



Europass
Europass
Curriculum Vitae



Personal information

First name(s) / Surname(s) **CĂLINOIU (MUREȘAN), Lavinia-Florina**

Address(es)

Telephone(s)

E-mail(s)

Nationality

Date of birth

Gender

Work experience

Occupation or position held

Name and address of employer

Dates

01.06.2022 – present

12.01.2021 - present

01.10.2020 – present

01.10.2016 – present

01.10.2016 – 16.12.2019

16.09.2014 – 30.06.2015

01.03.2014 – 15.09.2014

Research project director for stimulating young independent teams, project no. TE7/2022, project title "In situ fortification of vitamin B12 in cereal by products". Acronym: B12

Evaluator board member for Malta Council for Science and Technology (MCST)

Assistant Professor, Faculty of Food Science and Technology, Department of Food Science, Disciplines Food Biotechnology, Food Chemistry, University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca

Research Assistant, Field: Food Biotechnology, Institute of Life Sciences, University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca

PhD Student, Department of Food Science, Field: Food Biotechnology, University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca.

European Project Manager – FP7 PLEASURE
S.C TRITECC S.R.L - Transylvanian Innovations and Technologies Center, Cluj-Napoca, Romania

European Assistant Project Manager – FP7 OPTIFEL
CENTIV GmbH, Bremen, Germany

Education and training

Dates

2016 October - 2019 December

2013 October - 2015 June

2009 October - 2013 June

2012 September - 2013 March

Title of qualification awarded

Name and type of organisation providing education and training	PhD Diploma, Field: Food Biotechnology Master's Degree, Field: Food Quality Management Food Engineering Diploma (Bachelor's Degree) Erasmus student Diploma – Wageningen University Diploma Head of Promotion
	Faculty of Food Science and Technology, Food Quality Management Program, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Faculty of Food Science and Technology, Specialization: Control and Expertise of Food Products, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca Wageningen University, The Netherlands (Disciplines: Food related allergies and intolerances, Molecular gastronomy, Food Quality Management 1 and 2, Food Consumers and Preferences).
Skills and qualifications Scholarship, Course, Seminar, Training ,Workshop	Training for the future: innovative design methods to advance agri-food education, 20th of June, 2024 (Geek4Food project) 2nd FEEDACTIV Workshop, 01st of June 2024, UoA, Mytilene, Lesbos Island, Greece 1st FEEDACTIV Workshop, 29th of September 2023, USAMV Cluj-Napoca, Romania 2nd FRIETS Workshop, 29th of September 2023, USAMV Cluj-Napoca, Romania Sensorial Analysis/Food Safety and Quality Workshop, Miguel Hernández University, Agro-Food Technology Department, ORIHUELA, Alicante, Spain, 16th -20th of October 2019 October 2018. Seminar HPLC Troubleshooting by Phenomenex, Cluj-Napoca, Romania June 2018. Certificate of Attendance, Presentation and Scholarship in the EurSafe Congress „Professionals in Food Chains: Ethics, Roles and Responsibilities”, Vienna, Austria May 2018. Internship „Chromatography – HPLC, GC-MS, LC-MS/MS techniques”, SCIENT – CROMATEC PLUS, Bucharest, Romania March 2018 – March 2019. Though for Food (TFF) Ambassador November 2016. Romania Top Talents – one of the 100 selected finalists as a talented student from Romania July 2015. Finalist within POSDRU project „Imbunatatirea calitatii sistemului national de invatamant superior in conformitate cu schimbarile societatii bazate pe cunoastere si cu dinamica pietei muncii” May 2015. Romania Top Talents – one of the 100 selected finalists as a talented student from Romania March 2014 – September 2014. Erasmus Placement Mobility at Centiv GmbH, Bremen, Germany; May 2013. Certificate of Internal Auditor on the Food Safety System (HACCP); April 2013. 1st Place at Student Scientific Session U.S.A.M.V. 2013, section Food science and technology, Title of paper - Reformulating the Molecular Structure of Caprese Salad; September 2012 – March 2013. Erasmus Study Mobility at Wageningen University, The Netherlands Diploma of participation at the Student Scientific Session U.S.A.M.V 2012, section Food science and Technology, Title of paper - Molecular Cocktails; Diploma of participation at the Student Scientific Session U.S.A.M.V 2011, section Food science and Technology, Title of paper - Experimental Design of a New Functional Food; Diploma of participation at the Student Scientific Session U.S.A.M.V 2010, section Food science and Technology, Title of paper – Probiotic and Prebiotic Yoghurts; Performance Diploma for exceptional results in studying - every year of faculty; Graduation Degree of the pedagogical module;
List of Relevant Publications	34 publications (4 highly cited paper, 1 hot paper according to WOS) Nemes, S. A., Fărcas, A. C., Ranga, F., Teleky, B. E., Călinoiu, L. F., Dulf, F. V., & Vodnar, D. C. (2024). Enhancing phenolic and lipid compound production in oat bran via acid pretreatment and solid-state fermentation with <i>Aspergillus niger</i>. <i>New Biotechnology</i>. NEMES, S. A., TELEKY, B. E., RANGA, F., CĂLINOIU, L. F., ODOCHEANU, R., DULF, F. V., & VODNAR, D. C. (2024). Enhancing nutritional quality and bioactivity of wheat bran through acid and alkaline pretreatments. <i>Journal of Cereal Science</i>, 103979. Ștefănescu, B. E., Socaci, S. A., Fărcaș, A. C., Nemeș, S. A., Teleky, B. E., Martău, G. A., Călinoiu, L. F.* & Socaciu, C. (2024). Characterization of the Chemical Composition and Biological Activities

of Bog Bilberry (*Vaccinium uliginosum* L.) Leaf Extracts Obtained via Various Extraction Techniques. *Foods*, 13(2), 258.- *corresponding author

Plamada, D., Teleky, B. E., Nemes, S. A., Mitrea, L., Szabo, K., **Călinoiu, L. F.***, ... & Nătescu, M. (2023). Plant-Based Dairy Alternatives—A Future Direction to the Milky Way. *Foods*, 12(9), 1883. *corresponding author

Szabo, K., Mitrea, L., **Călinoiu, L. F.**, Teleky, B. E., Martău, G. A., Plamada, D., ... & Vodnar, D. C. (2022). Natural Polyphenol Recovery from Apple-, Cereal-, and Tomato-Processing By-Products and Related Health-Promoting Properties. *Molecules*, 27(22), 7977.

Mitrea, L., **Călinoiu, L. F.**, Teleky, B. E., Szabo, K., Martău, A. G., Ștefănescu, B. E., ... & Vodnar, D. C. (2022). Waste cooking oil and crude glycerol as efficient renewable biomass for the production of platform organic chemicals through oleophilic yeast strain of *Yarrowia lipolytica*. *Environmental Technology & Innovation*, 28, 102943.

Nemes, S. A., **Călinoiu, L. F.**, Dulf, F.V., Fărcaș, A.C. and Vodnar, D. C., Integrated Technology for Cereal Bran Valorization: Perspectives for a Sustainable Industrial Approach, *Antioxidants* 2022, 11(11), 2159; <https://doi.org/10.3390/antiox11112159>

Vodnar, D. C., **Calinoiu, L. F.**, & Mitrea, L. (2022). Exploiting the effect of dietary fibre on the gut microbiota in patients with pelvic radiotherapy. *British Journal of Cancer*, 1-2.

Teleky, B. E., Mitrea, L., Plamada, D., Nemes, S. A., **Călinoiu, L. F.**, Pascuta, M. S., ... & Vodnar, D. C. (2022). Development of Pectin and Poly (vinyl alcohol)-Based Active Packaging Enriched with Itaconic Acid and Apple Pomace-Derived Antioxidants. *Antioxidants*, 11(9), 1729.

Pascuta, M. S., Varvara, R. A., Teleky, B. E., Szabo, K., Plamada, D., Nemeș, S. A., Mitrea, L., Martău, G.A., Ciont, C., **Călinoiu, L.F.**, Barta, G. & Vodnar, D. C. (2022). Polysaccharide-Based Edible Gels as Functional Ingredients: Characterization, Applicability, and Human Health Benefits. *Gels*, 8(8), 524.

Clapa, D., Nemeș, S. A., Ranga, F., Hârta, M., Vodnar, D. C., & **Călinoiu, L. F.*** (2022). Micropropagation of *Vaccinium corymbosum* L.: An Alternative Procedure for the Production of Secondary Metabolites. *Horticulturae*, 8(6), 480.

Ștefănescu, B. E., Nemes, S. A., Teleky, B. E., **Călinoiu, L. F.**, Mitrea, L., Martău, G. A., ... & Crișan, G. (2022). Microencapsulation and Bioaccessibility of Phenolic Compounds of *Vaccinium* Leaf Extracts. *Antioxidants*, 11(4), 674.

Mitrea, L., **Călinoiu, L. F.**, Teleky, B. E., Szabo, K., Martău, A. G., Ștefănescu, B. E., ... & Vodnar, D. C. (2022). Succinic and citric acids production from renewable biomass (waste cooking oil and crude glycerol) through oleophilic yeast strain of *Yarrowia lipolytica* ATCC 20177.

SIMON, E.; **CĂLINOIU, L.F.**; MITREA, L.; VODNAR, D.C. Probiotics, Prebiotics, and Synbiotics: Implications and Beneficial Effects against Irritable Bowel Syndrome. *Nutrients* **2021**, 13, 2112. <https://doi.org/10.3390/nu13062112> (highly cited paper)

MARTĂU, G. A.¹, **CĂLINOIU, L. F.¹**, & VODNAR, D. C. Bio-vanillin: Towards a sustainable industrial production. *Trends in Food Science & Technology*. **2021**. (¹ Authors have an equal contribution.) (highly cited paper)

VODNAR, D.C., MITREA, L., TELEKY, B. E., SZABO, K., **CĂLINOIU, L. F.**, NEMEȘ, S. A., MARTĂU, G. A. Coronavirus Disease (COVID-19) Caused by (SARS-CoV-2) Infections: A Real Challenge for Human Gut Microbiota. *Frontiers in Cellular and Infection Microbiology*. **2020**, 10: 786.

ȘTEFĂNESCU, B.-E., **CĂLINOIU, L.F***, RANGA, F., FETEA, F., MOCAN, A., VODNAR, D.C*, CRIȘAN, G. The Chemical and Biological Profiles of Leaves from Commercial Blueberry Varieties. *Plants* **2020**, 9, 1193. (*corresponding author)

ȘTEFĂNESCU, B.-E., **CĂLINOIU, L.F***, RANGA, F., FETEA, F., MOCAN, A., VODNAR, D. C*, CRIȘAN, G. Chemical Composition and Biological Activities of the Nord-West Romanian Wild

Bilberry (*Vaccinium myrtillus* L.) and Lingonberry (*Vaccinium vitis-idaea* L.) Leaves. *Antioxidants* **2020**, 9, 495. (*corresponding author)

MITREA, L.; **CĂLINOIU, L.F.**; MARTĂU, G.A.; SZABO, K.; TELEKY, B.E.; MUREȘAN, V.; RUSU, A.V.; SOCOL, C.T.; VODNAR, D.C*. Poly(vinyl alcohol)-Based Biofilms Plasticized with Polyols and Colored with Pigments Extracted from Tomato By-Products. *Polymers*. **2020**, 12, 532.

SZABO, K., TELEKY, B. E., MITREA, L., **CĂLINOIU, L. F.**, MARTAU, G. A., SIMON, E., ... & VODNAR, D. C. Active Packaging–Poly (Vinyl Alcohol) Films Enriched with Tomato By-Products Extract. *Coatings*, **2020**, 10(2), 141.

CĂLINOIU, L.F., VODNAR, D.C*. Thermal Processing for the Release of Phenolic Compounds from Wheat and Oat Bran. *Biomolecules* **2020**, 10, 21 (**highly cited paper**)

CĂLINOIU, L.F., CĂTOI, A.F., VODNAR, D.C. Solid-State Yeast Fermented Wheat and Oat Bran as A Route for Delivery of Antioxidants. *Antioxidants*. **2019**, 8, 372, doi:10.3390/antiox8090372

CĂLINOIU, L.F., ȘTEFĂNESCU, B.E., POP, I.D.; MUNTEAN, L.; VODNAR, D.C. Chitosan Coating Applications in Probiotic Microencapsulation. *Coatings* **2019**, 9, 194.

CĂLINOIU, L.F., VODNAR, D.C. Whole Grains and Phenolic Acids: A Review on Bioactivity, Functionality, Health Benefits and Bioavailability. *Nutrients*. **2018**, 10(11):1615 (**highly cited paper, hot paper**)

CĂLINOIU, L.F., MITREA, L., PRECUP, G., BINDEA, M., RUSU, B., SZABO, K., DULF, F. V., ȘTEFĂNESCU, B. E., VODNAR, D.C. Sustainable use of agro-industrial wastes for feeding 10 billion people by 2050. *Book Professionals in food chains*. Wageningen Academic Publishers. **2018**. 482-486.

CĂLINOIU, L.F., MITREA, L., PRECUP, G., BINDEA, M., RUSU, B., DULF, F.V., ȘTEFĂNESCU, B.E., VODNAR, D.C *. Characterization of Grape and Apple Peel Wastes' Bioactive Compounds and Their Increased Bioavailability After Exposure to Thermal Process. Bulletin UASVM Food Science and Technology. **2017**. 74(2): 80-89

CĂLINOIU, L.F., VODNAR, D.C*. PRECUP, G. The Probiotic Bacteria Viability under Different Conditions. Bulletin UASVM Food Science and Technology. **2016**, 73(2): 55-59.

VODNAR, D.C., **CĂLINOIU, L.F.**, DULF, F.V., ȘTEFĂNESCU, B.E., CRIȘAN, G., SOCACIU, C. Identification of the bioactive compounds and antioxidant, antimutagenic and antimicrobial activities of thermally processed agro-industrial waste. *Food Chemistry*. **2017**. 231: 131-140.

PRECUP, G., PĂCURAR, A.M., **CĂLINOIU, L.F.**, MITREA, L., RUSU, B., SZABO, K., BINDEA, M., ȘTEFĂNESCU, B.E., VODNAR, D.C. Ethical perspectives on molecular gastronomy: food for tomorrow or just a food fad? *Book Professionals in food chains*. Wageningen Academic Publishers. **2018**. 482-486

MITREA, L., **CĂLINOIU, L.F.**, PRECUP, G., BINDEA, M., RUSU, B., TRIF, M., ȘTEFĂNESCU, B.E., POP, I.D., VODNAR, D.C *. Isolated Microorganisms for Bioconversion of Biodiesel-Derived Glycerol Into 1,3-Propanediol. Bulletin UASVM Food Science and Technology. **2017**. 74(2): 43-49.

PRECUP, G., **CĂLINOIU, L.F.**, MITREA, L., BINDEA, M., RUSU, B., ȘTEFĂNESCU, B.E., VODNAR, D.C *. The Molecular Restructuring of Classical Desserts by Using Food Industry By-Products. Bulletin UASVM Food Science and Technology. **2017**. 74(2): 58-63.

MITREA, L., **CĂLINOIU, L.F.**, PRECUP, G., BINDEA, M., RUSU, B., TRIF, M., FERENCZI, L.J., ȘTEFĂNESCU, B.E., VODNAR, D.C. Inhibitory Potential Of Lactobacillus Plantarum on Escherichia Coli. Bulletin UASVM Food Science and Technology. **2017**. 74(20): 99-10.

BETHKE, M., **MUREȘAN (CĂLINOIU), L.**, & TRIF, M. OFTIFEL Personalized Nutritional Calculator. *Bulletin UASVM Food Science and Technology*, **2016**, 73, 2.

TRIF, M., **MUREȘAN (CĂLINOIU), L.**, & BETHKE, M. (2016). Personalised nutritional powder for elderly developed in optifel european project. *Bulletin UASVM Food Science and Technology*, 73(2),

CASEE CONFERENCE „Smart Life Sciences and Technology for Sustainable Development”, 19th – 21st June, 2024,

(i) From grain to gain: solid-state fermentation for vitamin B12 enrichment in oat bran. **Autori: L. F. Călinoiu**, R. Odochean, GA. Martău, L. Mitrea, A.S. Nemes, B.E. Teleky, D. Plamada, B.E. Ștefănescu, and D.C. Vodnar;

(ii) Enhancing Vitamin B12 Content in Wheat By-Products Through Sustainable Solid-State Fermentation: A Multi-Actor Approach for In Situ Biofortification. **Autori: Lavinia Florina CĂLINOIU**, Răzvan ODOCHEAN, Gheorghe-Adrian MARTĂU, Laura MITREA, Amalia-Silvia NEMES, Bernadette-Emoke TELEKY, Diana PLAMADA, Bianca-Eugenia ȘTEFĂNESCU, and Dan Cristian VODNAR

Simpozionul Științific Studențesc cu participare internațională Universitatea pentru Științele Vieții „ION IONESCU DE LA BRAD” din Iași. Obținerea vitaminei B12 în fermentații pe substrat solid și incorporarea ei în paste. Autori: DRĂMBĂREAN Andreea, Gheorghe-Adrian MARTĂU, Lavinia Florina MUREȘAN, Dan-Cristian VODNAR; 17-18 aprilie 2024

Optimization of vitamin B12 production by *Propionibacterium freudenreichii* on model media fermentation. **Autori: Lavinia Florina CĂLINOIU**, Laura MITREA, Gheorghe-Adrian MARTĂU, Amalia-Silvia NEMES, Bernadette-Emoke TELEKY, Bianca-Eugenia ȘTEFĂNESCU, and Dan Cristian VODNAR, The 22nd International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT", 27th– 30th September, 2023, Cluj-Napoca, Romania, Session 3: Food Science and Technology

The Influence Of Acid Pretreatment On Phenolic Compounds During Solid-State Fermentation Of Oat Bran. **Autori: Silvia Amalia Nemes, Lavinia Florina Călinoiu**, Anca Corina Farcaș, Francisc Vasile Dulf and **Dan Cristian Vodnar**, The 22nd International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT", 27th– 30th September, 2023, Cluj-Napoca, Romania, Session 3: Food Science and Technology

Towards circular economy: agro-industrial byproducts enabling *in situ* enzyme production for food and pharmaceutical applications. **Autori: Gheorghe-Adrian MARTĂU, Lavinia Florina CĂLINOIU**, Simon ELEMÉR, Răzvan ODOCHEANU, Mădălina-Paula PLOSCA, Bernadette-Emoke TELEKY, Laura MITREA, Adrian-Ioan DUDU, **Dan Cristian VODNAR**, Monica-Ioana TOȘA, The 22nd International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT", 27th– 30th September, 2023, Cluj-Napoca, Romania, Session 3: Food Science and Technology

A two-step bioconversion approach of wheat bran for gellan gum obtaining. **Autori: Elemér L. SIMON**, Adrian G. MARTĂU, **Lavinia F. CĂLINOIU**, Răzvan ODOCHEANU, Paula M. PLOSCA, **Dan C. VODNAR**, The 22nd International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT", 27th– 30th September, 2023, Cluj-Napoca, Romania, Session 3: Food Science and Technology

The investigation of the correlation between the chemical profile of wheat and oat bran and B12 biosynthesis. **Autori: Lavinia Florina CĂLINOIU**, Laura MITREA, Gheorghe-Adrian MARTĂU, Amalia-Silvia NEMES, Bernadette-Emoke TELEKY, Bianca-Eugenia ȘTEFĂNESCU, and **Dan Cristian VODNAR**, The 22nd International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT", 27th– 30th September, 2023, Cluj-Napoca, Romania, Session 3: Food Science and Technology

CASEE CONFERENCE 2023 „Smart Life Sciences and Technology for Sustainable Development”, 28th – 30th June, 2023

(i) Cereal Bran Acid Pretreatment for Enhanced Bioactive Compound Production through Solid-State Fermentation. **Autori: Silvia Amalia NEMES**, Lavinia Florina CĂLINOIU, Anca Corina FARCAȘ, Francisc Vasile DULF and Dan Cristian VODNAR

(ii) Novel integrated bioprocess system for producing organic acids from food by-products. **Autori: B.-E. Teleky**, L. Mitrea, M. Pascuta, S.-A. Nemes, **L. Calinoiu**, B. Stefanescu, A. G. Martau, E. Simon, K. Szabo, A.-M. Cocean, D. Plămadă, P. Plosca, R. Odocheanu, A. Varvara, **D. C. Vodnar**

16th World Congress on Polyphenols Applications, September 28th – 30th, 2023, Malta

Bioactive Compound Production Via Solid-State Fermentation Using Acid-Pretreated Cereal Bran. **Autori: NEMES, Silvia Amalia, FĂRCAȘ, Anca Corina, CĂLINOIU, Lavinia Florina, DULF, Francisc**

Vasile and VODNAR, Dan Cristian

The 4th International Congress on "GREEN EXTRACTION OF NATURAL PRODUCTS" (GENP 2022), 26-28 October 2022, Poreč, Croatia, „Integrated sustainable pre-treatments approach for cereal bran valorization”. **Lavinia-Florina Călinoiu**, Laura Mitrea, Gheorghe-Adrian Martău, Dan-Cristian Vodnar

INOVALIMENT 2022, Târg Internațional de Inventii și Inovații din domeniul alimentar, 21-25 Noiembrie 2022, București, Romania. Fortificarea *in situ* cu vitamina B12 în subprodusele cerealiere - B12. Autori: **Lavinia Florina Călinoiu** și Dan Cristian Vodnar.

Sustainable vitamin B12 fortification of cereal by-products, **Lavinia Florina CĂLINOIU**, Laura MITREA, Gheorghe-Adrian MARTĂU, Amalia-Silvia NEMES, Bernadette-Emoke TELEKY, Bianca-Eugenia ȘTEFĂNESCU, Elemer SIMON and Dan Cristian VODNAR, 15th-17th September 2022. The 21th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

Pretreatments and bioprocesses for increasing the bioaccessibility and bioavailability of cereal bran phytochemicals, Silvia Amalia NEMES, **Lavinia Florina CĂLINOIU**, Anca Corina FARCAȘ, Francisc Vasile DULF and Dan Cristian VODNAR, 15th-17th September 2022. The 21th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

Itaconic-acid-based active packaging enriched with apple pomace-derived antioxidants, Bernadette-Emöke TELEKY, Laura MITREA, Diana PLAMADA, Silvia-Amalia NEMEȘ, **Lavinia-Florina CĂLINOIU**, Mihaela Stefana PASCUTA, Rodica-Anita VARVARA, Katalin SZABO, Patricia VAJDA, Cristian SZEKELY, Gheorghe-Adrian MARTĂU, Simon ELEMÉR, Floricuța RANGA and Dan-Cristian VODNAR, 15th-17th September 2022. The 21th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

Evaluation of the *Astragalus exscapus* l. subsp. transilvanicus roots chemical composition and biological activities, Katalin SZABO, Anita-Rodica VARVAVA, Laura MITREA, Silvia-Amalia NEMEȘ, Diana PLĂMADĂ, Mihaela-Ștefania PĂȘCUȚĂ, Elemer SIMON, Bernadette-Emöke TELEKY, **Lavinia-Florina CĂLINOIU**, Adrian-Gheorghe MARTĂU, Bianca-Eugenia ȘTEFĂNESCU, Francisc-Vasile DULF, Dan-Cristian VODNAR, 15th-17th September 2022. The 21th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

The Second Edition of PhD Students' Days, organized by the Faculty of Food Engineering, Tourism and Environmental Protection in Arad, "Aurel Vlaicu" University of Arad, Romania, 25-26 November 2022, in hybrid mode. Pretreatments of cereal bran to increase the concentration of bioactive compounds, Autori: Silvia Amalia Nemes, Lavinia Florina Călinoiu, Anca Corina Farcaș, Francisc Vasile Dulf și Dan Cristian Vodnar; Poster topic: SECTION II (Food Technology, Food Engineering, Food Chemistry, Nutrition, Food Quality and Food Security, Agrotourism Management, Sustainability, Bioeconomy) - PP10

"Improving the bioactive profile of wheat and oat bran, with the help of industrial heat treatment" - Speaker: **Lavinia CALINOIU (Mureșan)**, assistant professor, doctor of biotechnology, Scientific Conferences "INNOVALIMENT" 25 november 2021

CĂLINOIU, L.F., D.C. VODNAR. 2021. Wheat and oat bran: Integrated technology approach for antioxidants delivery. ", 23rd-25th June 2021, Online. 6th International ISEKI-Food Conference (ISEKI-Food 2021) „Sustainable Development Goals in Food Systems: challenges and opportunities for the future- ORAL PRES.

CĂLINOIU, L.F., D.C. VODNAR. 2021. Solid-state yeast fermentation of wheat and oat bran. 6th-8th of June, 2021 Online. 11th CASEE Conference "CASEE Universities as laboratories for new paradigms in life sciences and related disciplines", Prague - ORAL PRES.

CĂLINOIU, L.F., NEMES, A.S., DULF, F.V., DULF, E., POP, I.D., RANGA, F., VODNAR, D.C. 2021. Mathematical model of solid-state yeast and fungi fermentation of wheat bran for antioxidants production. 23th-24th September 2021. The 20th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

CĂLINOIU, L.F., D.C. VODNAR. 2020. Biological and chemical insights of thermally processed

wheat and oat bran. 24th-25th September 2020. The 19th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

CĂLINOIU, L.F., D.C. VODNAR. 2019. Wheat and Oat Bran wastes' bioactive compounds and their Increased Bioavailability during Solid-State Fermentation 26th-28th September 2019. The 18th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - ORAL PRES.

CĂLINOIU, L.F., D.C. VODNAR. 2019. Biotechnological route of Industrially derived cereal waste for Feeding 10 billion people by 2050. 26th-28th September 2019. The 18th International Conference 'Life Science for Sustainable Development', Cluj-Napoca, Romania - POSTER.

CĂLINOIU, L. F., VODNAR, D.C. 2018. Evaluation of bioavailability of whole grains bioactives as a core topic for human nutrition" The 17th International Symposium Prospects for the 3rd Millennium Agriculture, Cluj-Napoca, Romania.

CĂLINOIU, L.F., MITREA, L., PRECUP, G., BINDEA, M., RUSU, B., SZABO, K., DULF, F.V., ȘTEFĂNESCU, B.E., VODNAR, D.C. 2018. Sustainable use of agro-industrial wastes for feeding 10 billion people by 2050. 14th Congress of the European Society for Agricultural and Food Ethics - ERSAFE, Viena, Austria.

CĂLINOIU, L.F., MITREA, L., PRECUP, G., BINDEA, M., VODNAR, D.C. 2017. Effects of Boswellia species compounds in mental and motor dysfunctions treatment. Primul Congres de Aromaterapie din România, Cluj-Napoca, Romania.

CĂLINOIU, L. F., MITREA, L., PRECUP, G., BINDEA, M., RUSU, B., DULF, F.V., ȘTEFĂNESCU, B.E., VODNAR, D.C. 2017. Characterization of grape peel wastes' bioactive compounds and their increased bioavailability after the thermal process. The 16th International Symposium Prospects for the 3rd Millennium Agriculture, Cluj-Napoca, Romania.

CĂLINOIU, L. F., MITREA, L., PRECUP, G., BINDEA, M., RUSU, B., DULF, F.V., ȘTEFĂNESCU, B.E., VODNAR, D.C. 2017. Characterization of apple peels wastes' bioactive compounds after exposure to thermal process. The 16th International Symposium Prospects for the 3rd Millennium Agriculture, Cluj-Napoca, Romania.

TRIF, M., **MURESAN (CĂLINOIU), L., & BETHKE, M.** Personalised nutritional powder for elderly developed in OPTIFEL European Project. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca: Food Science and Technology*, **2016**, 73(2), 149-150.

Book Chapters (International)

CALINOIU, L. F., MITREA, L., TELEKY, B. E., SZABO, K., MARTĂU, A. G., NEMES, S. A., ... & VODNAR, D. C. (2023). Fruit and vegetable waste and by-products for pigments and color. In *Fruit and Vegetable Waste Utilization and Sustainability* (pp. 77-100). Academic Press.

MITREA, L., **CALINOIU, L. F., TELEKY, B. E., SZABO, K., MARTĂU, A. G., NEMES, S. A., ... & VODNAR, D. C. (2023).** Fruit and vegetable wastes for biobased chemicals. In *Fruit and Vegetable Waste Utilization and Sustainability* (pp. 43-76). Academic Press.

TELEKY, B.-E.; MITREA, L.; **CĂLINOIU, L.-F.**; MARTĂU, G.-A.; VODNAR, D.-C. Microbial Processes to Produce Food Ingredients and Products. In *Reference Module in Food Science*; Elsevier: Amsterdam, The Netherlands, 2023; pp. 1–17. ISBN 9780081005965

PRECUP, G., MITREA, L., **CĂLINOIU, L. F., MARTĂU, A. G., NEMES, A., TELEKY, B. E., ... & VODNAR, D. C.** Food processing by-products and molecular gastronomy. In *Gastronomy and Food Science*. Elsevier. **2020**, 137-163. Academic Press.

CĂLINOIU, L. F., FĂRCAȘ A., SOCACI S., VODNAR D.V. Innovative Sources. In *Nutraceuticals and Natural Product Pharmaceuticals*. Elsevier. **2019**, 235-265. Academic Press.

VODNAR, D.C., MITREA, L., **CĂLINOIU, L.F., SZABO, K., ȘTEFĂNESCU, B. E.** Removal of bacteria, viruses, and other microbial entities by means of nanoparticles. *Advanced Nanostructures for Environmental Health*. Elsevier. **2020**.

Research Projects

VODNAR, D. C., CĂLINOIU, L. F., MITREA, L., PRECUP, G., BINDEA, M., PĂCURAR, A. M., SZABO, K., ȘTEFĂNESCU, B. E. A New Generation of Probiotic Functional Beverages Using Bioactive Compounds From Agro-Industrial Waste. In *Functional and Medicinal Beverages*. 2019, 483-528. Academic Press.

COMAN, V., TELEKY, B.E., MITREA, L., MARTĂU, G.A., SZABO, K., CĂLINOIU, L.F., VODNAR, D. C*. Bioactive potential of fruit and vegetable wastes. *Advances in Food and Nutrition Research*. Elsevier. 2019.

Director of national research projects

Proiect PN-III-P1-1.1-TE-2021-1052, project no. TE7/2022. In situ fortification of vitamin B12 in cereal by-products. Acronym: B12. Funding: UEFISCDI.

Member of international research projects

RISE – Project ID: DRP 0200476 Interreg Programme Danube Region. Rising competences & skills in less developed Danube regions through food sector cross-topic innovations [RISE description](#)

RIA4 FOOD – HORIZON-MSCA-2021-SE-01, Multi-Actor Research and Innovation Approaches for Food Functionality, ACRONYM RIA4FOOD .

SCAR- Bioeconomy Strategic Working Group, SCAR BSWG, RTD/2021/OP/0001 d. 30/09/2021.

H2020. Type of Action: ERASMUS-EDU-2022-PI-FORWARD Acronym: Geek4Food. 2022-2025.

CEEPUS-Resilient management of bioactive compounds from plants and organic wastes in Middle -Europe. 2021-2023.

CASEE Fund for Incentives. "Bio-system for cereal by-products-derived antioxidants production" 2020-2022.

HORIZON-MSCA-SE-2021 Project: 101086261 Acronym: FEEDACTIV. 2023-2027.

H2020-MSCA-RISE-2020 Type of Action: MSCA-RISE Acronym: FRIETS. 2021-2024.

Manunnet III - Non-Act. NOvel Natural Antimicrobial CoaTings for food production chain. 2018-2021.

Mannunet II-TOMATOCYCLE. 34/14.06.2017. Sustainable exploitation of tomato processing industry by-products. 2017-2020.

JPI HDHL – LONGLIFE. Food Fermentations for Purpose: Health Promotion and Biopreservation. 2016-2019

Member of national research projects

Proiect PN-III-P1-1.1-TE-2019-1748. Bio-system for cereal waste-derived vanillin production. Funding: UEFISCDI.

PN-III-P1-1.2-PCCDI- 2017-0056. Functional collaboration model between public research organizations and the economic environment for providing high-level scientific and technological services in the field of bio-economics. Funding: UEFISCDI.

PN-III-P1-1.2-PCCDI-2017-0473. From classical nutrition to precision nutrition in the field of animal husbandry, the scientific basis for ensuring the nutritional security of the population. Funding: UEFISCDI.

PN-III-P1-1.1-TE-2016-0661. Reducing the sugar and increasing the bioavailability of food by-products in sweet bakery products. Funding: UEFISCDI.

PN-III-P2-2.1-PED-2016-1237, 17 PED/2017. Effective use of crude glycerol from biodiesel for lactic acid production. Funding: UEFISCDI.

PN-III-P2-2.1-PED-2016-0627, 15 PED/2017. Nutraceutical lycopene produced by biotechnological processes from natural agro-industrial residues with applications on the food industry. Funding: UEFISCDI.

Member of institutional projects

37 PFE-2018-2020. Cresterea performantei institutionale prin mecanisme de consolidare si dezvoltare a directiilor de cercetare din cadrul USAMVCN. Finantator: MCI- UEFISCDI.

Awards

Asist. univ. dr. Lavinia Călinoiu - "Top Scholars by Institution", ierarhia "Prior 5 years", Domeniul Agricultură și Resurse Naturale, (locul 2.477) - platforma ScholarGPS™

Premiul "Gheorghe Ionescu-Șișești", domeniul Biotehnologii- Gala Cercetării Românești 2024.

„Tineri cercetatori in Stiinta si Inginerie Rada Mihalcea „Award – 1st place, 31 iulie 2023, Cluj-Napoca, Romania

Romania Academy Award - "Traian Săvulescu" – Domains: Biology, Fitopathology, Biotechnology, Food Science. Section Agricultural and Forestry Sciences. Bucharest, 7 dec. 2022, Aula of Romanian Academy

3rd place Award for "In situ fortification of vitamin B12 in cereal by-products - B12
Authors: **Lavinia Florina Călinoiu** si Dan Cristian Vodnar. INOVALIMENT 2022, category Biotechnology

Gold Medal at International Exhibition of Inventions and Innovations „TRAIAN VUIA” Timișoara , edition VIII, period 08-10 october 2022. "Pretreatment techniques applied to cereals bran" **Authors:** Silvia Amalia Nemes, **Lavinia Florina Călinoiu**, Anca Corina Farcaș, Francisc Vasile Dulf si Dan Cristian Vodnar

Mention award for "Integrated technological approach for the development of a sustainable and intelligent product "- ASTRO, International Fair of Inventions and Innovations in the food field "INOVALIMENT" 2021

Honory Diploma and Assistant Prof. of the years 2020, 2021 and 2022 for Academic, Scientific and Institutional Activities , University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, Romania

Honorary Diploma and Title "PhD student of the year 2019" , University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, Romania

Medal "Honor et Gratitude", 2020, University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, Romania

Editor and Reviewer

Topic Editor - Research Topic "[Nutrition and Sustainable Development Goal 9: Industry, Innovation, and Infrastructure](#)" **Frontiers in Nutrition Journal**

Topic Editor - Research Topic "[Sustainability in the Food Chain](#)" **Frontiers in Sustainable Food Systems**

Guest Editor Special Issue in Catalyst Journal

"Current State-of-the-Art of Biocatalysts in the Food Sector"

https://www.mdpi.com/journal/catalysts/special_issues/biocatalysts_food

Guest editor Special Issue, *Microorganisms* MDPI "Food Fermentations"

Guest editor Special Issue, Journal of Food Quality "Microbial Production of Naturally Occurring Reduced-Calorie Sweeteners"

Editor invitat: CPQ Nutrition Journal

Reviewer:

Food Chemistry

Trends in Food Science and Technology

Critical Reviews in Food Science and Nutrition

Critical Reviews in Food Science and Technology

Nutrients

Annals of Epidemiology

Coatings

Molecules

Antioxidants

Materials

International Journal of Molecular Sciences

Horticulturae

Frontiers in Microbiology

Food Science and Technology

SN Applied Sciences

Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca-Food Science and Technology.

Global Nutrition and Dietetics Journal

Personal skills

Mother tongue(s)

Other language(s)

Self-assessment

European level ()***Language english****Language french****Language german****Romanian**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production		Written expression	
C1	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user	C2	Independent user
A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user
A2	User	A2	User	A2	User	A2	User	A2	User

Social skills and competences

Scientific Sessions, Chemistry scientific group "Young Food Fan";
I have got the ability to adapt to multicultural environments through work experience abroad during my Internship (Centiv company, Bremen, Germany) and also by studying in the Netherlands for 1 semester; I have acquired my good communication skills through my work experience as sales assistant manager at *Avon Cosmetics* RO company. University promo movie in 2014.

Organisational skills and competences

Good experience in project coordinating team (volunteer, symposium) and also in coordinating a group of students (150) as dean of the group.

Computer skills and competences

Knowledge of Internet Navigation, on database search.
Operating knowledge of Microsoft Office programs (Word, Excel, PowerPoint, Access), as well as programs that ChemWin, EndNote, Origin, Prism.
Basic knowledge in websites.
Basic understanding of graphic programs: Photoshop, Photo-Brush.

Artistic skills and competences

Passion for sport and english.

Driving licence

B Category

Additional information

Hirsch Index (WOS): 20, Google Scholar: 23; Citations: 1305 (WoS), 2168 (Google Scholar).
Cumulated Impact Factor: >100
Marital Status: Married with 3 children

Date: 20.07.2024

