

Jezici: Hrvatski, engleski, francuski, njemački
Adresa: Odjel za biotehnologiju
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**RADNO ISKUSTVO:**

2017 Gostujući prof. Université de Picardie Jules Verne: UPJV, Francuska
2016- Izvanredni prof. na Odjelu za biotehnologiju, Sveučilište u Rijeci
2015-2016 Izvanredni prof. na Odjelu za kemiju, Josip Juraj Strossmayer Sveučilište u Osijeku
2015 Gostujući prof. Riga Technical University, Latvija
2012-2014 Znanstveni suradnik, Faculté des Sciences Pharmaceutique i Biologique, Université Paris Descartes, Sorbonne Paris Cité, koordinator projekta prof. Brigitte Deguin, Laboratoire de Pharmacognosie-UMR CNRS 8638.
2010-2012 Gostujući prof. Sveučilište u Rijeci
2008-2011 Znanstveni suradnik, Swiss National Science Foundation, Laboratory of Glycochemistry and Asymmetric Synthesis, Prof. Pierre Vogel, EPFL
2006-2008 Postdoktorand na Yale University, New Haven, SAD i University of Illinois Urbana Champaign, SAD s prof. Johnom F. Hartwigom. Stipendija od Swiss National Science Foundation (2006-2007) te od Hoffman-La Roche Foundation (2007-2008)
2001-2005 Znanstveni novak na Institute of Sciences and Chemical Engineering at EPFL, Lausanne, Švicarska (doktorska disertacija nadzorom prof. Pierrea Vogela)
2000 Kemijski inženjer, razvoj i proizvodnja krema i sapuna u kozmetičkoj tvrtki "Milla", Zagreb, Hrvatska
1999 Diplomant na Institutu Ruđer Bošković, Zagreb, Hrvatska, (diplomski rad pod nadzorom prof. Vitomira Šunića)

OBRAZOVANJE I DIPLOME:

2017 Zamjenik voditelja Zavoda za medicinsku kemiju, Odjel za biotehnologiju, Sveučilište u Rijeci
2016- Izvanredni profesor, znanstveno nastavno zvanje dodijeljeno od strane Sveučilišta u Rijeci, Odjel za biotehnologiju
2015 Izvanredni profesor, znanstveno nastavno zvanje dodijeljeno od strane Sveučilišta u Osijeku, Odjel za kemiju
2014 Viši znanstveni suradnik, znanstveno zvanje dodijeljeno od strane Nacionalnog vijeća za znanost, Hrvatska
2012 Habilitation à diriger des recherches, Université Paris Descartes, Sorbonne Paris Cité, Laboratoire de Pharmacognosie -UMR CNRS 8638, Faculté des Sciences Pharmaceutique et Biologique.
2001-2005 Doktorska disertacija u organskoj sintezi i fizikalno organskoj kemiji pod vodstvom prof. Pierre Vogel, EPFL
2002 DEA multinational de Chimie Moléculaire (Europski magisterij u organskoj kemiji), Ecole Polytechnique de Palaiseau, France
2002 Advanced 1D/2D techniques in NMR, Bruker Biospin AG, Zürich, Switzerland – NMR training course
1994-1999 Inženjer kemije, Specijalizacija organska kemija, Sveučilište u Zagrebu, Hrvatska (prosijek 4.89); Diplomski rad pod ravnanjem prof. Vitomira Šunića, Institut Ruđer Bošković, Zagreb, Hrvatska

NASTAVA:

2002-2005 Praktična NMR analizu (EPFL, Švicarska)
2004 Opća kemija praktikum (EPFL, Švicarska)
2005 Organska kemija praktikum (EPFL, Švicarska)
2005 NMR strukturalne analize (EPFL, Švicarska)
2010-2011 Organska kemija (Sveučilište u Rijeci, Odjel za biotehnologiju)

- 2010-2011 Praktikum iz organske kemije (Sveučilište u Rijeci, Odjel za biotehnologiju)
 2015-2016 Organska kemija 2 (Sveučilište u Osijeku, Odjel za kemiju)
 2016 Praktikum iz Organske kemije 1 (Sveučilište u Osijeku, Odjel za kemiju)
 2016 Praktikum iz Organske kemije 2 (Sveučilište u Osijeku, Odjel za kemiju)
 2016 Metode organske sinteze (Sveučilište u Osijeku, Odjel za kemiju)
 2017- Zelena kemija (Sveučilište u Rijeci, Odjel za biotehnologiju)
 2017- Retrosinteza (Sveučilište u Rijeci, Odjel za biotehnologiju)
 2017- Fizikalno organska kemija (Sveučilište u Rijeci, Odjel za biotehnologiju)

PROJEKTI I SUDJELOVANJE NA PROJEKTIMA:

- 2001-2006 Švicarska nacionalna zaklada za znanost (Grant 2000-2010002/1), Švicarska, Koordinator: prof. P. Vogel
 2001-2006 Savezni ured za obrazovanje i znanost (Grant COI. 0071, COST D13/010/01), Švicarska, Koordinator: prof. P. Vogel
 2007-2008 Mechanistic Studies of Asymmetric Ir-Catalyzed Allylic Substitution, Švicarska nacionalna zaklada za znanost, potpora za perspektive istraživač, Švicarska
 2008 Stereoselective Ir-Catalyzed Allylic Substitutions: Mechanism and Characterization of Key Intermediate, Roche Istraživačka Fundacija, Švicarska
 2009-2011 Švicarska nacionalna zaklada za znanost (Grant 2008-20120004/1), Švicarska, Koordinator: prof. P. Vogel
 2012-2014 Nacionalna agencija za istraživanja (Grant ANR-09-CP2D-09-01), Francuska, Koordinator: prof.ica B. Deguin
 2015-2016 Hrvatska zaklada za znanost (Grant 9060), Koordinator: prof. Milan Sak Bosnar
 2015- Hrvatska zaklada za znanost (Grant 4459), Koordinator: prof. Branimir Hackenberger Kutuzović
 2017- Centar izvrsnosti za bioprospecting mora (Bioproco), Voditelj: dr.sc. Rozelindra Čož-Rakovac

NAGRADE I STIPENDIJE:

- 1997-1999 Stipendija za izvrsnost od Ministarstva znanosti, obrazovanja i sporta (GPA studija: 4.89 / 5)
 1999 Stipendija Instituta Ruđer Bošković
 2006-2007 Swiss National Science Foundation Stipendija za perspektivne istraživače
 2007-2008 Roche Research Foundation Poslijedoktorska stipendija
 2015 Erasmus + 2015/2016
 2017 Stipendija za gostujuće profesore, Université de Picardie Jules Verne : UPJV, Amiens, Francuska

NADZOR MLADIH ISTRAŽIVAČA:

a) Doktorske disertacije

- 2009: Volla, Chandra Mouliswara Rao: „New 2evelopment sin iron-catalyzed carbon-carbon bond forming reactions.“; EPFL, Švicarska (Komentor s Prof. Pierre Vogel, publikacije N° 12, 13, 15)
- 2014: Hugues Lemoine „Les sécoiridoïdes d '*Olea europaea* et du *Lonicera tatarica*: matières premières destinées à la conception de nouveaux synthons chirawc pour la synthèse de composés biologiquement actifs et outils pour le développement de nouvelles méthodes d'extraction et de synthèse „, L'Université Paris Descartes, Francuska (Komentor s Prof. Brigitte Deguine, publikacija N° 19)
2017. – sada Lela Munjas Jurkić, Jadran galenski laboratorij

b) Magistarski radovi

- 2004: Ekstrand, M. “Chemoselective Cleavage of Methylsubstituted Allyl Ethers by Polysulfones”, EPFL, Švicarska (Publikacija N° 6)
- 2005: Nadji, S. “New methods for Silylation of Polyols, Thiols and Oximes”, EPFL, Švicarska
- 2009: Tchawou Wandji, A. Silyl Methallylsulfonates: Efficient and Powerful Agents for the Chemoselective Silylation of Polyols And Sugars, EPFL (Publikacija N° 23)
- 2010: Pavels Ostrovskis, Click Chemistry in Biological Studies, Riga Technical University, Latvia (Komentor s Prof. M. Turks, Publikacija N° 16)
- 2011: Sedigh-Zadeh, R. “The Intermediacy of Sulfinic and Carboxylic Acids Anhydrides in the Direct Synthesis of Amides, Esters and Ketones Giving Only Volatile Co-products”, EPFL, Švicarska

6. 2012: Salle de Chou, Y. Chromatographie par partage centrifuge d'extrait aqueux d'*Aucuba Japonica*: Isolement rapide, efficace et écologique d'aucuboside, Université Paris Descartes, Sorbonne Paris Cité, France (Publikacija N° 20, Komunikacija N° 8, 9)
7. 2012: Vinh, N. D. Synthesis of amino iridoids derivatives with aliphatic amines, Université Paris Descartes, Sorbonne Paris Cité, Francuska.
8. 2012: Cyprien, B. Synthesis of amino iridoids derivatives with aromatic amines, Université Paris Descartes, Sorbonne Paris Cité, Francuska.
9. 2013: Jevgeinija Luginina Synthesis of new derivatives of 3-C-nitromethyl-hexofuranoses, (Riga Technical University, Latvija, Komentor s Prof. M. Turks, Publikacija N° 18).
10. 2013: Bettach, J. Isolation of Iridioids by Centrifugal Partition Chromatography, Université Paris Descartes, Sorbonne Paris Cité, Francuska. (Publikacija N° 20)
11. 2017: Aida Hajdo, Ekstrakcija i kvantifikacija metabolita iz lišća maslina s područja Krka i Marčeljeve Drage, Odjel za biotehnologiju, Sveučilište u Rijeci
12. 2017: Mateo Rabak, Detekcija i kvantifikacija metabolita pesticida u *Eisenia fetida* tekućinskom kromatografijom ultra visoke djelotvornosti, Sveučilište u Rijeci
13. 2017: Karla Gobo, Ekstrakcija i kvantifikacija metabolita iz lišća maslina s Istarskog područja, Sveučilište u Rijeci

c) Završni radovi

1. 2016: Ižaković, Marinela, Sinteza kvaternih amonijevih soli piridina i izokinolina i njihova upotreba u pripremi tenzidnih elektroda, Sveučilište u Osijeku
2. 2016: Koprivnjak, Marina Sinteza kvaternih amonijevih soli imidazola s potencijalnim antibakterijskim djelovanjem, Sveučilište u Osijeku
3. 2016: Faletar, Mihovil Sinteza kvaternih amonijevih soli piperidina s potencijalnim antibaktericidnim djelovanjem, Sveučilište u Osijeku
4. 2016: Marija Andabak, Sinteza kvaternih amonijevih soli triazola s potencijalnim citotoksičnim djelovanjem, Sveučilište u Osijeku
5. 2016: Snježana Šarić, Sinteza kvaternih amonijevih soli alikilamina s potencijalnim citotoksičnim djelovanjem, Sveučilište u Osijeku
6. 2016. Živković Ivana, Kemija vitamina B6 i sinteza novih derivata vitamina B6, Sveučilište u Osijeku Komentor s doc. Gašo Sokač, Dajana
7. 2017. Vedrana Glavan, Antibakterijske aktivnosti kvaternih amonijevih soli, Sveučilište u Rijeci

d) Prof. u razmjeni

2008: Prof. El-Metwally, M. A. Development of New Silylation Agents, EPFL. (Istraživački posjet 4 mjeseca)

PROFESIONALNE I ADMINISTRATIVNE FUNKCIJE:

2002-2006 Voditelj NMR centra pri LGSA, EPFL, Švicarska
 2015-2016 ERASMUS koordinator Odjel za kemiju, Sveučilište u Osijeku
 2015-2016 Voditelj Laboratorija za organsku kemiju, Odjel za kemiju, Sveučilište u Osijeku
 2017- Voditelj Laboratorija organske kemije i kemije čvrstog stanja, Odjel za biotehnologiju, Sveučilište u Rijeci
 2017 V.d. Predstojnik Zavoda za medicinsku kemiju, Odjel za biotehnologiju, Sveučilište u Rijeci
 2018- Član povjerenstva za projekte, Odjel za biotehnologiju, Sveučilište u Rijeci

UREDNIŠTVO:

2014-2016 Gostujući urednik dva broja izdanja časopisa Current Organic Chemistry
 2014- Urednik časopisa Materials Science and Applied Chemistry
 2016- Gostujući urednik časopisa Current Medicinal Chemistry

PUBLIKACIJE U CC ČASOPISIMA:

1. **Marković, D.;** Hameršak, Z.; Višnjavec, A.; Kojić Prodić, B.; Šunjić, V. *syn/anti* Diastereoselectivity in the Aldol Reaction of Aldehydes with the C(3) Carbanion of 1,3-Dihydro-2H-1,4-benzodiazepin-2-one, *Helv. Chim. Acta*, **2000**, 83, 603.
2. **Marković, D.;** Roversi, E.; Scoppelliti, R.; Vogel, P.; Meana, R.; Sordo, J. A. The Hetero-Diels-Alder Addition of

- Sulfur dioxide: The Pseudo-chair Conformation of a 4,5-Dialkylsultine, *Chem. Eur. J.* **2003**, *9*, 4911-4915.
3. **Markovic, D.**; Vogel, P. Polysulfones: Catalysts for Alkene Isomerization, *Angew. Chem. Int. Ed.* **2004**, *43*, 2928-2930.
 4. **Markovic, D.**; Vogel, P. Allyl, Methallyl, Prenyl and Methylprenyl Ethers as Protected Alcohols: their Selective Cleavage with Diphenyldisulfone under Neutral Conditions, *Org. Lett.* **2004**, *6*, 2693-2696.¹
 5. **Markovic, D.**; Steunenbergh, P.; Ekstrand, M.; Vogel, P. Polysulfones: Solid Organic Catalysts for the Chemoselective Cleavage of Methylsubstituted Allyl Ethers under Neutral Conditions. New Strategy for Alcohol Protection/Deprotection, *Chem. Commun.* **2004**, 2444-2445.
 6. **Markovic, D.**; Varela-Álvarez, A.; Sordo, J. A.; Vogel, P. Mechanism of the Diphenyldisulfone-Catalyzed Isomerization of Alkenes. Experimental and Quantum Chemistry Studies, *J. Am. Chem. Soc.* **2006**, *128*, 7782-7795.²
 7. **Markovic, D.**; Hartwig, J. F. Resting State and Kinetic Studies on the Asymmetric Allylic Substitutions Catalyzed by Iridium-Phosphoramidite Complexes, *J. Am. Chem. Soc.* **2007**, *129*, 11680-11681.
 8. Vogel, P.; Turks, M.; Bouchez, L.; **Markovic, D.**; Varela-Alvarez, A.; Sordo, J. A. New Organic Chemistry of Sulfur Dioxide, *Acc. Chem. Res.* **2007**, *40*, 931-942.³
 9. Sherzod, M.; **Markovic, D.**; Hartwig, J. F. The Allyl Intermediate in Regioselective and Enantioselective Iridium-Catalyzed Asymmetric Allylic Substitution Reactions, *J. Am. Chem. Soc.* **2009**, *131*, 7228-7229.⁴
 10. Weix, D.; **Markovic, D.**; Ueda, M.; Hartwig, J. F. Direct, Intermolecular, Enantioselective, Iridium-Catalyzed Allylation of Carbamates to Form Carbamate-Protected, Branched Allylic Amines, *Org. Lett.* **2009**, *10*, 1147-1150.⁵
 11. Varela-Álvarez, A.; **Markovic, D.**; Sordo, J. A.; Vogel, P. The Desulfinylation of Prop-2-enesulfinic Acid: Experimental Results and Mechanistic Theoretical Analysis, *J. Am. Chem. Soc.* **2009**, *131*, 9547-9561.
 12. Volla, C. M. R.; **Markovic, D.**; Dubbaka S. R.; Vogel, P. Ligandless Iron-catalyzed Desulfinylative C-C Allylation reactions using Grignard reagents and Alk-2-enesulfonyl Chlorides, *Eur. J. Org. Chem.* **2009**, *36*, 6281-6288.⁶
 13. **Markovic, D.***; Volla, C. M. R.; Varela-Álvarez, A.; Sordo, J. A.; Vogel, P. BCl₃-Mediated H-Ene Reaction of Sulfur Dioxide and Unfunctionalized Alkenes, *Chem. Eur. J.* **2010**, *20*, 5969-5975.
 14. Hanley, P.; **Markovic, D.**; Hartwig, J. F. Intermolecular Insertion of Ethylene and Octene into a Palladium-Amide Bond. Spectroscopic Evidence for an Ethylene Amido Intermediate, *J. Am. Chem. Soc.* **2010**, *132*, 6302-6303.⁷
 15. Volla, C. M. R.; **Markovic, D.**; Laclef, S.; Vogel, P. Catalyzed Desulfinylative Allylation of Carbonyl Compounds with Alk-2-enesulfonyl Chlorides and Silyl Alk-2-enesulfinates, *Chem. Eur. J.* **2010**, *30*, 8984-8988.
 16. Ostrovskis, P.; Volla, C. M. R.; Turks, M.; **Markovic, D.** Application of Metal Free Click Chemistry in Biological Studies, *Curr. Org. Chem.* **2013**, *17*, 609-639.
 17. Zambrón, B.; Dubbaka, S. R.; **Markovic, D.**; Clavijo, E. M.; Vogel, P. Amides from Carboxylic Acids and Amines via Carboxyl and Sulfinyl mixed Anhydrides, *Org. Lett.* **2013**, *15*, 2550-2553.
 18. Turks, M.; Vēze, K.; Kiseļovs, G.; Mackeviča, J.; Lugiņina, J.; Mishnev, A.; **Markovic, D.** Synthesis and X-Ray Studies of Novel 3-C-Nitromethyl-Hexofuranoses, *Carbohydr. Res.*, **2014**, *391*, 82-88.
 19. Lemoine, H.; **Markovic, D.**; Deguin, B. Mild and Chemoselective Lactone Ring-Opening with (TMS)Ona. Mechanistic Studies and Application to Sweroside Derivatives, *J. Org. Chem.* **2014**, *79*, 4358-4366.
 20. **Markovic, D.**; Sallé de Chou, Y.; Barboux, C.; Grougnet, R.; Deguin, B. Centrifugal partition chromatography: efficient tool to access highly polar and unstable synthetic compounds in large scale, *RCS Advances*, **2014**, *4*, 63254.
 21. **Markovic, D.**; Kolympadi, M.; Deguin, B.; Poree, F.-H.; Turks, M. The Isolation and Synthesis of Neodolostane Diterpenoids, *Nat. Prod. Rep.*, **2015**, *32*, 230. Together with cover page of NPR issue 2, 2015.
 22. Turks, M.; Rolava, E.; Stepanovs, D.; Mishnev, A.; **Markovic, D.** Novel 3-C-aminomethyl-hexofuranose-derived thioureas and their testing in asymmetric catalysis, *Tetrahedron Asymmetry*, **2015**, *26*, 952.
 23. **Markovic, D.**; Tchawou, W. A.; Novosjolova, I.; Laclef, S.; Stepanovs, D.; Turks, M.; Vogel, P. Synthesis and Applications of Silyl 2-Methylprop-2-ene-1-sulfinates in Preparative Silylation and GC-Derivatization Reactions of Polyols and Carbohydrates, *Chem. Eur. J.*, **2016**, *22*, 4196-4205.
 24. Mierina, I.; Gudelis, E.; Stepanovs, D.; Jure, M.; Mishnev, A.; Kolympadi, M.; **Marković, D.** Crystal structure of 3-(4-hydroxy-3-methoxyphenyl)-N-phenylpropanamide, C₁₆H₁₇NO₃, *Z. Krist. – New Cryst. St.*, **2016**, *231*, 657-659.

¹Deprotection procedure published in: Greene, T. W.; Wuts, P. G. M. *Green's Protective Groups in Organic Synthesis*; Wiley: New York, 2007; p 96-97.

²Highlighted in: Koeck, M.; Lindel, T *Angew. Chem., Int. Ed.* **2007**, *46*, 5268-5271.

³One of the most accessed articles for the third quarter 2007.

⁴ Highlighted in: *Chem. Eng. News*, **2009**, *87*, 31-33; available online :

<http://pubs.acs.org/subscribe/journals/cen/87/i24/html/8724sci2.html>.

⁵Highlighted by the Organic Chemistry webpage: <http://www.organic-chemistry.org/abstracts/lit2/595.shtm>.

⁶Covering page of issue 36 of *Eur. J. Org. Chem.* **2009**.

⁷Highlighted in: Chemical and Engineering News **2010**, *88*, 41; <http://pubs.acs.org/cen/science/88/8823sci2.html>

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- Cottet, K.; Kolypadi, M.; Lallemand, M.-C.; **Marković, D.** Artificial Enzyme-Catalyzed Diels-Alder Cycloadditions, *Curr. Org. Chem.* **2016**, *20*, 2254-2281.
- Stivojevic, M; **Markovic, D.** Recent Synthetic Advances and Biological Activities of Triazolothiadiazoles, Manuscript in preparation.

PATENTNA APLIKACIJA:

- Šunjić, V.; Hamersak, Z.; Majerić-Elenkov M.; **Markovic, D.** *Syn* and *anti* Stereoisomeric 3-(1'-Hydroxyalkyl and 1'-Hydroxyaryl) of 1,4-Benzodiazepine-2-ones, *Croat. Pat. Appl.* P990379A, **2001**.

POGLAVLJA U KNJIGAMA:

- Markovic, D.**; Vogel, P. Diphenyl disulfone, In: *e-Encyclopedia of Reagents for Organic Synthesis*, Ed. Paquette, L. A., John Wiley & Sons: New York **2005**, Published online: <http://www.mrw.interscience.wiley.com/eros>.
- Markovic, D.**; Hartwig, J. F. Asymmetric Allylic Substitutions Catalyzed by Iridium-Phosphoramidate Ethylene Complex. Roche Annual Reports 2007, **2008**, 204-212.
- Markovic, D.**; Vogel, P. Diphenyl disulfone, In: *Handbook of Reagents for Organic Synthesis, Reagents for Radical and Radical Ion Chemistry*, Ed. Chrich, D., John Wiley & Sons: West Sussex **2008**, 288-290.
- Vogel, P.; **Markovic, D.**; Turks, M. Sulfur Dioxide: a Powerful Tool for the Construction of Carbon-Carbon Bonds. In *Stereoselective Synthesis of Drugs & Natural Products*, Andrushko V., Andrushko N., Eds.; Wiley: New York, 2013.

PREDAVANJA I SEMINARI:

- 09.10.2003. Mechanism of the Isomerization of Alkenes Induced by Polysulfones, **Swiss Chemical Society Meeting, Lausanne**
- 15.05.2008. SO₂ Chemistry and Iridium Catalyzed Allylic Substitutions, **University of Bern** (Invited)
- 04.09.2008. Iridium Catalyzed Allylic Substitutions: Mechanism and Catalysts Improvements by Rational Design, **Swiss Chemical Society Meeting, Zürich**
- 09.07.2009. Polysulfones as New Organic Catalysts and Isolation of Active Intermediates in Iridium Catalyzed Allylic Substitutions, **Albert-Ludwigs Universität Freiburg, Germany**.
- 25.08.2009. Ene-Reaction of Sulfur Dioxide, Isomerization of Alkenes Induced by Polysulfones and Iridium Catalyzed Allylic Substitutions, **University of Groningen, Netherlands**
- 04.09.2009. The Endergonic Ene Reaction of Alkenes and SO₂ Can Now Be Used to Prepare β,γ -Unsaturated Sulfones and Sulfonamides, **Swiss Chemical Society Meeting Lausanne**.
- 27.02.2010. New Organic Chemistry of Sulfur Dioxide and Mechanistic Insights in the Iridium Catalyzed Allylic Substitutions, **University of Rijeka, Croatia** (Invited)
- 23.03.2010. Ene- and Hetero-Diels-Alder Reactions of Sulfur Dioxide: New Reagents and Total Asymmetric Synthesis of Dolabriferol, Abstracts of Papers, 239th **ACS National Meeting, San Francisco, CA, United States**.
- 15.06.2010. Novel Organic Chemistry of Carbon Dioxide, **SNSF, Bern Switzerland**.
- 4.3.2011. Recent Advances in Sulfur Dioxide Chemistry, **University of Fribourg, Switzerland**
- 18.5.2011. Enantioselective Ir-Catalyzed Allylic Substitutions: Isolation of the Key Intermediates and Rational, Mechanistically Driven Improvements of the Catalyst, **Galapagos Research & Development Institute, Zagreb, Croatia**
- 14.7.2011. Chemistry of Sulfur Dioxide and Isolation of Active Intermediates in Iridium Catalyzed Allylic Substitutions, **Ruder Bosković Institute, Zagreb, Croatia**
- 14.09.2011. Iridium Catalyzed Nucleophilic Substitutions, **University of Bath, United Kingdom**
- 29.09.2011. New Organic Chemistry of Sulfur Dioxide and Iridium Catalyzed Nucleophilic Substitutions, **Novartis AG, Basel, Switzerland**
04. 10.2011. New Organic Chemistry of Sulfur Dioxide, **University of Neuchatel, Switzerland**
- 26.07.2012. Mechanism, Scope and Synthetic Applications of Ir-Catalyzed Nucleophilic Substitutions, **DSM, Stein AG, Švicarska**
- 03.09.2012. Enantioselective Ir-Catalyzed Nucleophilic Substitutions and New Sulphur Dioxide Organic Chemistry, **Syngenta Crop Protection Münchwilen AG, Stein AG, Švicarska**
- 20.05.2014. Chemistry of Sulfur Dioxide, Metal Catalyzed Nucleophilic Substitutions and New Isolation

19. 21.11.2014. Techniques of Natural Products, Croatian Chemical Society, **University of Osijek, Croatia**
Sulfur Dioxide Organic Chemistry, New Techniques of Isolation of Natural Products and
Enantioselective Ir-Catalyzed Nucleophilic Substitutions, **Carbogen-Amcis AG**, Švicarska
20. 06.10.2017. Green Methods in Organic Chemistry – Personal Experiences, Université de Picardie Jules Verne:
UPJV
21. 5.5.2018 Hackenberger Kutuzović, D.; Lončarić, Ž.; Marković, D.; Obhodaš, J.; Hackenberger Kutuzović,
B. Combination effects of chlorpyrifos and ZnO on oxidative stress and reproduction of the
earthworm *Dendrobaena veneta* // SETAC Europe 28th Annual Meeting, Rim, Italija, 2018.

KOMUNIKACIJE:

1. 07. 2000. Hamersak, Z.; **Markovic, D.**; Šunjić, V. Preparation and Relative (*syn/anti*) Configuration of 3-(substituted)hydroxymethyl 7-chloro-1,3-dihydro-1-methyl-5-phenyl- 1,4-benzodiazepin-2-ones, **8th Belgian Organic Synthesis, Ghent, Belgium.**
2. 12. 2002. **Markovic, D.**; Vogel, P. Radical Chain Isomerization of Alkenes Induced by Polysulfones, Proceedings of molecules de future: **Les Defits de la Synthèse Organique, Lyon, France.**
3. 09.2003. **Markovic, D.**; Vogel, P. A New Sequential Method for the Hydrolysis of Allyl Ethers Induced by a "Green" Catalyst: a New Strategy for Alcohol Deprotection, **13th European Symposium on Organic Chemistry, Dubrovnik, Croatia.**
4. 09.2003. **Markovic, D.**; Vogel, P. A Revised Mechanism for the Sulfur Dioxide Catalyzed Alkene Isomerization, **13th European Symposium on Organic Chemistry, Dubrovnik, Croatia.** (Oral communication).
5. 10.2003. **Markovic, D.**; Steunenberg, P.; Vogel, P. Successive Cleavage of Allylic Ethers by Polysulfone, **Swiss Chemical Society Meeting Lausanne (Chimia, 2003, 57, 448).**
6. 10.2004. **Markovic, D.**; Vogel, P. New strategy for the semi-protection of polyols. Diphenyldisulfone a Neutral Catalyst for the Chemoselective Cleavage of Methyl Substituted Allyl Ethers, **Swiss Chemical Society Meeting, Zürich (Chimia, 2004, 58, 526).**
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