

PERSONAL INFORMATION

Pop Oana Lelia

 Cluj-Napoca

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PROFESIONAL EXPERIENCE

2023 PhD supervisor, field: BIOTEHNOLOGY, specialization Food Biotechnology, University of Agricultural Sciences and Veterinary Medicine, Cluj Napoca

February 2022
prezent

Associate Professor

University of Agricultural Sciences and Veterinary Medicine, Faculty of Food Science and Technology, Cluj-Napoca, Romania

Courses, Seminars, Laboratories: Food Safety, Nutrition and Health, Biosecurity and Rapid Alert System, Nutraceuticals and Food Supplements. Research Activities

February 2020
February 2022

Lecturer

University of Agricultural Sciences and Veterinary Medicine, Faculty of Food Science and Technology, Cluj-Napoca, Romania

Courses, Seminars, Laboratories: Food Chemistry, Human Nutrition, Food Safety and Toxicology. Research Activities

February 2016 –
February 2020

Assistant Professor

University of Agricultural Sciences and Veterinary Medicine, Faculty of Food Science and Technology, Cluj-Napoca, Romania

Courses, Seminars, Laboratories: Food Chemistry, Human Nutrition, Food Safety and Toxicology. Research Activities

2014-2015

Postdoctoral Researcher

University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania

PEG-PLGA nanostructures containing bioactive molecules with antitumoral activity. Transport and controlled release.

Ph.D. Researcher - Doctoral Research Stage

University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania

Development of innovative encapsulation systems for microorganisms with applications in biomedicine

2008-2010

Quality and Food Safety Systems Consultant

T Smart Servicii SRL, Cluj-Napoca, Romania, Implementation, auditing of quality management systems (ISO 9001) and food safety (HACCP/ ISO 22000).

EDUCATION

2010 - 2014

PhD in Biotechnologies

University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania

2008 - 2010

Master – Food quality management

University of Agricultural Sciences and Veterinary Medicine, Faculty of Food Science and Technology, Cluj-Napoca, Romania

2003 - 2008 Food Engineering
 University of Agricultural Sciences and Veterinary Medicine, Faculty of Food Science and Technology, Cluj-Napoca, Romania

PERSONAL SKILLS

Native language: Română

| Other known foreign languages | UNDERSTANDING | | SPEAKING | | WRITING |
|-------------------------------|---------------|---------|-------------------------------|----------------|---------|
| | Listening | Reading | Participation in conversation | Oral discourse | |
| Engleză | B2 | B2 | B2 | B2 | B2 |
| Spaniolă | B2 | A1 | B1 | A1 | A1 |

Achieved Mobilities and Scholarships

2017 Mobility projects PN-III-P1-1.1-MC-2017-0566 and PN-III-P1-1.1-MC-2017-1720

2013-2014 Study program European Patent Academy (Office), Viena, Austria:

“EU and International patent systems for winners of the EPO 2013”

Martie **2012** Cost action FA0907 și FA1006 Summer School, 'Introduction to Metabolite Profiling Approaches in Microorganisms' at Royal Holloway, University of London."

2010-2011 DBU fellowship in Microencapsulation Laboratories of BRACE GmbH, Germany

| Publications | Articoles |
|--------------|---|
| | <ul style="list-style-type: none"> • Csatlos, N.-I.; Simon, E.; Teleky, B.-E.; Szabo, K.; Diaconeasa, Z.M.; Vodnar, D.-C.; Ciont, C., and Pop, O.-L., Development of a Fermented Beverage with Chlorella Vulgaris Powder on Soybean-Based Fermented Beverage. <i>Biomolecules</i> 2023, 13, 245. • Sakoui, S.; Derdak, R.; Pop, O.L.; Vodnar, D.C.; Addoum, B.; Teleky, B.-E.; Elemer, S.; Elmakssoudi, A.; Suharoschi, R., and Soukri, A., Effect of encapsulated probiotic in Inulin-Maltodextrin-Sodium alginate matrix on the viability of Enterococcus mundtii SRBG1 and the rheological parameters of fermented milk. <i>Current Research in Food Science</i> 2022, 5, 1713-1719. • Sakoui, S.; Derdak, R.; Addoum, B.; Pop, O.L.; Vodnar, D.C.; Suharoschi, R.; Soukri, A., and El Khalfi, B., The first study of probiotic properties and biological activities of lactic acid bacteria isolated from Bat guano from Er-rachidia, Morocco. <i>LWT</i> 2022, 159, 113224. • Pop, O.L.; Suharoschi, R., and Gabbianelli, R., Biodetoxification and Protective Properties of Probiotics. <i>Microorganisms</i> 2022, 10, 1278. • Pop, O.L.; Kerezsi, A.D., and Ciont, C., A Comprehensive Review of Moringa oleifera Bioactive Compounds—Cytotoxicity Evaluation and Their Encapsulation. <i>Foods</i> 2022, 11, 3787. • Khalid, M.F.; Iqbal Khan, R.; Jawaid, M.Z.; Shafqat, W.; Hussain, S.; Ahmed, T.; Rizwan, M.; Ercisli, S.; Pop, O.L., and Alina Marc, R., Nanoparticles: the plant saviour under abiotic stresses. <i>Nanomaterials</i> 2022, 12, 3915 |

- Fărcaș, A.C.; Socaci, S.A.; Nemeș, S.A.; Pop, O.L.; Coldea, T.E.; Fogarasi, M., and Biriș-Dorhoi, E.S., An update regarding the bioactive compound of cereal by-products: Health benefits and potential applications. *Nutrients* 2022, 14, 3470.
- Dola, D.B.; Mannan, M.A.; Sarker, U.; Al Mamun, M.A.; Islam, T.; Ercisli, S.; Saleem, M.H.; Ali, B.; Pop, O.L., and Marc, R.A., Nano-iron oxide accelerates growth, yield, and quality of Glycine max seed in water deficits. *Frontiers in Plant Science* 2022, 13.
- Derdak, R.; Sakoui, S.; Pop, O.L.; Vodnar, D.C.; Addoum, B.; Teleky, B.-E.; Elemer, S.; Elmakssoudi, A.; Suharoschi, R., and Soukri, A., Optimisation and characterization of α -D-glucan produced by *Bacillus velezensis* RSDM1 and evaluation of its protective effect on oxidative stress in *Tetrahymena thermophila* induced by H₂O₂. *International Journal of Biological Macromolecules* 2022, 222, 3229-3242.
- Derdak, R.; Sakoui, S.; Pop, O.L.; Vodnar, D.C.; Addoum, B.; Elmakssoudi, A.; Errachidi, F.; Suharoschi, R.; Soukri, A., and El Khalfi, B., Screening, optimization and characterization of exopolysaccharides produced by novel strains isolated from Moroccan raw donkey milk. *Food Chemistry: X* 2022, 14, 100305.
- Dagni, A.; Hegheș, S.C.; Suharoschi, R.; Pop, O.L.; Fodor, A.; Vulturar, R.; Cozma, A.; Aniq filali, O.; Vodnar, D.C., and Soukri, A., Essential oils from *Dysphania* genus: Traditional uses, chemical composition, toxicology, and health benefits. *Frontiers in Pharmacology* 2022, 13, 1024274.
- Ciont, C.; Epuran, A.; Kerezsi, A.D.; Coldea, T.E.; Mudura, E.; Pasqualone, A.; Zhao, H.; Suharoschi, R.; Vriesekoop, F., and Pop, O.L., Beer Safety: New Challenges and Future Trends within Craft and Large-Scale Production. *Foods* 2022, 11, 2693.
- Szabo, K.; Teleky, B.E.; Ranga, F.; Simon, E.; Pop, O.L.; Babalau-Fuss, V.; Kapsalis, N., and Vodnar, D.C., Bioaccessibility of microencapsulated carotenoids, recovered from tomato processing industrial by-products, using in vitro digestion model. *LWT* 2021, 152, 112285.
- Pop, C.; Suharoschi, R., and Pop, O.L., Dietary fiber and prebiotic compounds in fruits and vegetables food waste. *Sustainability* 2021, 13, 7219.
- Mihalca, V.; Kerezsi, A.D.; Weber, A.; Gruber-Traub, C.; Schmucker, J.; Vodnar, D.C.; Dulf, F.V.; Socaci, S.A.; Fărcaș, A., and Mureșan, C.I., Protein-based films and coatings for food industry applications. *Polymers* 2021, 13, 769.
- Fărcaș, A.C.; Socaci, S.A.; Chiș, M.S.; Pop, O.L.; Fogarasi, M.; Păucean, A.; Igual, M., and Michiu, D., Reintegration of Brewers Spent Grains in the Food Chain: Nutritional, Functional and Sensorial Aspects. *Plants* 2021, 10, 2504.
- Farcas, A.C.; Galanakis, C.M.; Socaciu, C.; Pop, O.L.; Tibulca, D.; Paucean, A.; Jimborean, M.A.; Fogarasi, M.; Salanta, L.C., and Tofana, M., Food Security during the Pandemic and the Importance of the Bioeconomy in the New Era. *Sustainability* 2021, 13, 150.
- Socaciu, M.-I.; Fogarasi, M.; Semeniuc, C.A.; Socaci, S.A.; Rotar, M.A.; Mureșan, V.; Pop, O.L., and Vodnar, D.C., Formulation and characterization of antimicrobial edible films based on whey protein isolate and tarragon essential oil. *Polymers* 2020, 12, 1748.
- Rusu, I.G.; Suharoschi, R.; Vodnar, D.C.; Pop, C.R.; Socaci, S.A.; Vulturar, R.; Istrati, M.; Moroșan, I.; Fărcaș, A.C., and Kerezsi, A.D., Iron supplementation influence on the gut microbiota and probiotic intake effect in iron deficiency—A literature-based review. *Nutrients* 2020, 12, 1993.
- Pop, O.L.; Vodnar, D.C.; Diaconeasa, Z.; Istrati, M.; Bîntînțan, A.; Bîntînțan, V.V.; Suharoschi, R., and Gabbianelli, R., An Overview of Gut Microbiota and Colon Diseases with a Focus on Adenomatous Colon Polyps. *International Journal of Molecular Sciences* 2020, 21, 7359.
- Pop, O.L.; Pop, C.R.; Dufrechou, M.; Vodnar, D.C.; Socaci, S.A.; Dulf, F.V.; Minervini, F., and Suharoschi, R., Edible films and coatings functionalization by probiotic incorporation: A review. *Polymers* 2020, 12, 12.

- Pop, O.L.; Mesaros, A.; Vodnar, D.C.; Suharoschi, R.; Tăbăran, F.; Mageruşan, L.; Tódor, I.S.; Diaconeasa, Z.; Balint, A., and Ciontea, L., Cerium oxide nanoparticles and their efficient antibacterial application in vitro against gram-positive and gram-negative pathogens. *Nanomaterials* 2020, 10, 1614.
- Ignat, M.V.; Salanță, L.C.; Pop, O.L.; Pop, C.R.; Tofană, M.; Mudura, E.; Coldea, T.E.; Borşa, A., and Pasqualone, A., Current functionality and potential improvements of non-alcoholic fermented cereal beverages. *Foods* 2020, 9, 1031.
- Farcas, A.C.; Galanakis, C.M.; Socaciu, C.; Pop, O.L.; Tibulca, D.; Paucean, A.; Jimborean, M.A.; Fogarasi, M.; Salanta, L.C., and Tofana, M., Food Security during the Pandemic and the Importance of the Bioeconomy in the New Era. *Sustainability* 2020, 13, 1-1.
- Derdak, R.; Sakoui, S.; Pop, O.L.; Muresan, C.I.; Vodnar, D.C.; Addoum, B.; Vulturar, R.; Chis, A.; Suharoschi, R., and Soukri, A., Insights on Health and Food Applications of Equus asinus (Donkey) Milk Bioactive Proteins and Peptides—An Overview. *Foods* 2020, 9, 1302.
- Biris-Dorhoi, E.-S.; Michiu, D.; Pop, C.R.; Rotar, A.M.; Tofana, M.; Pop, O.L.; Socaci, S.A., and Farcas, A.C., Macroalgae—A sustainable source of chemical compounds with biological activities. *Nutrients* 2020, 12, 3085.
- Țiplea, R.; Suharoschi, R.; Leopold, L.; Fetea, F.; Ancuța, S.; Socaci, D.C.V., and POP, O.L., Alfalfa leaf powder and its potential utilisation in raw vegan chocolate. *Bulletin UASVM Food Science and Technology* 2019, 76, 1.
- Mesaros, A.; Vasile, B.S.; Toloman, D.; Pop, O.L.; Marinca, T.; Unguresan, M.; Perhaita, I.; Filip, M., and Iordache, F., Towards understanding the enhancement of antibacterial activity in manganese doped ZnO nanoparticles. *Applied Surface Science* 2019, 471, 960-972.
- Csernaton, F.; Pop, R.M.; Romaciuc, F.; Fetea, F.; Pop, O., and Socaciu, C., Sea buckthorn juice, tomato juice and pumpkin oil microcapsules/microspheres with health benefit on prostate disease—obtaining process, characterization and testing properties. *Romanian Biotechnological Letters* 2018, 23, 13214-13224.
- Pop, O.L.; Dulf, F.V.; Cuibus, L.; Castro-Giráldez, M.; Fito, P.J.; Vodnar, D.C.; Coman, C.; Socaciu, C., and Suharoschi, R., Characterization of a sea buckthorn extract and its effect on free and encapsulated *Lactobacillus casei*. *International journal of molecular sciences* 2017, 18, 2513.
- Pop, O.L.; Vodnar, D.C.; Suharoschi, R., and Socaciu, C., Stability Comparison of Free and Encapsulated *Lactobacillus casei* ATCC 393in Yoghurt for Long Time Storage. *Bulletin UASVM Food Science and Technology* 2016, 73, 2.
- Pop, O.L.; Vodnar, D.C.; Suharoschi, R.; Mudura, E., and Socaciu, C., *L. plantarum* ATCC 8014 entrapment with prebiotics and lucerne green juice and their behavior in simulated gastrointestinal conditions. *Journal of food process engineering* 2016, 39, 433-441.
- Pop O.L.; Leopold, L.F.; RUGINĂ, O.D.; Diaconeasa, Z.; Oprea, I.; TĂBĂRAN, F.; TOFANĂ, M.; Socaciu, C., and Coman, C., Gold Nanoparticles Encapsulated in a Polymeric Matrix of Sodium Alginate. *Bulletin UASVM Food Science and Technology* 2016, 73, 2.
- Vodnar, D.C.; Pop, O.L.; Dulf, F.V., and Socaciu, C., Antimicrobial efficiency of edible films in food industry. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* 2015, 43, 302-312.
- Pop, O.L.; Diaconeasa, Z.; Mesaroş, A.; Vodnar, D.C.; Cuibus, L.; Ciontea, L., and Socaciu, C., FT-IR studies of cerium oxide nanoparticles and natural zeolite materials. *Bulletin UASVM Food Science and Technology* 2015, 72, 50-55.
- Pop, O.L.; Diaconeasa, Z.; Brandau, T.; Ciuzan, O.; Pamfil, D.; Vodnar, D.C., and Socaciu, C., Effect of glycerol, as cryoprotectant in the encapsulation and freeze drying of microspheres containing probiotic cells. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Food Science and Technology* 2015, 72, 27-32.

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| | <p>International book chapters</p> <ul style="list-style-type: none"> • Liana C. Salanța, Alina Uifălean, Cristina-Adela Iuga, Maria Tofană, Janna Cropotova, Oana L. Pop, Carmen R. Pop, Mihaela A. Rotar, Mirandeli Bautista-Ávila, Claudia Velázquez González, The Health Benefits of Foods-Current Knowledge and Further Development, IntechOpen, 2020; • Oana L. Pop, Sonia Ancuța Socaci, Ramona Suharoschi, Dan Cristian Vodnar, Pro and prebiotics foods that modulate human health, The Role of Alternative and Innovative Food Ingredients and Products in Consumer Wellness, Ed Academic Press Elsevier, 2019; • O. L. Pop, L. C. Salanța, C. R. Pop, T. Coldea, S. A. Socaci, R. Suharoschi, D. C. Vodnar. Prebiotics and Dairy Applications in Dietary Fibers, Properties, recovery and Applications, Ed Academic Press Elsevier, 2019; • R. Suharoschi, O. L. Pop, R. A. Vlaic, C. I. Muresan, C. C. Muresan, A. Cozma, A. V. Sitar-Taut, R. Vulturar, S. C. Heghes, A. Fodor, C. A. Iuga. Dietary Fiber and Metabolism, in Dietary Fibers, Properties, recovery and Applications, Ed Academic Press Elsevier, 2019; • S. A. Socaci, D. O. Rugină, Z. M. Diaconeasa, O. L. Pop, A. C. Fărcaș, A. Păucean, M. Tofană, A. Pinte. Antioxidant Compounds Recovered from Food Wastes, in Functional Food-Improve Health through Ed. InTech, 2017; • O. L. Pop, D. C. Vodnar. Procyanidins, and their Effectiveness after Incorporation in Food Systems, in Procyanidins Characterisation, antioxidant properties and health benefits, Ed. Nova, 2016; • O. L. Pop, D. C. Vodnar, C. Socaciu. Encapsulation field polymers: FTIR characterization, Encyc of Biomedical Polymers and Polymeric Biomaterials, Ed. Taylor & Francis, NY, USA, 2015; • D. C Vodnar, O. L. Pop, C. Socaciu. Probiotics: Microencapsulation. Encyclopedia of Biomedical Polymers and Polymeric Biomaterials, Ed. Taylor & Francis, 2015. |
| <p>Prjects</p> | <ol style="list-style-type: none"> 1. PN III- PCE Exploratory Research Project - PN-III-P4-IDPCE-2020-2126 titled "Iron Oxide Nanoparticles Transported by Probiotics - Cytotoxicity, Biodisponibility and Their Influence on Intestinal Microflora," funded by UEFISCDI, total value: 1,198,032.00 lei, 36 months, 2021 (project director). 2. Research and Service Project - PROBIOKA - beneficiary Biokuri B.V. Belgium, 12 months, total value 23,620 euros, 2021 (project director). 3. PN III- CI Innovation Checks Project titled "Gluten-Free, Low-Calorie Muffins Enriched with Essential Amino Acids of Plant Origin," Funding: 50,000 lei, UEFISCDI-6 months, 2017 (project director). 4. ERANET-MANUNET II –TOMATOCYCL, Sustainable Exploitation of Tomato Processing By-Products, international project, 2017 (member). 5. PN III – PED Project; Nutraceutical Lycopene Produced by Biotechnological Processes from Natural Agro-Industrial Residues with Applications in the Food Industry. Funding UEFISCDI, 2017 (member). 6. PN III- PED Project: Efficient Use of Crude Glycerol from Biodiesel for L-Lactic Acid Production. Funding: 135,000 euros, UEFISCDI, 2017-2019 (member). 7. PN II Partnership Project "A New Generation of Probiotic Beverages with Impact on Human Health." Funding: 330,000 euros, UEFISCDI, 2014-2017 (member). 8. POC_37_637: "Bioprocessing of 1,3-Propanediol (1,3-PD) and Citric Acid Production from Crude Glycerol." Funding: 1,500,000 euros, ANCSI, 2016-2020 (member). 9. PN II – RUTE Project: "Encapsulated Nanoplasmatical Nanoparticles for Controlled Release of Bioactive Molecules," UEFISCDI, 2015-2017 (member). 10. PN II – Economic Competitiveness Program PN-II-IN-CI-2012-1-0157 "Food Safety Management System for the Production Process of Probiotic-Encapsulated Gels," UEFISCDI, Funding: 10,000 EUR, duration: 6 months (responsible). 11. 2 Innovation Research Projects (PNII), UEFISCDI, 2012-2014 (member) |

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| Distinctions and Awards | <ul style="list-style-type: none">• International Exhibition of Inventions and Innovations Traian Vuia Timisoara – 39 distinctions (gold and silver diplomas) in the period 2020-2022.• Awarding of research results by UEFISCDI 2017-2023.• Diplomas of excellence at PRO INVENT, the International Research, Innovation, and Invention Exhibition, 16th edition Cluj-Napoca, 2018-2022.• Best poster award at the International Probiotics and Antimicrobial Proteins Conference, Barcelona, November 2017.• 1st and 2nd place with supervised students at the International Symposium "Student in Bucovina" 2016.• Diploma of Excellence and Gold Medal for the "Procedure for Obtaining Microspheres with Probiotics" at the International Invention Exhibition, PRO INVENT, 12th edition Cluj-Napoca, 2014.• 1st place for "Microspheres - support for probiotic cells in yogurt and other dairy products", OSIM, Representative of Romania at the "EPO Innovation Contest 2013", European Patent Office, 2013. |
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