Fabio Valoppi

Adjunct Professor (Docent) in Food Materials Science

CTO & Co-founder, Perfat Technologies Oy
University of Helsinki spin-out · Helsinki, Finland

CONTACT

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KEYWORDS

oleogels · lipid delivery systems · edible structure design · in vitro digestion · equipment development

49	H = 20	1,346	8	~€8M
peer-reviewed publications	Scopus h-index	total citations	patents (filed & granted)	total funding (academic + startup)

I am a problem- and curiosity-driven scientist with 15+ years of experience in the design and development of novel edible structures with tailored functionalities. My work combines multidisciplinary expertise across food science, physics, chemistry, and materials science, covering the full pipeline from rational structural design and custom equipment development, through multiscale characterization (macro, micro, nano), to performance evaluation under in vitro digestion and in vivo conditions. A central focus of my career has been translating fundamental structure-function relationships into scalable technologies, most recently as CTO and co-founder of Perfat Technologies, a deep-tech food ingredients spin-out from the University of Helsinki.

EDUCATION & QUALIFICATIONS

Italian Scientific Qualification as Associate Professor in Food Science and Technology — *1.2022 – 12.2031*
National Scientific Qualification (ASN), Italy

Docent (Adjunct Professor) in Food Materials Science — *9.1.2020*
University of Helsinki, Finland

Ph.D. in Food Science · Best Thesis Prize (AISSA, 2017) — *31.3.2016*
University of Udine, Italy

M.Sc. in Food Science and Technology — *16.4.2012*
University of Udine, Italy

B.Sc. in Food Science and Technology — *12.3.2009*
University of Udine, Italy

LANGUAGE SKILLS

Italian & Friulano (native) · **English** (fluent, working knowledge)

PROFESSIONAL EXPERIENCE

Current Positions

Chief Technology Officer & Co-founder — *9.2023 – present*

Perfat Technologies Oy · Helsinki, Finland

University Researcher (part-time, career stage 3) *9.2023 – 8.2026*
Department of Physics & Department of Food and Nutrition, University of Helsinki · Finland

Previous Positions

University Researcher (full-time, career stage 3) *9.2022 – 8.2023*
Department of Physics & Department of Food and Nutrition, University of Helsinki · Finland

Marie Skłodowska-Curie Individual Fellow (MSCA-IF), career stage 2 *9.2020 – 8.022*
Department of Physics & Department of Food and Nutrition, University of Helsinki · Finland

Academy of Finland Postdoctoral Researcher *9.2018 – 8.2020*
Department of Food and Nutrition & Department of Physics, University of Helsinki · Finland

Visiting Scientist *2.2019 – 3.2019*
Institute of Crystallography – Elettra Synchrotron Lab. · Italy

Postdoctoral Researcher *10.2017 – 8.2018*
Department of Food and Nutrition, University of Helsinki · Finland

Postdoctoral Researcher *12.2016 – 9.2017*
Faculty of Science and Technology, Free University of Bolzano-Bozen · Italy

Research Assistant *11.2015 – 10.2016*
Institute of Crystallography – Elettra Synchrotron Lab. · Italy

Visiting Ph.D. Student *2.2015 – 9.2015*
University of Guelph · Canada

Ph.D. Candidate *9.2012 – 10.2015*
Department of Food Science, University of Udine · Italy

Visiting Master Student *1.2011 – 9.2011*
Washington State University · USA

RESEARCH FUNDING & GRANTS (TOTAL: €1.8M+)

More than €1.8M secured in five years through highly competitive national (Finnish) and European funding calls. In addition, guided postdoctoral researchers and students in grant writing; their applications achieved >80% cumulative success rate, raising an additional €100k+.

Shear resistant oleogels based on ultrasound-enhanced electrospun fibers (FIBER-OLEO) **€45,000**
Proof-of-concept grant · University of Helsinki *1.2023 – 6.2023*

Re-engineering food to address obesity (OleoFlow) **€770,000**
Research to Business grant · Business Finland *6.2021 – 5.2023*

Engineered oleogels for body weight control (ENGEL) **€303,000**
Proof-of-concept grant · Jane and Aatos Erkko Foundation *5.2021 – 12.2023*

Functional oleogels for body weight control (iOLEO) **€150,000**
Rector's strategic 3-year grant · University of Helsinki *4.2021 – 4.2024*

Novel digital tools for food science (iFOOD) **€22,000**
HELSUS seed funding · University of Helsinki *1.2021 – 12.2021*

Research collaborations with Finnish food and bioproduct companies **€5,000**
University of Helsinki *1.2021*

Ultrasonic standing waves as a new tool for improved oleogel (ULTRA-OLEO) **€202,681**
Marie Skłodowska-Curie Individual Fellowship (H2020) · European Commission *9.2020 – 8.2022*

Water-in-oleogel emulsions as vitamin B12 delivery systems for plant-based products (B-GELS) **€12,000**
Faculty Proof-of-Concept grant · University of Helsinki *9.2020 – 12.2020*

Functional oleogels with health enhancing ability (FUN-OLEO) **€47,000**
HiPOC grant · Helsinki Institute of Life Science *12.2019 – 8.2021*

Acoustic waves as a new tailoring tool for lipid-based oleogels (NEW-WAVE) **€216,733**

Postdoctoral researcher funding · Academy of Finland *9.2018 – 8.2020*

Short term scientific mission **€2,100**

National Research Council of Italy *10.2018*

STARTUP ACTIVITIES (TOTAL FUNDING: ~€6M)

Together with co-founders Jyrki Lee-Korhonen (CEO) and Anton Nolvi (COO), secured approximately €6M in total funding (equity, grants, and loans) from Finnish and international sources.

RESEARCH OUTPUT

49 peer-reviewed publications · 25+ conference proceedings · 7 research monographs/chapters · 1 co-edited book (Springer, 2024, 28 chapters, 58 authors, 16 countries) · 16 invention disclosures · 8 patents (5 filed, 3 granted). Scopus H-index: 20; total citations: 1,346. One publication cited by the US Food and Drug Administration (FDA) in their draft guidance on docosanol in topical creams.

Peer-Reviewed Publications

1. Duggan, F., Lassila, P., **Valoppi, F.**, O'Mahony, J. A., & Bot, F. (2026). Tailoring the rheological properties of pea and whey protein hybrid emulgels using high-pressure homogenization treatment on pea protein suspensions. Food Hydrocolloids, 178, 112659.
2. Pinto, T. C., Barba, L., Papadogiannakis, C., García, A. K., Caliandro, R., Sabet, S., & **Valoppi, F.** (2026). Unveiling the fate of lipid crystalline structures in engineered emulsions during in vitro digestion. Food Chemistry, in press, 149077.
3. Grahn, P., Lassila, P., & **Valoppi, F.** (2025). Micromechanical finite element modeling of crystalline lipid-based materials: Monoglyceride-based oleogels and their composites. Materials Horizons, 12, 3358–3367.
4. Lassila, P., Zinn, T., Hyvonen, J., Noriega Benitez, E., Penttila, P., Salmi, A., & **Valoppi, F.** (2025). Effect of ultrasound standing wave-induced acoustophoresis in monoglyceride oleogel structuration. Crystal Growth & Design, 25, 4394–4404.
5. Lassila, P., Nikolaev, D., Mäkinen, J. M. K., Haeggström, E., **Valoppi, F.**, & Salmi, A. (2025). Simulation of angular spectrum filtering utilizing an attenuating layered structure with an emitting piezoceramic transducer. IEEE International Ultrasonics Symposium (IUS), Utrecht, pp. 1–4.
6. Pinto, T. C., Lassila, P., Giannone, G., Sabet, S., Hietala, S., & **Valoppi, F.** (2025). A novel oleogel-in-oleogel system with tailorable digestibility through kinetic confinement of the oil. Food Hydrocolloids, 167, 111436.
7. Sabet, S., Kazerani García, A. A., Kirjoranta, S., Pinto, T. C., Siven, M., Bhattarai, M., Barba, L., & **Valoppi, F.** (2024). Development of the first "encapsulated oleogel-in-oleogel" system with tailorable lipid digestion. Food Hydrocolloids, 153, 110068.
8. **Valoppi, F.**, Lee-Korhonen, J., Nolvi, A., Sabet, S., Nikolaev, D., Grahn, P., Schavikin, J., Lassila, P., Pinto, T. C., Kazerani Garcia, A., Papadogiannakis, C., Kirjoranta, S., & Salmi, A. (2024). A new era of healthy fats. Food Science and Technology, 38, 46–51.
9. Nikolaev, D., Weber, M., **Valoppi, F.**, Hyvönen, J., Mäkinen, J., Salmi, A., & Haeggström, E. (2023). Generating spatially complex ultrasonic standing waves for particle manipulation. IEEE International Ultrasonics Symposium (IUS), Montreal, pp. 1–4.
10. Sabet, S., Pinto, T. C., Kirjoranta, S., Kazerani Garcia, A., & **Valoppi, F.** (2023). Clustering of oleogel production methods reveals pitfalls and advantages for sustainable, upscalable, and oxidative stable oleogels. Journal of Food Engineering, 357, 111659.
11. **Valoppi, F.**, Schavikin, J., Lassila, P., Laidmäe, I., Heinämäki, J., Hietala, S., Haeggström, E., & Salmi, A. (2023). Formation and characterization of oleogels obtained via direct dispersion of ultrasound-enhanced electrospun nanofibers and cold milling. Food Structure, 37, 100338.
12. Halahlah, A., Räikkönen, H., Piironen, V., **Valoppi, F.**, Mikkonen, K. S., & Ho, T. M. (2023). Wood hemicelluloses as sustainable wall materials to protect bioactive compounds during spray drying of bilberries. Powder Technology, 415, 118148.
13. Bhattarai, M., Penttilä, P., Barba, L., Macias-Rodriguez, B., Hietala, S., Mikkonen, K. S., & **Valoppi, F.** (2022). Size-dependent filling effect of crystalline celluloses in structural engineering of composite oleogels. LWT – Food Science and Technology, 160, 113331.
14. Cerqueira, M. A. A., **Valoppi, F.**, & Pal, K. (2022). Oleogels and organogels: A promising tool for new functionalities. Gels, 8, 349.
15. Lassila, P., **Valoppi, F.**, Hietala, S., Salmi, A., & Haeggström, E. (2022). Ultrasonic-standing-wave-crystallized oleogels characterized via oscillatory rheology. IEEE International Ultrasonics Symposium (IUS), Venice, pp. 1–4.

16. Lassila, P., **Valoppi, F.**, Tommiska, O., Hyvönen, J., Holmström, A., Hietala, S., Salmi, A., & Haeggström, E. (2022). Practical scale modification of oleogels by ultrasonic standing waves. Ultrasonics Sonochemistry, 85, 105970.
17. Molteni, C., La Motta, C., & **Valoppi, F.** (2022). Improving the bioaccessibility and bioavailability of carotenoids by means of nanostructured delivery systems: A comprehensive review. Antioxidants, 11, 1931.
18. Österberg, H. O., Mäkinen, J. M. K., Schavikin, J., **Valoppi, F.**, Nikolaev, D., Laidmäe, I., Heinämäki, J., Salmi, A., & Haeggström, E. (2022). Scaling-up the ultrasound-enhanced electrospinning device. IEEE International Ultrasonics Symposium (IUS), Venice, pp. 1–4.
19. Sabet, S., Kirjoranta, S., Lampi, A. M., Lehtonen, M., Pulkkinen, E., & **Valoppi, F.** (2022). Addressing criticalities in the INFOGEST static in vitro digestion protocol for oleogel analysis. Food Research International, 160, 111633.
20. Tommiska, O. M., Mäkinen, J. M. K., Salmi, A., **Valoppi, F.**, & Haeggström, E. (2022). FEM-simulations of tailored 3D pressure fields for US-assisted oleogel crystallization. IEEE International Ultrasonics Symposium (IUS), Venice, pp. 1–3.
21. **Valoppi, F.**, Agustin, M., Abik, F., Morais De Carvalho, D., Sithole, J., Bhattarai, M., Varis, J. J., Arzami, A. N. A. B., Pulkkinen, E., & Mikkonen, K. S. (2021). Insight on current advances in food science and technology for feeding the world population. Frontiers in Sustainable Food Systems, 5, 626227.
22. **Valoppi, F.**, Lassila, P., Salmi, A., & Haeggström, E. (2021). Automated image analysis method for oil-release test of lipid-based materials. MethodsX, 8, 101447.
23. **Valoppi, F.**, Salmi, A., Ratilainen, M., Puranen, T., Tommiska, O., Hyvönen, J., Heikkilä, J., & Haeggström, E. (2021). Ultrasonic standing wave chamber for engineering microstructures of water- and lipid-based materials. Engineering Research Express, 3, 016002.
24. **Valoppi, F.**†, Wang, Y.-J.†, Alt, G., Peltonen, L. J., & Mikkonen, K. S. (2021). Valorization of native soluble and insoluble oat side streams for stable suspensions and emulsions. Food and Bioprocess Technology, 14, 751–764. (†equal contribution)
25. **Valoppi, F.**, Salmi, A., Ratilainen, M., Barba, L., Puranen, T., Tommiska, O., Helander, P., Heikkilä, J., & Haeggström, E. (2020). Controlling oleogel crystallization using ultrasonic standing waves. Scientific Reports, 10, 14448.
26. **Valoppi, F.**†, Haman, N.†, Ferrentino, G., & Scampicchio, M. (2020). Inhibition of lipid autoxidation by vegetable waxes. Food & Function, 11, 6215–6225. (†equal contribution)
27. Bhattarai, M., **Valoppi, F.**, Hirvonen, S.-P., Hietala, S., Kilpeläinen, P., Aseyev, V., & Mikkonen, K. S. (2020). Time-dependent self-association of spruce galactoglucomannans depends on pH and mechanical shearing. Food Hydrocolloids, 102, 105607.
28. **Valoppi, F.**, Lahtinen, M. H., Bhattarai, M., Kirjoranta, S. J., Juntti, V. K., Peltonen, L. J., Kilpeläinen, P. O., & Mikkonen, K. S. (2019). Centrifugal fractionation of softwood extracts improves the biorefinery workflow and yields functional emulsifiers. Green Chemistry, 21, 4691–4705.
29. **Valoppi, F.**, Maina, N., Allén, M., Miglioli, R., Kilpeläinen, P. O., & Mikkonen, K. S. (2019). Spruce galactoglucomannan-stabilized emulsions as essential fatty acid delivery systems for functionalized drinkable yogurt and oat-based beverage. European Food Research and Technology, 245, 1387–1398.
30. Lahtinen, M. H., **Valoppi, F.**, Juntti, V., Heikkinen, S., Kilpeläinen, P. O., Maina, N. H., & Mikkonen, K. S. (2019). Lignin-rich PHWE hemicellulose extracts responsible for extended emulsion stabilization. Frontiers in Chemistry, 7, 871.
31. Calligaris, S., Manzocco, L., **Valoppi, F.**, Comuzzo, P., & Nicoli, M. C. (2019). Microemulsions as delivery systems of lemon oil and beta-carotene into beverages: Stability test under different light conditions. Journal of the Science of Food and Agriculture, 99, 7016–7020.
32. Calligaris, S., **Valoppi, F.**, Barba, L., Anese, M., & Nicoli, M. C. (2018). β-Carotene degradation kinetics as affected by fat crystal network and solid/liquid ratio. Food Research International, 105, 599–604.
33. Calligaris, S., Plazzotta, S., **Valoppi, F.**, & Anese, M. (2018). Combined high-power ultrasound and high-pressure homogenization nanoemulsification: The effect of energy density, oil content and emulsifier type and content. Food Research International, 107, 700–707.
34. **Valoppi, F.**, Frisina, R., & Calligaris, S. (2017). Fabrication of transparent lemon oil loaded microemulsions by phase inversion temperature (PIT) method: Effect of oil phase composition and stability after dilution. Food Biophysics, 12, 244–249.
35. **Valoppi, F.**, Calligaris, S., & Marangoni, A. G. (2017). Structure and physical properties of oleogels containing peanut oil and saturated fatty alcohols. European Journal of Lipid Science and Technology, 119.
36. **Valoppi, F.**, Calligaris, S., Barba, L., Šegatin, N., Poklar Ulrih, N., & Nicoli, M. C. (2017). Influence of oil type on formation, structure, thermal, and physical properties of monoglyceride-based organogel. European Journal of Lipid Science and Technology, 119, 1500549.
37. Manzocco, L., **Valoppi, F.**, Lagazio, C., Calligaris, S., Anese, M., & Nicoli, M. C. (2017). Shelf life validation by monitoring food on the market: The case study of sliced white bread. Italian Journal of Food Science, 29, 100–111.

38. Manzocco, L., **Valoppi, F.**, Calligaris, S., Andreatta, F., Spilimbergo, S., & Nicoli, M. C. (2017). Exploitation of κ-carrageenan aerogels as template for edible oleogel preparation. Food Hydrocolloids, 71, 68–75.
39. Fayaz, G., Goli, S. A. H., Kadivar, M., **Valoppi, F.**, Barba, L., Calligaris, S., & Nicoli, M. C. (2017). Potential application of pomegranate seed oil oleogels based on monoglycerides, beeswax and propolis wax as partial substitutes of palm oil in functional chocolate spread. LWT – Food Science and Technology, 86, 523–529.
40. Fayaz, G., Goli, S. A. H., Kadivar, M., **Valoppi, F.**, Barba, L., Balducci, C., Conte, L., Calligaris, S., & Nicoli, M. C. (2017). Pomegranate seed oil organogels structured by propolis wax, beeswax and their mixture. European Journal of Lipid Science and Technology, 119, 1700032.
41. Calligaris, S., **Valoppi, F.**, Barba, L., Pizzale, L., Anese, M., Conte, L., & Nicoli, M. C. (2017). Development of transparent curcumin loaded microemulsions by PIT method: Effect of lipid type and physical state on curcumin stability. Food Biophysics, 12, 45–51.
42. **Valoppi, F.**, Calligaris, S., & Marangoni, A. G. (2016). Phase transition and polymorphic behavior of binary systems containing fatty alcohols and peanut oil. Crystal Growth & Design, 16, 4209–4215.
43. Manzocco, L., Ignat, A., **Valoppi, F.**, Burrafato, K. R., Lippe, G., Spilimbergo, S., & Nicoli, M. C. (2016). Inactivation of mushroom polyphenoloxidase in model systems exposed to high-pressure carbon dioxide. The Journal of Supercritical Fluids, 107, 669–675.
44. Anese, M., **Valoppi, F.**, Calligaris, S., Lagazio, C., Suman, M., Manzocco, L., & Nicoli, M. C. (2016). Omega-3 enriched biscuits with low levels of heat-induced toxicants: Effect of formulation and baking conditions. Food and Bioprocess Technology, 9, 232–242.
45. **Valoppi, F.**, Calligaris, S., Barba, L., & Nicoli, M. C. (2015). Structural and viscoelastic characterization of ternary mixtures of sunflower oil, saturated monoglycerides and aqueous phases containing different bases. Food Research International, 74, 224–230.
46. **Valoppi, F.**, Calligaris, S., Barba, L., & Nicoli, M. C. (2015). Compositional phase diagram, rheological and structural properties of systems containing UHT skim milk, sunflower oil, saturated monoglycerides and co-surfactants. Food Biophysics, 10, 94–102.
47. Manzocco, L., Ignat, A., Anese, M., Bot, F., Calligaris, S., **Valoppi, F.**, & Nicoli, M. C. (2015). Efficient management of the water resource in the fresh-cut industry: Current status and perspectives. Trends in Food Science & Technology, 46, 286–294.
48. Calligaris, S., **Valoppi, F.**, Barba, L., Anese, M., & Nicoli, M. C. (2014). Mutual effect of fat and beta-carotene on fat crystal network structure and carotenoid bleaching. Food Research International, 66, 257–263.
49. Calligaris, S., Manzocco, L., **Valoppi, F.**, & Nicoli, M. C. (2013). Effect of palm oil replacement with monoglyceride organogel and hydrogel on sweet bread properties. Food Research International, 51, 596–602.

Book Chapters

1. Palla, C.†, & **Valoppi, F.**† (2024). Preface. In C. Palla & F. Valoppi (Eds.), Advances in oleogel development, characterization, and nutritional aspects. Springer. ISBN: 978-3-031-46830-8. (†equal contribution)
2. Cerqueira, M. A.†, Palla, C.†, & **Valoppi, F.**† (2024). Tracing the evolution of oleogels: A historical overview. In C. Palla & F. Valoppi (Eds.), Advances in oleogel development, characterization, and nutritional aspects. Springer. (†equal contribution)
3. Pinto, T. C., Sabet, S., Kazerani García, A., Kirjoranta, S., & **Valoppi, F.** (2024). Oleogel preparation methods and classification. In C. Palla & F. Valoppi (Eds.), Advances in oleogel development, characterization, and nutritional aspects. Springer.
4. Palla, C.†, & **Valoppi, F.**† (2024). Image analysis for oleogel and oleogel-based system characterization. In C. Palla & F. Valoppi (Eds.), Advances in oleogel development, characterization, and nutritional aspects. Springer. (†equal contribution)
5. Aitta-aho, T., Kazerani García, A., Sabet, S., Pinto, T. C., & **Valoppi, F.** (2024). Preclinical and clinical research on oleogels. In C. Palla & F. Valoppi (Eds.), Advances in oleogel development, characterization, and nutritional aspects. Springer.
6. **Valoppi, F.**† & Palla, C.† (2024). The future of oleogels between challenges and opportunities. In C. Palla & F. Valoppi (Eds.), Advances in oleogel development, characterization, and nutritional aspects. Springer. (†equal contribution)
7. **Valoppi, F.**, Calligaris, S., & Marangoni, A. G. (2018). Stearyl Alcohol Oleogels. In A. G. Marangoni & N. Garti (Eds.), Edible Oleogel: Structure and Health Implications, 2nd Edition (pp. 219–234). Academic Press and AOCS Press. ISBN: 9780128142707.

Edited Books

Palla, C., & **Valoppi, F.** (Eds.) (2024). *Advances in oleogel development, characterization, and nutritional aspects*. Springer International Publishing, 691 pp. ISBN: 978-3-031-46830-8.

PATENTS

November 2025 Valoppi F., Mardanihosseinabadi, M. A method for producing a food composition, such as an oleogel, comprising a fibrous material. **Filed — FI20253796**

May 2025 Weber, M., Salmi, A., Nikolaev, D., Hyvönen, J., Koskenniemi, M., Jääskeläinen, J., Haeggström, E., Nolvi, A., Luxenhofer, R., Klami A., Valoppi, F., Iablonskyi, D. Method for additive manufacturing with machine-learning. **Filed — WO2025242963A1**

March 2024 Valoppi, F., Sabet, S., Kirjoranta, S., Palla, C. A method for producing a spreadable food composition and a spreadable food composition. **Filed — WO2025202538A1**

June 2023 Valoppi, F., Salmi, A, Haeggström, E., Laidmäe, I., Heinämäki, J. Method for producing oleogels and oleogels obtainable by the method. (Priority: June 2022) **GRANTED — EP4496836B1**

February 2023 Valoppi, F., Bhattarai, M. A composition comprising an oleogel and a method for producing a composition comprising an oleogel. (Priority: February 2022) **Filed — WO2023156713A1**

September 2022 Valoppi, F., Salmi, A., Haeggström, E., Mikkonen, K. S., Sabet, S. Composition comprising fat or oil droplets and a method for producing the composition. (Priority: September 2021) **Filed — WO2023037053A1**

November 2019 Valoppi, F., Salmi, A, Haeggström, E. Method to produce oleogels. **GRANTED — US20210127720A1**

October 2018 Scampicchio, M. M., Ferrentino, G., Valoppi, F., Haman, N. Oleogel with antioxidant activity (Oleogel con capacità antiossidante). **GRANTED — IT102018000009242A**

RESEARCH SUPERVISION & LEADERSHIP

R&D Team Lead (10 people) *9.2023 – present*
Perfat Technologies Oy · Helsinki, Finland

Principal Investigator & Research Group Leader *2.2021 – present*
Faculty of Agriculture and Forestry (2021) & Faculty of Science (2022), University of Helsinki · Finland

Supervised 20+ researchers at the University of Helsinki since 2018, spanning postdoctoral researchers, Ph.D. students, master's students, and bachelor's students. Co-supervised 4 master's and 12 bachelor's students at the University of Udine (2012–2015). Mentor in the FOODIO Food Solutions Master Class (EIT Food, 2018).

TEACHING ACTIVITIES

Lecturer — Edible Metamaterials (MATR383, 5 ECTS, lectures + lab) *2021–2022*
Department of Physics, University of Helsinki · First course of its kind in Europe

Invited Teacher *2017–2023*
Department of Food and Nutrition, University of Helsinki · Topics: edible structures for non-communicable diseases; pulsed electric fields; supercritical fluid extraction; low-energy emulsification; emulsions

Invited Teacher *2022, 2024*
Nordic Lipidforum Academy · Topic: oleogels

Teacher & Assistant Teacher *2012–2015*
Department of Food Science, University of Udine · Topics: structural design of emulsions and gels; microemulsions; novel technologies; water activity

AWARDS & HONORS

Young Scientist Award 2022 — Food Structure and Functionality *21.9.2022*
5th Food Structure and Functionality Symposium, Cork, Ireland

Ph.D. Thesis Award (Scientific Area) *30.6.2017*
University of Udine, Italy

Best Ph.D. Thesis in Food Science and Technology of 2016 *16.2.2017*
Italian Association of Scientific Agricultural Societies (AISSA), Italy

OTHER SCIENTIFIC MERITS & ACTIVITIES

Editorial Roles

- Editorial Advisory Board member, MethodsX — Food Science (since 4.2019, by invitation of Editor-in-Chief)
- Associate Editor, Journal of Nutrition, Food Research and Technology (since 1.2018)
- Guest Editor, Gels — special issue on oleogels (since 5.2020)
- Peer-reviewer for 25+ scientific journals including Food Hydrocolloids, Food Structure, Food Research International, Food Chemistry, Soft Matter (since 1.2013)
- Co-Editor, Springer book "Advances in Oleogel Development, Characterization, and Nutritional Aspects" (2.2022 – 1.2024; published 2024)

Scientific Community & Memberships

- Fellow, Helsinki Institute of Life Science (HiLIFE) — 1.2023 – 12.2025
- Fellow, Food section, Lund Institute of Advanced Neutron and X-Ray Science — since 2.2022
- Member, Finnish Synchrotron Radiation User Organization — since 8.2018
- Member, Helsinki Institute of Sustainability Science (HELSUS) — since 1.2018
- Thesis Committee Member for a Ph.D. student in Physics, University of Helsinki — since 5.2021
- Co-Chair of two sessions on Sustainable Food Systems, Sustainability Science Days Conference 2022, Helsinki

Entrepreneurship & Innovation

- EIT Food Innovator Fellowship 2020 (6.2020 – 7.2020)
- Finalist, Y Science pitching competition (12.2021)
- Leader of selected team, Germinator pre-incubator program, Viikki Food Design Factory, University of Helsinki (8.2021 – 4.2022)
- External research consultant and collaborator for food industries and startups — since 3.2018

Science Communication

- Invited speaker, Nordic Lipid Forum webinar (11.2020)
- Scientific blog for the Food Materials Science Research Group, University of Helsinki (10.2017 – 9.2023)
- Feature article in Food Hub magazine: "Designing foods from understanding structure to structure design" (2021)
- Interview in Smithsonian Magazine: "Have Scientists Designed the Perfect Chocolate?" (2023)