

Petra Matić

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Sex Female | Date of birth 22/5/1985

RESEARCH DATABASES

WOS <https://www.webofscience.com/wos/woscc/summary/b5458d27-61e9-49c3-a557-08b925031d17-0105ca988a/relevance/1>
ORCID <https://orcid.org/0000-0003-0804-1280>
SCOPUS <https://www-scopus-com.ezproxy.nsk.hr/authid/detail.uri?authorId=57200195198>
GOOGLE ZNALAC <https://scholar.google.com/citations?user=GHG0cL4AAAAAJ&oe=CP1251>
CROSB/CROCRIS <https://crosis.hr/crosbi/searchByContext/2/31960>

WORK EXPERIENCE

22.9.2021. Senior assistant
Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek

3.3.2014.-22.9.2021. Assistant
Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek

9.04.2013. – 28.02.2014. Laboratory - chemist
Meggle d.o.o. Croatia

1.05.2011. – 1.05.1012 Technologist probationer
Eurovoće Orahovica

EDUCATION

2014.-2021. **PhD, Natural sciences, Chemistry**
University of Zagreb, Faculty of Chemical Engineering and Technology,

1.7.2010. **BSc, Food technology**
Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek

RESEARCH INTERESTS

- Studies of adsorption processes.
- Application of adsorption isotherms.
- Kinetics and thermodynamics of the adsorption process.
- Identification and quantification of compounds using HPLC and UV/Vis techniques.
- Studies of antioxidant activity.
- Studies of the interactions of polyphenols and dietary fibers.

Organisational / managerial skills

Work on the polarization of the profession:
Member of the Science Festival co-organization team (2015, 2016, 2017),
Participation in the faculty presentation at the University Review (2015, 2016, 2017).
Reviewer in journals.
Member of the Technical Editorial Board of the *Croatian Journal of Food Science and Technology*.

Editorial Board of Scientific Journals

Member of the Technical Editorial Board of the *Croatian Journal of Food Science and Technology* (since 2023. -)

Talks and Invited Lectures

Plenary invited talk „Phenolic compounds in the digestive system: their potential beneficial effects and interactions with dietary fibers“, 3rd Food Chemistry Conference, Shaping a Healthy and Sustainable Food Chain Through Knowledge, Dresden, Germany, 10.-12.10.2023., organizer Elsevier journal Food Chemistry.

Electrochemical and spectrophotometric determination of total polyphenol content in Croatian ancient apple varieties, 7th ISE Satellite Student Regional Symposium on Electrochemistry, Zagreb, Croatia, 7.7.2017.

Adsorption of polyphenols from apples onto β -glucan, 9th International Scientific and Professional Conference "With food to health", Osijek, Croatia, 13.10.2016.

PUBLICATIONS
THE MOST RELEVANT
PUBLICATIONS

Jakobek, L., Matić, P. (2019). Non-covalent dietary fiber - polyphenol interactions and their influence on polyphenol bioaccessibility. Trends in Food Science & Technology, 83, 235-247.

Impact factor 15,3

Jakobek, L., Ištuk, J., Matić, P., Skendrović Babojelić, M. (2021). Interactions of polyphenols from traditional apple varieties 'bobovac', 'ljepocvjetka' and 'crvenka' with β -glucan during in vitro simulated digestion. Food Chemistry, 363, 130283.

Impact factor 8,8

Jakobek, L., Pöc, K., Valenteković, M., Matić, P. (2024). The Behavior of Chlorogenic Acids from Apples during Simulated Gastrointestinal Digestion, Foods, 13, 693.

Impact factor=4,7

Jakobek, L., Matić, P. (2024). Phenolic compounds from apples: From natural fruits to the beneficial effects in the digestive system. Molecules, 29(3), 568, 19.

Impact factor 4,6

Jakobek, L., Strelec, I., Kenjerić, D., Šoher, L., Tomac, I., Matić, P. (2022). Simulated gastric and intestinal fluid electrolyte solutions as an environment for the adsorption of apple polyphenols onto β -Glucan. Molecules, 27(19), 6683, 14.

Impact factor 4,6

Matić, P., Ukić, Š., Jakobek, L. (2024). Adsorption of Procyanidins B1 and B2 onto β -Glucan: Adsorption Isotherms and Thermodynamics. Adsorption 30, 1303-1313.

Impact factor=3,0

Jakobek, L., Ištuk, J., Barron, A.R., Matić, P. (2023). Bioactive phenolic compounds from apples during simulated in vitro gastrointestinal digestion: kinetics of their release, Applied Sciences, 13, 8434

Impact factor=2,8

Matić, P., Ukić, Š., Jakobek, L. (2021). Interactions of phenolic acids and β -glucan: studies of adsorption isotherms and thermodynamics. Chemical and Biochemical Engineering Quarterly 35, 177-187. Impact factor =1,582

Matić, P., Sabljic, M., Jakobek, L. (2017). Validation of spectrophotometric methods for the determination of total polyphenols and total flavonoid content. Journal of AOAC International, 100, 6; 1795-1803.

Impact factor=1,087

Matić, P., Ukić, Š., Jakobek, L. (2022). The study of adsorption kinetics of flavan-3-ols, dihydrochalcones and anthocyanins onto barley β -glucan. Croatica Chemica Acta 2022, 95 (1), 7-13.

Impact factor=0,7

Projects

Participation on the project:

- project "Development of environmentally friendly materials: Biodegradable and active polymer film", funded by Adris Foundation (10.2023.–10.2024.)
- project "Potential of elderberry and aronia as raw materials for value added products on family farms in Osijek-Baranya County", funded by Osijek-Baranya County (12.2020.-12.2021.)
- project "Examination of important bioactive substances from agricultural products from the farms of Osijek-Baranjska County", funded by Osijek-Baranya County (12.2021-12.2022).
- project „Dihydrochalcones in old apple varieties“, funded by Osijek-Baranya County (12.2018.-12.2019.)
- research project IP-2016-06-6777 „The influence of dietary fibers on polyphenol bioaccessibility by studying adsorption and simulated digestion processes, *in vitro*“, funded by Croatian Science Foundation (1.3.2017. –28.2.2021.)
- project „Nutritional properties of old, neglected apple cultivars from Slavonia region, important for their preservation“, funded by Adris Foundation (10.2015.-10.2016.)

- Workshops** How to publish your article in a research journal?" organized by the Faculty of Chemical Engineering and Technology. (January 29-30, 2016).
- "Pedagogical competences" organized by the Faculty of Educational Sciences of Jurje Dobrila University in Pula. (February 14-18, 2022).
- Honours and awards** Diploma for winning a silver medal at the Third International Exhibition of Inventions, prototypes and business plans, 2007.