. Miličević, N. Trinajstić, Boiling Points of Alcohols – A Comparative QSPR Study. *Internet Electron. J. Mol. Des.* 5 (2006) 192-200, <http://www.biochempress.com>.
3. D. Amić, B. Lučić, A. Amić, Z. Marković, On the Novel ETE2 and BDE2 Molecular Descriptors of Flavonoid Free Radical Scavenging Potency. *Int. J. Chem. Model.* 6 (2014) 287-299.

**b) Scientific, expert/professional and review papers published as chapter in books**

1. B. Lučić, N. Trinajstić, D. Juretić, Recognition of Membrane Protein Structure from Amino Acid Sequence, in *From Chemical Topology to Three-Dimensional Geometry* (A.T. Balaban, Ed.): Plenum Publishing



- Corporation, New York, pp 117-158, **1997**.
2. D. Juretić, D. Zucić, B. Lučić, N. Trinajstić, Protein Transmembrane Structure: Recognition and Prediction by Using Hydrophobicity Scales through Preference Functions, in *Theoretical and Computational Chemistry*, Volume 5. Theoretical Organic Chemistry (C. Parkanyi and W.C. Herndon Eds.): Elsevier Science B. V., Amsterdam, pp 405-445, **1998**.
  3. B. Lučić, D. Amić, N. Trinajstić, Antioxidant QSAR Modeling as Exemplified on Polyphenols, in *Methods in Molecular Biology*, vol. 477: *Advanced Protocols in Oxidative Stress I* (Armstrong, Donald Ed.): Humana Press (a part of Springer Science), New York, NY, USA, pp 207-218, **2008**.
  4. B. Lučić, S. Nikolić, N. Trinajstić, S. Ivaniš Turk, Sum-connectivity Index, in *Novel Molecular Structure Descriptors - Theory and Applications I* (I. Gutman and B. Furtula, Eds.): University of Kragujevac, Faculty of Science, Kragujevac, Serbia, pp 101-136, **2010**.
  5. B. Lučić, A. Miličević, S. Nikolić, N. Trinajstić, Coding and Ordering Benzenoids and Their Kekulé Structures (Chapter 9), in *Carbon Coding and Structures - Advances in Physics and Chemistry* (M. V. Putz, Ed.): Springer, Dordrecht, Heidelberg, London, New York, pp 205-225, **2011**.
  6. B. Lučić, S. Nikolić, N. Trinajstić, Zagreb Indices, in *Chemical Information and Computational Challenges in the 21st Century - A Celebration of 2011 International Year of Chemistry* (M. V. Putz, Ed.): Nova Science Publishers, Inc., New York, USA, Chapter 11. pp 261-275, **2011**.
  7. B. Lučić, I. Sović, D. Plavšić, N. Trinajstić, Harary Matrices: Definitions, Properties and Applications, in *Distance in Molecular Graphs – Applications* (I. Gutman and B. Furtula, Eds.): University of Kragujevac, Faculty of Science, Kragujevac, Serbia, pp 3-26, **2012**.
  8. B. Lučić, I. Sović, N. Trinajstić. On coding and ordering benzenoids and their Kekulé structures by using Kekulé index and some related codes, in *Ante Graovac – Life and Works* (I. Gutman, B. Pokrić, and D. Vukičević Eds.): University of Kragujevac, Faculty of Science, Kragujevac, Serbia, pp 163-178, **2014**.
  9. B. Lučić, I. Sović, N. Trinajstić. The four connectivity matrices, their indices, polynomials and spectra, in *Advances in mathematical chemistry and applications*, vol. 1 (S. C. Basak, G. Restrepo and J. L. Villaveces): Bentham Science Publishers, Sharjah, UAE, pp 76-91, **2014**.

**c) Review papers published in international journals that are not included in *Current Contents***

1. N. Trinajstić, S. Nikolić, B. Lučić, D. Amić, On QSAR Modeling, *Acta. Pharm.* 46 (1996) 249-263.
2. D. Juretić, B. Lučić, N. Trinajstić, Why Focusing on Bioinformatics? *Period. Biol.* 107 (2005) 379-383.
3. B. Lučić, S. Nikolić, N. Trinajstić, Távolságfüggő molekuláris deskriptorok. *Magyar Kémiai Folyóirat.* 114 (2008) 171-175. (Distance-Related Molecular Descriptors, *Hung. J. Chem.* 114 (2008) 171-175),
4. B. Lučić, N. Trinajstić, D. Juretić, Od sekvencije do konformacije proteinâ I, *Polimeri* 17(3) (1996) 119-128.