

PERSONAL INFORMATION



Mirela Planinić

📍 Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek, Franje Kuhača 18, 31000 Osijek, Croatia

☎ +385 31 224 398

✉ mirela.planinic@ptfos.hr

🌐 www.ptfos.unios.hr
<http://www.ptfos.unios.hr/index.php/nastavno-osoblje/prof-dr-sc-mirela-planinic>

Scientific database:

ORCID: <https://orcid.org/0000-0003-3752-5989>

CroRIS: <https://www.croris.hr/osobe/profil/4605>

Google znalac: <https://scholar.google.hr/citations?user=VrX8CuQAAAAJ&hl=hr&oi=ao>

Sex F | Date of birth 14/11/1970 | Nationality Croatian

WORK EXPERIENCE

01/06/2024 – onward	Full professor (tenure) Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
24/04/2019 – 31/05/2024	Full professor Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
01/10/2010 – 30/10/2017	Vice-Dean for education Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
31/10/2013 – 23/04/2019	Associate professor Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
18/12/2008 – 29/10/2013	Assistant professor Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
05/07/1999 – 17/12/2008	Assistant Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
Business or sector	Science and higher education

EDUCATION AND TRAINING

21/11/2018	General Course on Intellectual Property The State Intellectual Property Office of the Republic of Croatia (SIPO) and WIPO Academy
08/12/2010	CIEH trainer (Level 3 Award in Training Skills and Practice) Chartered Institute of Environmental Health, London, UK
11/04/2008	PhD in Biotechnical Science, Food Technology, Engineering Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek
22/07/1998	MSc of Food Technology, Food Engineering Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek

PERSONAL SKILLS

Mother tongue(s) Croatian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B1	B1	B1

Organisational / managerial skills

- Head of Sub-department of Mechanical, Thermal and Separation Processes, 2021 - onward
- Head of Postgraduate University Study "Food Technology and Nutrition", 2018 - 2022
- Vice-Dean for education, 01/10/2010 – 30/10/2017
- Member of the Scientific and Organizing Committee of International Scientific and Professional Conference „Ružička Days“ (2010, 2014, 2016)
- Vice-President of organizing committee of International congress "Flour-Bread" (2011, 2013, 2015)
- Member of Organization Board of International congress "Flour-Bread" (2009, 2017)
- Member of Scientific Board of International congress "Flour-Bread" (2019)
- Member of International Scientific Committee of European Biotechnology Congress, EuroBiotech 2019 (2019)
- Member of Secretariat of International congress "Flour-Bread" (1999, 2001, 2003, 2007)
- Member of Editorial Board of journal *Food in Health and Disease*, 2012 (University of Tuzla and Faculty of Food Technology Osijek)

Nagrade / priznanja

- Award for Academic Achievements, granted by Faculty of Food Technology Osijek (2021)
- Certificate of Appreciation for the successful organization of the 7th International Congress „Flour-Bread '13“, granted by ICC (International Association of Cereal Science and Technology) (2013)
- Certificate of Appreciation for the successful organization of the 6th International Congress „Flour-Bread '11“, granted by ICC (International Association of Cereal Science and Technology) (2011)

Computer skills

- command of Microsoft Office™ tools, CorelDraw, Statistica and Design Expert

Driving licence

- B

ADDITIONAL INFORMATION

Projects

Leader of EU project:

"Bioconversion of lignocellulosic materials to value added feed" (Bio4Feed), funded by European regional development fund (ERDF); project duration: 20/12/2019 – 20/06/2023

Associate in EU project:

"Development of a lifelong learning program in the field of food technology, biotechnology and nutrition through the implementation of the Croatian Qualifications Framework", funded by European social fund (ESF); 2019 – 2022

"Improvement of study programs in the biotechnical field according to the Croatian Qualifications Framework" funded by European social fund (ESF); 2015 – 2017

"Development of innovative process of agricultural waste biological treatment in biogas production – ProBioTech" funded by European regional development fund (ERDF); 2014 – 2016

Associate in national scientific projects:

"Development of a sustainable integrated process for the production of bioactive isolates from food industry residues; Croatian Science Foundation"; 2018 – 2022

"Development of integrated micro-system based biocatalytic process for biodiesel production"; foundation source: Croatian Science Foundation; 2017 – 2021

"Influence of biological treatment of grape pomace on extraction of polyphenols" funded by Josip Josip Juraj Strossmayer University of Osijek (2013-2014)

"Modelling and simulation of drying and extraction processes in food processing" funded by the Ministry of Science, Education and Sports, Republic of Croatia (2007-2014)

"Modern methods of drying in food processing engineering" funded by the Ministry of Science, Education and Sports, Republic of Croatia (2002-2006)

VIP project "Drying Slavonic indigenous and organic products" funded by Ministry of Agriculture, Republic of Croatia (2004-2006)

Selected scientific papers

- Perković, Gabriela; Planinić, Mirela; Šelo, Gordana; Martinović, Josipa; Nedić, Radenko; Puš, Matej; Bucić-Kojić, Ana. Optimisation of the Encapsulation of Grape Pomace Extract by Spray Drying Using Goat Whey Protein as a Coating Material. *Coatings*, 14 (2024), 9; 1101, 17. doi: 10.3390/coatings14091101
- Selo, Gordana; Planinic, Mirela; Tisma, Marina; Klaric, Ana-Marija; Bucic-Kojic, Ana. Effects of Fungal Solid-State Fermentation on the Profile of Phenolic Compounds and on the Nutritional Properties of Grape Pomace. *Microorganisms*, 12 (2024) 1310; doi: 10.3390/microorganisms12071310.
- Martinovic, Josipa; Ambrus, Rita; Planinic, Mirela; Selo, Gordana; Klaric, Ana-Marija; Perkovic, Gabriela; Bucic-Kojic, Ana. Microencapsulation of Grape Pomace Extracts with Alginate-Based Coatings by Freeze-Drying: Release Kinetics and In Vitro Bioaccessibility Assessment of Phenolic Compounds. *GELS*, 10 (2024) 353; doi: 10.3390/gels10060353
- Perkovic, Gabriela; Martinovic, Josipa; Selo, Gordana; Bucic-Kojic, Ana; Planinic, Mirela; Ambrus, Rita. Characterization of Grape Pomace Extract Microcapsules: The Influence of Carbohydrate Co-Coating on the Stabilization of Goat Whey Protein as a Primary Coating. *Foods*, 13 (2024) 1346. doi: 10.3390/foods13091346
- Martinović, Josipa; Lukinac, Jasmina; Jukić, Marko; Ambrus, Rita; Planinić, Mirela; Šelo, Gordana; Klarić, Ana-Marija; Perković, Gabriela; Bucić-Kojić, Ana. Physicochemical Characterization and Evaluation of Gastrointestinal In Vitro Behavior of Alginate-Based Microbeads with Encapsulated Grape Pomace Extracts. *Pharmaceutics*, 15 (2023); doi:10.3390/pharmaceutics15030980.
- Martinović, Josipa; Lukinac, Jasmina; Jukić, Marko; Ambrus, Rita; Planinić, Mirela; Šelo, Gordana; Klarić, Ana-Marija; Perković, Gabriela; Bucić-Kojić, Ana. In Vitro Bioaccessibility Assessment of Phenolic Compounds from Encapsulated Grape Pomace Extract by Ionic Gelation. *Molecules*, 28 (2023); doi: 10.3390/molecules28135285
- Martinović, Josipa; Lukinac, Jasmina; Jukić, Marko; Ambrus Rita; Planinić, Mirela; Šelo, Gordana; Perković, Gabriela; Bucić-Kojić, Ana. The Release of Grape Pomace Phenolics from Alginate-Based Microbeads during Simulated Digestion In Vitro: The Influence of Coatings and Drying Method. *Gels*, 9 (2023)., doi: 10.3390/gels9110870
- Šelo, Gordana; Planinić, Mirela; Tišma, Marina; Martinović Josipa; Perković, Gabriela; Bucić-Kojić, Ana. Bioconversion of Grape Pomace with *Rhizopus oryzae* under Solid-State Conditions: Changes in the Chemical Composition and Profile of Phenolic Compound, *Microorganisms*, 11 (2023), doi:10.3390/microorganisms11040956.
- Mišković Špoljarić, Katarina; Šelo, Gordana; Pešut, Ena; Martinović, Josipa; Planinić, Mirela; Tišma, Marina; Bucić-Kojić, Ana. Antioxidant and antiproliferative potentials of phenolic-rich extracts from biotransformed grape pomace in colorectal Cancer. *BMC Complementary Medicine and Therapies*, 23 (2023); doi:10.1186/s12906-023-03852-w
- Zeko-Pivac, Andela; Bosnjakovic, Anja; Planinic, Mirela; Vukovic, Jelena Parlov; Novak, Predrag; Jednacak, Tomislav; Tisma, Marina. Improvement of the Nutraceutical Profile of Brewer's Spent Grain after Treatment with *Trametes versicolor*. *Microorganisms*, 10 (2022) 2295; doi: 10.3390/microorganisms10112295
- Zeko-Pivač A., Tišma M., Žnidaršič-Plazl P., Kulisić B., Sakellaris G., Hao J., Planinić M. The Potential of Brewer's Spent Grain in the Circular Bioeconomy: State of the Art and Future Perspectives. *Frontiers in Bioengineering and Biotechnology*, 10 (2022) 870744; doi: 10.3389/fbioe.2022.870744
- Šelo G., Planinić M., Tišma M., Grgić J., Perković G., Kočeva Komlenić, D., Bucić-Kojić A. A Comparative Study of the Influence of Various Fungal-Based Pretreatments of Grape Pomace on Phenolic Compounds Recovery. *Foods*, 11 (2022) 1665; doi: 10.3390/foods11111665
- Tisma, Marina; Znidarsic-Plazl, Polona; Selo, Gordana; Tolj, Ivana; Speranda, Marcela; Bucic-Kojic, Ana; Planinic, Mirela. *Trametes versicolor* in lignocellulose-based bioeconomy: State of the art, challenges and opportunities. *Bioresource Technology*, 330 (2021) 124997. doi: 10.1016/j.biortech.2021.124997
- Simic, Gordana; Lalic, Alojzije; Horvat, Daniela; Zdunic, Zvonimir; Kočeva Komlenic, Daliborka; Bucic-Kojic, Ana; Planinic, Mirela; Tisma, Marina. Production and analysis of the flour from the hull-less barley. *Journal of Food Measurement and Characterization*. 15 (2021) 2679-2687. doi: 10.1007/s11694-021-00857-2
- Pavlovic, Stefan; Selo, Gordana; Marinkovic, Dalibor; Planinic, Mirela; Tisma, Marina;

- Stankovic, Miroslav. Transesterification of Sunflower Oil over Waste Chicken Eggshell-Based Catalyst in a Microreactor: An Optimization Study. *Micromachines*, 11 (2021) 120. doi: 10.3390/mi12020120
- Šelo G., Planinić M., Tišma M., Tomas S., Koceva Komlenić D., Bucić-Kojić, A.. A Comprehensive Review on Valorization of Agro-Food Industrial Residues by Solid-State Fermentation. *Foods*, 10 (2021) doi:10.3390/foods10050927
- Grgić J., Šelo G., Planinić M., Tišma M., Bucić-Kojić A.. Role of the Encapsulation in Bioavailability of Phenolic Compounds. *Antioxidants*, 9 (2020), 10; doi:10.3390/antiox9100923
- Tišma M, Šalić A, Planinić M, Zelić B, Potočnik M, Šelo G, Bucić-Kojić A. Production, characterisation and immobilization of laccase for an efficient aniline-based dye decolourization. *Journal of Water Process Engineering* 36 (2020), 101327
- Šibalić D, Planinić M, Jurić A, Bucić-Kojić A, Tišma M. Analysis of phenolic compounds in beer: From raw materials to the final product. *Chemical Papers* (2020); doi: 10.1007/s11696-020-01276-1
- Bucić-Kojić A, Fernandes F, Silva T, Planinić M, Tišma M, Šelo G, Šibalić D, Pereira DM, Andrade PB. Enhancement of the anti-inflammatory properties of grape pomace treated by *Trametes versicolor*. *Food & Function*, 11 (2020), 680-688
- Tišma M, Planinić M, Bucić-Kojić A, Panjičko M, Zupančič DG, Zelić B. Corn silage fungal-based solid-state pretreatment for enhanced biogas production in anaerobic co-digestion with cow manure. *Bioresource Technology*, 253 (2018), 220-226
- Tisma, Marina; Juric, Anita; Bucic-Kojic, Ana; Panjicko, Mario; Planinic, Mirela. Biovalorization of brewers' spent grain for the production of laccase and polyphenols. *Journal of The Institute of Brewing*. 124 (2018) 182-186. doi: 10.1002/jib.479
- Bucić-Kojić A, Šelo G, Zelić B, Planinić M, Tišma, M. Recovery of phenolic acids and enzymes production from corn silage biologically treated by *Trametes versicolor*. *Applied Biochemistry and Biotechnology*, 181 (2017) 948-960
- Planinić M, Zelić B, Čubel I, Bucić-Kojić A, Tišma M. Corn forage biological pretreatment by *Trametes versicolor* in a tray bioreactor. *Waste Management & Research*, 34 (2016) 802-809
- Bucić-Kojić A, Casazza Alessandro A, Strelec I, Paini M, Planinić M, Perego P. Influence of High-Pressure/High-Temperature Extraction on the Recovery of Phenolic Compounds from Barley Grains. *Journal of Food Biochemistry*. 39 (2015) 696-707
- Planinić M, Aliakbarian B., Perego P, Greganić K, Tomas S, Bucić-Kojić A. Influence of Temperature and Drying Time on Extraction Yield of Phenolic Compounds from Grape Pomace Variety "Portogizac". *Chemical and Biochemical Engineering Quarterly*. 29 (2015) 343-350
- Bucić-Kojić A, Sovová H, Planinić M, Tomas S. Temperature-dependent kinetics of grape seed phenolic compounds extraction: Experiment and model. *Food Chemistry*, 136 (2013), 1136-1140
- Bucić-Kojić A, Planinić M, Tomas S, Jakobek L, Šeruga M. Influence of solvent and temperature on extraction of total polyphenols, individual polyphenols and proanthocyanidins from grape seed and antioxidant activity. *International Journal of Food Science and Technology*. 44(2009) 2394-2400
- Bucić-Kojić A, Planinić, M, Tomas S, Bilić M, Velić, D. Study of solid-liquid extraction kinetics of total polyphenols from grape seeds. *Journal of Food Engineering* 81 (2007), 236-242
- Planinić M., Velić D., Tomas S., Bilić M., Bucić A. Modelling of drying and rehydration of carrots using Peleg's model. *European Food Research and Technology* 221 (3-4), 446-451 (2005)