Doc. Dr Miloš Mojović

CURRICULUM VITAE

LIČNI PODACI:

Datum rođenja: 20. januar 1973.

Mesto rođenja: Beograd, Srbija

Pol: Muški

Državljanstvo: Srpsko

KONTAKT:

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PROFESIONALNO ISKUSTVO:

Akademsko zvanje: Docent

Naziv institucije: Fakultet za fizičku hemiju

Univerzitet u Beogradu

Studentski trg 12-16

11000 Beograd

Srbija

Nastavna karijera (2000-2012):

- Biofizička hemija 2

- Membranski transport i signalizacija

- Primena računara u fizičkoj hemiji

- Primenjena hemija

- Radijaciona hemija i dozimetrija

Naučna karijera (2000-2012):

- Saradnik na više projekata koje finansira Ministarstvo za nauku i obrazovanje Republike Srbije. Član naučnoistraživačkog tima iz oblasti biofizičke hemije na Fakultetu za fizičku hemiju i Institutu za multidisciplinarna istraživanja, Univerziteta u Beogradu, Srbija.

Naučnoistraživački projekti (2000-2012):

- Spektroskopija atoma, molekula i supramolekulskih struktura (MNTR 1928), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

- Biofizička istraživanja membranskih procesa, interakcija membranskih receptora i kanala sa spoljašnjim faktorima i interćelijska regulacija (MNTR 143016), Institut za multidisciplinarna istraživanja, Univerzitet u Beogradu.

- Biomarkeri u neurodegenerativnim i malignim procesima (III41005), Biološki fakultet i Fakultet za fizičku hemiju, Univerzitet u Beogradu (šef potprojekta).

OBRAZOVANJE:

Diplomirani fizikohemičar (2000), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

Magistar fizičke hemije (2004), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

Doktor fizičke hemije (2006), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

KARIJERA:

Asistent pripravnik (2000-2004), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

Asistent (2004-2007), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

Docent (2007-2012), Fakultet za fizičku hemiju, Univerzitet u Beogradu.

PROFESIONALNA USAVRŠAVANJA:

University of Oxford, U.K. (2007), Department of Plant Sciences.

PREDAVANJA PO POZIVU:

Castellaneta Marina, Italy (2009).

Oxford University, U.K. (2007).

Davos, Switzerland (2005).

Sofia, Bulgaria (2004).

VEŠTINE:

- Predavač kao profesor na Univerzitetu.

- Rukovodilac naučnih istraživanja iz oblasti fizičke hemije i redoks biologije.

- Upravljanje naučnom instrumentacijom: EPR, NMR, MRI, Ramaska spektrometrija, itd.

- Računarske veštine: MATLAB, Mathematica, Origin itd.

- Jezici: engleski (napredni nivo), nemački (osnovni nivo).

- Udruženja: Društvo fizikohemičara Srbije, Srpsko hemijsko društvo, Društvo biofizičara Srbije (član upravnog odbora).

OBLASTI INTERESOVANJA:

- Detekcija slobodnih radikala u hemijskim i biološkim sistemima tehnikama EPR i NMR.

- Mehanizmi ROS u hemijskim i biološkim sistemima.

- Biomarkeri u neurodegenerativnim i malignim procesima.

- Primena naprednih matematičkih i računarskih metoda za identifikaciju slobodnih radikala iz kompleksnih EPR signala.

- Razvoj novih kontrastnih agenasa za MRI.

- EPR dozimetrija.

BIBLIOGRAFIJA - ODABRANI RADOVI:

1. **M. Mojović**, M. Vuletić, G. Bačić and Ž. Vučinić. Oxygen-centered radicals produced by plant plasma membranes: An EPR spin-trap study. *J. Exp. Bot.* 2523-2531 **55** (2004).
2. G.Bačić and **M. Mojović**. EPR spin trapping of oxygen radicals in plants: a methodological overview. *Ann. NY Acad. Sci.* 230-243 **1048** (2005).
3. **M. Mojović**, M. Vuletić, G.Bačić. Detection of oxygen-centered radicals using spin-trap DEPMPO. The effect of oxygen. *Ann. NY Acad. Sci.* 471-475 **1048** (2005).
4. S.Veljović-Jovanović, B.Kukavica, T. Cvetić, **M. Mojović**, Ž. Vučinić, Ascorbic acid and the oxidative processes in pea root cell wall isolates: Characterization by fluorescence and EPR spectroscopy. *Ann. N. Y. Acad. Sci.* 500-504, **1048** (2005).
5. V. Maksimović, **M. Mojović**, G. Neumann, Ž. Vučinić, Nonenzymatic reaction of dihydroxyacetone with hydrogen peroxide enhanced via a fenton reaction. *Ann. N. Y. Acad. Sci.* 461-465, **1048** (2005).
6. **M. Mojović**, I. Spasojević, G. Bačić, Detection of hydrogen atom adduct of spin-trap DEPMPO. The relevance for studies of biological systems. *J. Chem. Inf. Model.* 1716-1718, **45** (2005).
7. **M. Mojović**, I. Spasojević, M. Vuletić, Ž Vučinić, G. Bačić. EPR spin-probe and spin-trap study of free radicals produced by plant plasma membranes. *J. Serb. Chem. Soc.* 177-186, **70** (2005).
8. V. Maksimović, **M. Mojović**, Ž. Vučinić, Monosaccharide-H_2O_2 reactions as a source of glycolate and their stimulation by hydroxyl radicals. *Carbohydrate Research* 2360-2369, **341** (2006).
9. **Mojović M**, Spasojević I, Spasić M, Bačić G. Fenton reaction produces hydrogen atom $^{\bullet}H$ in chemical and biological systems. *Free Rad Res* S72 **40** (2006).
10. Spasojević I, **Mojović M**, Stević Z, Batas V, Bačić G, Spasić M, Capacity of cerebrospinal fluid to transform hydrogen peroxide – relation to neurodegenerative changes in ALS. *Free Rad. Res.* S90 **40** (2006).
11. B. Kukavica, A. Mitrovic, **M. Mojović**, S. Veljovic-Jovanovic. Effect of indole-3-acetic acid on pea root growth, peroxidase profiles and hydroxyl radical formation. *Arch. Biol. Sci*: 319-326, **59** (2007).
12. Gođevac D, Vujisic Lj, **Mojovic M**, Ignjatovic A, Spasojevic I, Vajs V, Evaluation of antioxidant capacity of Allium ursinum L. volatile oil and its effect on membrane fluidity. *Food Chemistry*: 1692-1700, **107** (2008).
13. Miloš R. Filipović, Katharina Duerr, **Miloš Mojović**, Vladica Simeunović, Robert Zimmermann, Vesna Niketić, Ivana Ivanović-Burmazović, NO Dismutase Activity of Seven-Coordinate Manganese(II) Pentaazamacrocyclic Complexes. *Angew. Chem. Int. Ed.* 8735 –8739, **47** (2008).
14. G Bačić, Ivan Spasojevic, B. Šećerov, **M. Mojović,** Spin-trapping of oxygen free radicals in chemical and biological systems: New traps, radicals and possibilities. *Spectrochim Acta A* 1354-1366, **69** (2008).
15. J. Bogdanović, **M. Mojović**,· N. Milosavić, A. Mitrović, Ž. Vučinić, I. Spasojević. Role of fructose in the adaptation of plants to cold-induced oxidative stress. *Eur Biophys J.* 1241–1246, **37** (2008).
16. Ivan Spasojevic, **Milos Mojovic**, Dusko Blagojevic, Snezana D Spasic, David R Jones, Aleksandra Nikolic-Kokic, Mihajlo B Spasic. Relevance of the capacity of phosphorylated fructose to scavenge hydroxyl radical. *Carbohydrate Research.* 80–84, **344** (2009).
17. Gordana Ćirić-Marjanovic, Vera Dondur, Maja Milojević, **Miloš Mojović**, Slavko Mentus, Aleksandra Radulović, Zorica Vuković, Jaroslav Stejskal. Synthesis and Characterization

of Conducting Self-Assembled Polyaniline Nanotubes/Zeolite Nanocomposite. *Langmuir* 3122-3131, **25** (2009).

18. Biljana Kukavica, **Miloš Mojović**, Željko Vucinic, Vuk Maksimovic, Umeo Takahama and Sonja Veljovic Jovanovic. Generation of Hydroxyl Radical in Isolated Pea Root Cell Wall, and the Role of Cell Wall-Bound Peroxidase, Mn-SOD and Phenolics in Their Production. *Plant Cell Physiol*. 304–317, **50(2)** (2009).
19. Jelena Živković, Zoran Zeković, Ibrahim Mujić, Dejan Gođevac, **Miloš Mojović**, Aida Mujić, Ivan Spasojević. EPR Spin-Trapping and Spin-Probing Spectroscopy in Assessing Antioxidant Properties: Example on Extracts of Catkin, Leaves, and Spiny Burs of Castanea sativa. *Food Biophysics.* 126-133, **4** (2009).
20. Gordana Ćiric-Marjanović, Ljiljana Dragicević, Maja Milojević, **Miloš Mojović**, Slavko Mentus, Biljana Dojcinović, Budimir Marjanović and Jaroslav Stejskal, Synthesis and Characterization of Self-Assembled Polyaniline Nanotubes/Silica Nanocomposites. *J. Phys. Chem. B* 7116-7127, **113** (2009).
21. Filipovic Milos R, Koh A, Arbault S, Amatore C, **Mojovic Milos D**, Niketic Vesna P, Ivanovic-Burmazovic Ivana S, A new way to strike the inflammation from both sides: superoxide dismutase mimics as nitric oxide dismutases (Meeting Abstract) *Free Rad. Res.* 51-52, **43** (2009).
22. Danijela Kojic, Ivan Spasojevic, **Miloš Mojović**, Duško Blagojevic, M. Roger Worland, Gordana Grubor-Lajsic, Mihajlo B. Spasic. Potential role of hydrogen peroxide and melanin in the cold hardiness of Ostrinia nubilalis (Lepidoptera: Pyralidae). *Eur. J. Entomol.* 451–454, **106(3)** (2009).
23. Marko Daković, **Miloš Mojović**, Goran Bačić. EPR study of the production of OH radicals in aqueous solutions of uranium irradiated by ultraviolet light. *J. Serb. Chem. Soc.* 651–661, **74** (2009).
24. **Miloš Mojović**, Marko Daković, Predrag Banković, Zorica Mojović. Paramagnetic pillared bentonites - The new digestive tract MRI contrast agents. *Appl. Clay Sci.* 191-194, **48** (2010).
25. Filis Morina, Ljubinko Jovanović, **Miloš Mojović**, Marija Vidovica, Dejana Panković and Sonja Veljović Jovanovic, Zinc-induced oxidative stress in *Verbascum Thapsus* is caused by an accumulation of reactive oxygen species and quinhydrone in the cell wall. *Physiologia Plantarum*. 209–224, **140** (2010).
26. Ivan Spasojević, **Miloš Mojović**, Zorica Stević, Snežana D. Spasić, David R. Jones, Arian Morina, Mihajlo B. Spasić. Bioavailability and catalytic properties of copper and iron for Fenton chemistry in human cerebrospinal fluid. *Redox Report* 29-35, **15** (2010).
27. **Miloš Mojović**, Marko Daković, Mia Omerašević, Zorica Mojović, Predrag Banković, Aleksandra Milutinović-Nikolić and Dušan Jovanović. The paramagnetic pillared bentonites as digestive tract MRI contrast agents. *Int. J. Mod. Phys. B* 780-787, **24** (2010).
28. Dragomir R. Stanisavljev, Maja C. Milenković, **Miloš D. Mojović** and Ana D. Popović-Bijelić, A Potential Source of Free Radicals in Iodine-Based Chemical Oscillators. *J. Phys. Chem. A* 2247–2249, **115** (2011).
29. Dragomir R. Stanisavljev, Maja C. Milenković, **Miloš D. Mojović**, Ana D. Popović-Bijelić, Oxygen Centered Radicals in Iodine Chemical Oscillators, *J. Phys. Chem. A,* 7955–7958, **115** (2011).
30. A. Rakić, D. Bajuk-Bogdanović, **M. Mojović**, G. Ćirić-Marjanović, M. Milojević -Rakić, S. Mentus, B. Marjanović, M. Trchovac, J. Stejskal, Oxidation of aniline in dopant-free template-free dilute reaction media, *Materials Chemistry and Physics* 501–510, **127** (2011).

31. Ivan Spasojević, **Miloš Mojović**, Aleksandar Ignjatović, Goran Bačić, The role of EPR spectroscopy in studying of oxidative status of biological systems and antioxidative properties of various compounds. *J. Serb. Chem. Soc.* 647–677, **76** (2011).
32. B. Marjanović, I. Juranić, G. Ćirić-Marjanović, **M. Mojović**, I. Pašti, A. Janošević, M. Trchová, P. Holler, J. Horský, Chemical oxidative polymerization of ethacridine, *Reactive & Functional Polymers* 25–35, **72** (2012).
33. Jelena Dragišić Maksimović, **Miloš Mojović**, Vuk Maksimović, Volker Römheld and Miroslav Nikolić, Silicon ameliorates manganese toxicity in cucumber by decreasing hydroxyl radical accumulation in the leaf apoplast, *J. Exp. Bot,* doi:10.1093/jxb/err359 (2012).
34. Aleksandar G. Savić, **Miloš Mojović**, Free Radicals Identification from the Complex EPR Signals by Applying Higher Order Statistics, *Anal. Chem.* dx.doi.org/ 10.1021/ ac300200y (2012).
35. Jasmina M. Dimitrić Marković, Zoran S. Marković, Igor A. Pašti, Tanja P. Brdarić, Ana Popović-Bijelić and **Miloš Mojović**, A joint application of spectroscopic, electrochemical and theoretical approaches in evaluation of the radical scavenging activity of 3-OH flavones and their iron complexes towards different radical species, *Dalton Transactions,* DOI: 10.1039/c2dt30220a (2012).