

University Academic Curriculum Vitae

Personal information

Martina Moretton
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Education since leaving school

- October 2014 – October 2017
Bachelor's Degree in Food Science and Technology (L-26)
University of Udine, Italy.
Final grade: 107/110
- October 2017 – September 2019
Master's Degree in Food Science and Technology (LM-70)
University of Udine, Italy.
Final grade: 110/110 *cum laude*
- November 2019 – January 2023
Ph.D. in Food and Human Health (scholarship funded by the European Social Fund – FSE) at the University of Udine, Italy

Present appointment

- Title of appointment: **Fixed-term Researcher**
- start of appointment: **15th December 2025**
- Level of appointment: **RTDa AGR AGRI 07/A**
- Employer: **Free University of Bozen-Bolzano**
- brief description of responsibilities:
The main responsibilities include
 1. Conducted experimental research and data analysis within the framework of the project.
 2. Developed and validated experimental protocols, models, and analytical tools.
 3. Prepared scientific articles and contributed to publications in peer-reviewed international journals.
 4. Participated in conferences and workshops to present research findings.
 5. Collaborated with national and international research groups.
 6. Supervised students and PhD candidates in laboratory and research activities.
 7. Managed project documentation, scientific reporting, and administrative deliverables.

Professional experience

Chronological list of all previous employments

From / to	Job title	Name of academic Institution	Academic level	Responsibilities
April 2022 – October 2022	Visiting PhD	Food Quality and Design Group, Department of Agrotechnology and Food Sciences, Wageningen University & Research, The Netherlands.	PhD Student	Research
February 2023 – March 2023	Research Collaborator	Department of Agri-Food, Environmental and Animal Sciences, University of Udine, Italy.	Post-Doc	Research
February 2023	Visiting researcher	Food Quality and Design Group, Department of Agrotechnology and Food Sciences, Wageningen University & Research, The	Post-Doc	Research

		Netherlands.		
April 2023 – July 2023	Post-Doc Researcher	Department of Agri-Food, Environmental and Animal Sciences, University of Udine, Italy.	Post-Doc	Research
August 2023 – September 2025	Fixed-term Researcher	Fondazione Edmund Mach, Sensory Quality Unit, Research and Innovation Centre, San Michele All'Adige (TN), Italy.	Researcher	Research
2025	Teaching Assistant	Centro Agricoltura Alimenti Ambiente C3A, University of Trento	Teaching Assistant	Teaching
September 2025 – December 2025	Fixed-term Researcher	Laimburg Resarcher Centre, Gruppo di Aromi e Metaboliti, Vadena – BZ	Researcher	Research

Participation in exhibitions (where applicable)

Participation in Research Projects

From / to	Project	Organization	Role	Contact Person
2025-2026	SCIRE	SINU	Co-tutor	Dr. Monica Dinu
2023 – 2025	OnFoods – Spoke 3	PNRR	Researcher	Dr. Franco Biasioli
2023	CibiAMO-Progetto Interdipartimentale	UniUd	Post-doc researcher	Prof. Nicoletta Pellegrini
2020-2022	Personalized Health Management of Physical, Mental and Social Frailty in the Elderly (ALT FRAILY)	Friuli Foundation	PhD Student	Prof. Sonia Calligaris
2020 – present	Food Labelling of Italian Products (FLIP)	Italian Society of Human Nutrition	Collaborator	Prof. Nicoletta Pellegrini Prof. Daniela Martini

Membership in Associations

Active member of the Italian Society of Human Nutrition (SINU) and an active participant in the “Young SINU” working group (2020-present). Through SINU, M. Moretton is involved in the FLIP project and contributes to the production of scientific content for the society’s institutional social media channels and newsletter. She has delivered oral presentations within SINU activities and is currently the author of two scientific manuscripts in preparation. Details of these activities are provided below. (<https://sinu.it/giovani/>, 28/11/2025)

Experience in academic teaching

Academic Teaching – Free University of Bolzano-Bozen

A.Y. 2025/2026

- Laboratory activities of the course “Sensory Analysis and Testing Techniques” (English) (6 ECTS) for Bachelor students (L-GASTR);
- Laboratory activities of the course “Food and wine science and technology and recovery methods of agrofood by-products” (English) (3 ECTS) for Bachelor students (L-GASTR);
- Laboratory activities of the course “Operazioni Unitarie” (English) (3 ECTS) for Bachelor students (L-25);
- Laboratory activities of the course “Industrie Agrarie” (Italian) (6 ECTS) for Bachelor students (L-25).

Teaching Support Activities – University of Trento

A.Y. 2025/2026

- Laboratory activities of the course “Sensory quality of agri food products and consumer preference” (English) (3 ECTS) for the Master’s Degree program in Agrifood Innovation Management (LM-69R).

A.Y. 2024/2025

- Laboratory activities of the course “Sensory analysis” (Italian) (6 ECTS) Bachelor's degree program in Viticulture and Oenology (L-25)

Academic lectures

Since 2019, M. Moretton has conducted thematic seminars and practical exercises for students as part of various courses in the Bachelor's (L-26) and Master's (LM-70) programs in Food Science and Technology, the Master's (LM-86) program in Animal Breeding and Welfare, and the Bachelor's (L/GASTR) program in Food Science and Culture at the University of Udine, as well as the Bachelor's (L-25, L-26) program in Viticulture and Oenology at the University of Trento.

Thematic seminars

A.Y.	Teaching Course	Degree Program	Seminars	Duration (h)
2023-2024	L-25, L-26	<i>Analisi sensoriale</i>	<i>La valutazione dei vini da parte del sommelier</i>	1
2019-2020; 2020-2021	LM-70	<i>Tecnologie Alimentari I</i>	<i>L'omogeneizzazione ad alta pressione (HPH)</i>	2
2021-2022; 2022-2023	L/GASTR	<i>Scenari ed evoluzioni nel mondo del cibo</i>	<i>Alimenti per specifiche categorie di consumatori: gli anziani</i>	2

Practical exercises

A.Y.	Teaching Course	Degree Program	Practical exercises	Duration (h)
2019-2020	L-26	<i>Proprietà chimiche e fisiche degli alimenti</i>	<i>L'attività dell'acqua e pH</i>	3
2019-2020	LM-86	<i>Tecnologie di trasformazione</i>	<i>Caratterizzazione dei prodotti di origine animale</i>	2

Activity as Co-supervisor of Bachelor and Master's Thesis Reports

List of Bachelor's theses aimed at obtaining a Bachelor's degree in Viticulture and Oenology (L-25) at the University of Trento.

N	Name	A.Y.	Title	Contact
1	Margherita Tadei	2024-2025	<i>Il profilo sensoriale del Bianchetto del Metauro: uno strumento per la valorizzazione di un vitigno storico delle Marche</i>	Prof. Flavia Gasperi
2	Francesco Zizioli	2024-2025	<i>Appassimento in pianta mediante taglio del tralcio</i>	Prof. Silvia Carlin
3	Matteo Pepi	2024-2025	<i>L'aroma dei vini rosé: l'influenza delle variabili prefermentative</i>	Prof. Tomas Roman Villegas Prof.ssa Flavia Gasperi

List of Bachelor's theses aimed at obtaining a Bachelor's degree in Food Science and Technology (L-26) at the University of Udine.

N	Name	A.Y.	Title	Contact
1	Margherita Battistella	2023-2024	<i>Un'analisi critica della qualità nutrizionale e del contenuto di sodio dei primi piatti ready-to-eat venduti in Italia</i>	Prof. Nicoletta Pellegrini
2	Albright Kwaku Yeboah	2023-2024	<i>La qualità nutrizionale dei prodotti venduti in Italia: un'analisi critica sul contenuto di sodio delle salse</i>	Prof. Nicoletta Pellegrini
3	Giorgia Spricigo	2023-2024	<i>Quanto sodio contengono i prodotti sott'olio e sott'aceto rispetto ai limiti proposti dall'Organizzazione Mondiale della Sanità?</i>	Prof. Nicoletta Pellegrini
4	Alice Fardin	2023-2024	<i>I vegetali in scatola venduti in Italia: un'analisi critica della qualità</i>	Prof. Nicoletta Pellegrini

		<i>nutrizionale e del contenuto di sodio</i>		
5	Luca Chiavon	2021-2022	<i>Proprietà chimiche, fisiche e sensoriali di pane arricchito di proteine destinato a consumatori anziani</i>	Prof. Monica Anese
6	Davide Rosario Altomonte	2021-2022	<i>Valutazione del rilascio di zuccheri della mela durante la masticazione: confronto tra varietà Fuji e Golden Delicious</i>	Prof. Nicoletta Pellegrini
7	Asia Miranda	2021-2022	<i>Contenuto di sodio nei condimenti venduti in Italia: quanto lontani siamo dai riferimenti fissati dall'Organizzazione Mondiale della Sanità?</i>	Prof. Nicoletta Pellegrini
8	Giada Piccini	2021-2022	<i>Quanto è lontano il contenuto di sodio di minestrone surgelati e zuppe pronte al consumo vendute in Italia rispetto ai riferimenti globali fissati dall'Organizzazione Mondiale della Sanità?</i>	Prof. Nicoletta Pellegrini
9	Davide Papandrea	2021-2022	<i>Messa a punto della formulazione e del processo di cottura di pane arricchito in proteine</i>	Prof. Monica Anese
10	Francesco Battiston	2020-2021	<i>Effetto del grado di tostatura sulle caratteristiche chimiche e fisiche del pane in cassetta</i>	Prof. Monica Anese
11	Giorgia Brescacin	2020-2021	<i>Contenuto di sodio nei trasformati del pomodoro venduti in Italia: quanto lontani siamo dai riferimenti globali fissati dall'Organizzazione Mondiale della Sanità?</i>	Prof. Nicoletta Pellegrini
12	Elisa Piccoli	2020-2021	<i>Contenuto di sodio nelle zuppe pronte vendute in Italia: quanto lontani siamo dai riferimenti globali fissati dall'Organizzazione Mondiale della Sanità?</i>	Prof. Nicoletta Pellegrini
13	Syria Dalla Schiava	2020-2021	<i>Strategie di educazione alimentare negli anziani</i>	Prof. Nicoletta Pellegrini
14	Mattia Zambon	2020-2021	<i>Metodi di rilevamento delle abitudini alimentari negli anziani: un'analisi della letteratura</i>	Prof. Nicoletta Pellegrini

List of Master's theses in Food Science and Technology (LM-70) at the University of Udine.

N	Name	A.Y.	Title	Contact
1	Federica Tombolan	2021-2022	<i>Effetto della tostatura e dell'aggiunta di burro sulla risposta glicemica di pane in cassetta stimata in vitro in anziani</i>	Prof. Monica Anese
2	Essoham Salifou	2021-2022	<i>Effetto del grado di tostatura e della combinazione con burro sulla stima dell'indice glicemico di pane in cassetta</i>	Prof. Monica Anese
3	Naomi Fossaluzza	2020-2021	<i>Confronto della digeribilità di diverse tipologie di pane con un metodo di digestione in vitro adattato per anziani</i>	Prof. Monica Anese

List of Master's theses in Food Technology at the Wageningen University & Research, The Netherlands

N	Name	A.Y.	Title	Contact
1	Rianne Oudejans	2021-2022	Protein-enriched bread for elderly consumer	Prof. Nicoletta Pellegrini, Dr. Edoardo Capuano

Provided research support to Erasmus students

N	Name	Period	University	Title	Contact
1	Alice Fenouillere	2022	Institute Agro Dijon, France	Impact of different technological interventions on glucose release after in vitro digestion of bread.	Prof. Monica Anese

Since April 1, 2020, M. Moretton has been awarded the title of "Subject

Expert" (Cultore della materia) in the scientific-disciplinary sector of Food Science and Technology (SC 07/F1 - SSD AGR/15) by the Department of Agri-Food, Environmental, and Animal Sciences at the University of Udine for the academic years 2019/2020, 2020/2021, and 2021/2022.

Examination Committees

Since 2020, M. Moretton has been a member of the examination committees for the following courses within the Bachelor's (L-26) and Master's (LM-70) programs in Food Science and Technology and the Master's (LM-86) program in Animal Breeding and Welfare at the University of Udine, related to SC 07/F1 – SSD AGR/15.

Other academic responsibilities

M. Moretton was the coordinator of the "Early Career Scientists" (ECSs) group, which includes RTDa researchers, Post-Docs, and PhD students from Spoke 3 of OnFoods Project - PNRR. Her role involves organizing and coordinating activities planned by the Mentorship Program and ensuring effective communication of information within Spoke 3. **(2023 – 2025)**

Contact: Prof. Maria De Angelis.

M. Moretton has been involved in dissemination ECS activities through oral presentations as reported below:

Oral presentations

Moretton, M. Early Career Scientist (ECS) activities. Onfoods Annual Meeting, Bari, April 14-15, 2025.

Memberships

M. Moretton **has been a member of the organizing committee** for the following events:

DIFFA23 – 1st *International Symposium on Direct Injection Food Flavour Analytics*. San Michele all'Adige (TN), September 20-22, 2023.

Annual Meeting of the Early Career Scientists from Spoke 3 – OnFoods Project. Piacenza, January 16, 2025

Tradition and Innovation in Food: More Connected Than We Think? A two-day event at Fondazione Mach, organised by Spokes 3 and 4. San Michele all'Adige (TN), June 9-10, 2025.

Research and scholarships

Summary of current research

Since 2019, M. Moretton has been continuously engaged in research activities on various topics related to food science and technology, food chemistry, and nutrition. The main research topics:

1. The application of mass spectrometry techniques, such as direct injection mass spectrometry (**DIMS**), gas chromatography, and spectroscopic analysis (e.g., **PTR-ToF-MS**, **GC-MS**), combined with advanced data analysis, enables rapid and sensitive monitoring of volatile compounds in food-related systems and processes (e.g., fruits and vegetables, dairy and plant-based beverages, alcoholic drinks, algae, fermentation processes, and shelf-life assessment) as well as in health-related studies (e.g., in vitro colon fermentation for gut microbiota monitoring). The evidence gathered from this research demonstrated that PTR-ToF-MS was particularly effective in tracking VOC dynamics during fermentation, offering valuable insights into microbial activity and chemical transformations. The characterization of VOCs in milk- and cereal-based kefir revealed how variations in formulations, starter cultures, and additional inocula significantly influenced VOC profiles and, consequently, the sensory attributes of the final products. These findings contribute to improving consumer acceptance and optimizing fermentation strategies. The experience also includes the handling and interpretation of large datasets derived from these analyses.
2. Integration of DIMS with Nuclear Magnetic Resonance (**NMR**) for comprehensive characterization of fermented products. The integration of these techniques enabled a deeper understanding of

the fermentation process and highlighted significant differences between food matrices.

3. **Sensory analysis** of food products (e.g., apples, baked goods) aimed at reformulating and optimizing the sensory quality of foods, including for vulnerable consumer groups and at-risk populations such as the elderly.
4. Application of a multidisciplinary approach for designing tailor-made foods for the elderly: sensory properties of an ideal bread for elderly consumers were identified, and based on the sensory preferences of the elderly, a functional bread was designed to meet the nutritional needs of older adults. Gastrointestinal digestibility and colonic fermentability of the new product in the elderly were assessed through *in vitro* tests. The metabolic responses during the colonic fermentability were monitored by **GC-FID, HPLC** and **LC-MS**.
5. Development and application of an ***in vitro* digestion method** to simulate the gastrointestinal conditions of the elderly, to study the digestibility of nutrients (e.g., proteins and carbohydrates). Since no standardised method currently exists, this research is particularly relevant for evaluating the effectiveness of technological interventions targeted at developing foods for the elderly population. Specifically, various plant-based protein concentrates (pea, rice, and wheat), along with whey proteins - the reference animal protein source - were subjected to *in vitro* digestion to simulate adult and elderly conditions. The results demonstrated that the developed method is capable of distinguishing between different physiological conditions, as all protein sources tested, with the exception of wheat, showed lower digestibility under simulated elderly conditions. This method was also applied to complex systems (e.g., baked products) as case studies.
6. Reuse of industrial production waste to develop new ingredients: soy okara, the byproduct from the industrial production of soy milk, tofu, soy protein isolates, and soy oil, has been used to prepare protein extracts from okara for new food products.
7. Application of technological interventions to modify the functional properties of foods. Specifically, the effects of high-pressure homogenization (**HPH**) treatments on the functional and nutritional properties of plant proteins and soy okara were studied.

M. Moretton has secured funding for her research activities, as summarized below.

November 2019	PhD scholarship funded by the European Social Fund (ESF) at the University of Udine.
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Publications

M. Moretton is the author of **15 publications** in international peer-reviewed journals indexed in Scopus (Q1 and Q2), 1 publication currently under review, and 2 technical–scientific papers published in a national journal. M. Moretton has a total of 280 citations and an H-index of 8 (Scopus, data retrieved on 02/04/2026). The full list of publications is reported below.

Journal articles in refereed academic journals

[–] **Moretton, M.**, Angelino, D., Pellegrini, N., Martini, D. Nutritional profile of ready-to-eat first course meals and soups on the Italian market: focus on sodium content and comparison with WHO sodium benchmarks. *Under review*.

- [1] Secchi, G., Tajmoussavilangerudi, A., Viretto, C., Tlais, A. Z. A., Angeli, A., Vrhovsek, U., Brigante, F., **Moretton, M.**, Betta, E., Khomenko, I., Biasioli, F., Solovyev, P., Bontempo, L., Mancini, A., Franciosi, E. (2026). Fermented beverages enriched with quinoa or chestnut–persimmon: nutritional, functional, and anti-nutritional assessment. *LWT - Food Science and Technology*, 241, 119054. <https://doi.org/10.1016/j.lwt.2026.119054>
- [2] Devecchi, A. Stacchini, L., Nucci, D., Ferrando, M. R., Proietti, E., Formisano, E., **Moretton, M.**, Leone, A., Gianfredi, V. (2026). Exploring regional inequities in food safety practices and food security in Italy: a cross-sectional study. *Nutrition*, 142, 112985. <https://doi.org/10.1016/j.nut.2025.112985>
- [3] **Moretton, M.**, Cattaneo, C., Anese, M., Pagliarini, E., Pellegrini, N. (2025). Tailor-made protein-rich bread for the elderly: integrating sensory preferences with nutritional and technological goals. *International Journal of Food Sciences and Nutrition. Journal of Food Sciences and Nutrition*, 1-12. <https://doi.org/10.1080/09637486.2025.2579728>
- [4] **Moretton, M.**, Khomenko, I., Cunedioglu, H., Spano, G., Capozzi, V., Biasioli, F., Fragasso, M. (2025). Volatilome evolution of milk kefir and oat, corn and barley kefir-like beverages during fermentation with milk and water kefir grains. *Food Bioscience*, 74, 107731. <https://doi.org/10.1016/j.fbio.2025.107731>
- [5] Piergiovanni, M., **Moretton, M.***, Masuero, D., Carlin, S. (2025). Deep analytical investigation of the aroma chemistry of Incrocio Bruni 54 and its differentiation from Italian white varieties. *Fermentation*, 11, 590. <https://doi.org/10.3390/fermentation11100590>
- [6] Lotti, S., **Moretton, M.**, Bulgari, M., Costantini, L., Dall'Asta, M., De Amicis, R., Esposito, S., Ferraris, C., Fiorini, S., Formisano, E., Giustozzi, D., Guglielmetti, M., Membrino, V., Moroni, A., Napoletano, A., Perone, N., Proietti, E., Tristan Asensi, M., Vici, G., Colombini, B., Martini, D., Sofi, F., Dinu, M. (2025). Association between shift work and eating behaviours, sleep quality, and mental health among Italian workers. *European Journal of Nutrition*, 64:97. <https://doi.org/10.1007/s00394-025-03600-5>
- [7] **Moretton, M.**, Casertano, M., Pellegrini, N., Anese, M., Fogliano, V., Capuano, E. (2024). Effect of high pressure homogenization on *in vitro* digestibility and colon fermentability of pea protein-rich bread designed for elderly consumers. *Food & Function*, 15, 10459–10471. <https://doi.org/10.1039/d4fo02767a>
- [8] **Moretton, M.**, Alongi, M., Renoldi, N., Anese, M. (2023). Steering protein and carbohydrate digestibility by food design to address elderly needs: the case of pea protein enriched bread. *LWT - Food Science and Technology*, 190, 115530. <https://doi.org/10.1016/j.lwt.2023.115530>
- [9] **Moretton, M.**, Alongi, M., Melchior, S., Anese, M. (2023). Adult and elderly *in vitro* digestibility patterns of proteins and carbohydrates as affected by different commercial bread types. *Food Research International*, 167, 112732. <https://doi.org/10.1016/j.foodres.2023.112732>
- [10] **Moretton, M.**, Cattaneo, C., Mosca, A.C., Proserpio, C., Anese, M., Pagliarini, E., Pellegrini, N. (2023). Identification of desirable mechanical and sensory properties of bread for the elderly. *Food Quality and Preference*, 104, 104716. <https://doi.org/10.1016/j.foodqual.2022.104716>
- [11] Melchior, S., **Moretton, M.**, Alongi, M., Calligaris, S., Nicoli, M. C., Anese, M. (2023) Comparison of protein *in vitro* digestibility under adult and elderly conditions: The case study of gluten, pea, rice, and whey proteins. *Food Research International*, 163, 112147. <https://doi.org/10.1016/j.foodres.2022.112147>

[12] Calligaris, S., **Moretton, M.**, Melchior, S., Mosca, A. C., Pellegrini, N., Anese, M. (2022). Designing food for the elderly: the critical impact of food structure. *Food & Function*, 13, 6467. <https://doi.org/10.1039/d2fo00099g>

[13] Mosca, A. C., **Moretton, M.**, Angelino, D., Pellegrini, N. (2022). Effect of gluten and spreads on the oral processing behavior of breads. *Food Chemistry*, 373, 131615. <https://doi.org/10.1016/j.foodchem.2021.131615>

[14] Melchior, S., **Moretton, M.**, Calligaris, S., Manzocco, L., Nicoli, M. C. (2022). High pressure homogenization shapes the techno-functionalities and digestibility of pea proteins. *Food and Bioproducts Processing*, 131, 77-85. <https://doi.org/10.1016/j.fbp.2021.10.011>

[15] Plazzotta S., **Moretton M.**, Calligaris S., Manzocco L. (2021). Physical, chemical, and techno-functional properties of soy okara powders obtained by high pressure homogenization and alkaline-acid recovery. *Food and Bioproducts Processing*, 128, 95-101. <https://doi.org/10.1016/j.fbp.2021.04.017>

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Publications in national technical-scientific journals

[1] **Moretton, M.**, Khomenko, I., Corvino, A. Kefir innovativo a base di cereali: equilibrio tra qualità nutrizionale e profilo aromatico (IT version). *Innovative cereal-based kefir: balancing nutritional quality and aroma profile (ENG version)*. Annual Report Fondazione Edmund Mach. ISSN 2282-1341 https://cri.fmach.it/content/download/3983/97978/file/Report_CRI_2023-24_IT_Web.pdf

[2] Betta, E., Dell'Olio, A., Khomenko, I., **Moretton, M.**, Pedrotti, M., Bianco, G., Caruso, D., Flamini, R., Magni, F., Biasioli, F. (2023). Metodi diretti per l'aroma degli alimenti (Direct injection food flavour analytics). *La Chimica e L'Industria*, 10(6), 26-28. ISSN 2532-182X <https://www.calameo.com/read/00504981112eeca4f9fb6>

Reviewer Activities

Since 2022, M. Moretton has served as a peer reviewer for several international journals with an impact factor in the food technology sector (Food Structure; Food Research International; LWT – Food Science and Technology; Journal of Human Nutrition and Dietetics).

Conference Participation

M. Moretton was invited to give a presentation at the following conference:
XLIV National Congress of SINU 2024. Piacenza, June 4-6, 2024.
M. Moretton. New Foods for the Elderly: Between Nutritional Needs and Physiological Changes.

M. Moretton **has participated** in national and international conferences, delivering oral contributions and presenting posters. The full list is provided below.

Oral presentation

Moretton, M., Khomenko, I., Betta, E., Brigante, F.I., Solovyev, P., Bontempo, L., Capozzi, V., Biasioli, F. Monitoring the effect of raw milk refrigeration on milk kefir fermentation: implications for quality and food safety. *1st International Conference on Fermented Foods*. Bozen (Italy), October 27-30, 2025. *

Khomenko, I., **Moretton, M.**, Betta, E., Langellotti, A. L., Capozzi, V., Fogliano, V., Biasioli, F. Real-Time VOC profiling of microalgae fermented with kefir starters using PTR-ToF-MS. *IMEKOFOODS 2025*. Ljubljana, September 22 – 24, 2025.

Khomenko, I., **Moretton, M.**, Betta, E., Langellotti, A. L., Capozzi, V., Fogliano, V., Biasioli, F. DI-MS for precision fermentation: case study of microalgae fermentation with kefir starters by PTR-ToF-MS. *MASSA 25*. Taranto, June 16-18 2025.

Moretton, M., Pellegrini, N., Angelino, D., Martini, D. The nutritional quality of sauces, dips and dressings sold in Italy: a critical analysis of the sodium content. *45° Congresso Nazionale SINU 2025*. Salerno, May 28-30 2025. *

Dell'Olio, A., Rubert, J., Capozzi, V., Khomenko, I., **Moretton, M.**, Fogliano, V., Biasioli, F. Unraveling the gut volatilome dynamics and inter-individual variability during in-vitro digestion and fermentation of black beans. *8th MS Food Day*, Torre Canne (Brindisi), October 16-18, 2024.

Moretton, M., Khomenko, I., Cunedioğlu, H., Capozzi, V., Biasioli, F. Characterization of kefir-like cereal-based beverages volatilomeduring fermentation by using green analytical approaches. *IUFoST 2024 - 22nd World Congress of Food Science and Technology*, Rimini, September 8-12, 2024. *

Bonfili, L., Suo, X., Tagliasco, M., Bonfini, M., Araiza, O. M., **Moretton, M.**, Pellegrini, N., Eleuteri, A. M., Fiorini, D., Vittadini, E. Symbiotic functional snack for gut-brain axis health. *IUFoST 2024 - 22nd World Congress of Food Science and Technology*, Rimini, September 8-12, 2024.

Khomenko, I., Pedrotti, M., **Moretton, M.**, Betta, E., Farenti, B., Romano A., Capozzi, V., Biasioli, F. High-throughput targeted and untargeted headspace analysis of spirits by PTR-ToF-MS. *5th MS Wine Day*. Asti, May 22-24, 2024.

Khomenko, I., Pedrotti, M., **Moretton, M.**, Betta, E., Farenti, B., Romano A., Capozzi, V., Biasioli, F. How not to get your PTR-TOF drunk: solutions for the automated targeted and untargeted head-space analysis of spirits. *9th International PTR-MS Conference*. Seefeld in Tirol (Austria), January 26-29, 2024.

Fragasso, M., Corvino, A., Dell'Olio, A., **Moretton, M.**, Mazzucotelli, M., Spano, G., Khomenko, I., Capozzi, V. Green analytical approaches and sustainable transition of food systems: the potential of PTR-MS to speed up innovation in fermentation. *9th International PTR-MS Conference*. Seefeld in Tirol (Austria), January 26-29, 2024.

Fragasso, M., Corvino, A., **Moretton, M.**, Khomenko, I., Capozzi, V. DIMS techniques and the study on microbial VOCs in food: flavour attributes, fermentation monitoring and emerging trends. *DIFFA23 – 1st International Symposium on Direct Injection Food Flavour Analytics*. San Michele all'Adige (TN), September 20-22, 2023.

Moretton, M., Martini, D., Angelino, D., Pellegrini, N. Sodium content in soups sold in Italy: how far are we from the global benchmarks? *XLIII Congresso Nazionale SINU 2023*. Arezzo, June 7-9, 2023. *

Moretton, M. Formulation and processing strategies for obtaining bakery products tailored to the elderly's needs. *XXVI Workshop on the Developments in the Italian PhD Research on Food Science, Technology and Biotechnology*. Asti, September 19-21, 2022. *

Moretton, M., Alongi, M., Calligaris, S., Anese, M. Comparison between adult and elderly *in vitro* digestibility patterns of proteins and carbohydrates as affected by different bread types. *Food Structures, Digestion & Health 6th International Conference*. Online, November 16-19, 2021. *

Melchior, S., **Moretton, M.**, Manzocco, L., Calligaris, S. *In vitro* digestibility of plant proteins under adult and elderly conditions. *Virtual International Conferences on Food Digestion*. Online, May 6-7, 2021.

*Delivered personally.

Poster

Moretton, M., Khomenko, I., Betta, E., Brigante, F.I., Solovyev, P., Bontempo, L., Capozzi, V., Biasioli, F. Monitoring the effect of refrigeration on milk kefir fermentation: implications for nutritional quality and food safety. *45^o Congresso Nazionale SINU 2025*. Salerno, May 28-30, 2025. *

Moretton, M., Khomenko, I., Capozzi, V., Biasioli, F. Direct Injection Mass Spectrometry for Food Volatilomics: Emerging green approaches for the rapid and online screening of microbial resources (DIMS4FOOD_μ). *Onfoods Annual Meeting*, Bari, April, 14-15, 2025. *

Moretton, M., Khomenko, I., Cunedioğlu, H., Capozzi, V., Biasioli, F. Monitoring the volatilome of kefir and kefir-like cereal-based beverages during fermentation by PTR-ToF-MS. *8th MS Food Day*, Torre Canne (Brindisi), October 16-18, 2024. *

Khomenko, I., **Moretton, M.**, Corvino, A., Dell'Olio, A., Pedrotti, M., Capozzi, V., Biasioli, F. The application of direct-injection mass spectrometry techniques in studying microbial vocs in food: flavour attributes, fermentation monitoring and emerging trends. *IUFoST 2024 - 22nd World Congress of Food Science and Technology*, Rimini, September 8-12, 2024. *

Khomenko, I., Pedrotti, M., **Moretton, M.**, Betta, E., Farenti, B., Romano A., Capozzi, V., Biasioli, F. High-throughput targeted and untargeted headspace analysis of spirits by PTR-ToF-MS. *IUFoST 2024 - 22nd World Congress of Food Science and Technology*, Rimini, September 8-12, 2024. Poster.

Moretton, M., Khomenko, I., Cunedioğlu, H., Corvino, A., Capozzi, V., Biasioli, F. Exploring probiotic activity and vitamin B₂ synthesis in kefir-like cereal-based beverage. *XLIV Congresso Nazionale SINU 2024*. Piacenza, June 4-6, 2024. Poster.

Alongi, M., **Moretton, M.**, Renoldi, N., Anese, M. Steering protein and carbohydrate digestibility in bread by pea protein enrichment. *8th International Conference on Food Digestion*. Porto, Portugal, April 9-11, 2024.

Moretton, M., Khomenko, I., Cunedioğlu, H., Corvino, A., Capozzi, V., Biasioli, F. Characterization of kefir-like cereal-based beverages volatilome during fermentation by using PTR-ToF-MS. *9th International PTR-MS Conference*. Seefeld in Tirol (Austria), January 26-29, 2024.

Moretton, M., Anese, M., Capuano, E., Pellegrini, N. Preliminary screening of elderly gut microbiota metabolites of pea protein enrich-bread. *DIFFA23 – 1st International Symposium on Direct Injection Food Flavour Analytics*. San Michele all'Adige (TN), September 20-22, 2023. *

Dell'Olio, A., Rubert, J., Fogliano, V., Capozzi, V., Khomenko, I., **Moretton, M.**, Biasioli, F. Tailored dietary intervention based on PTR-ToF-MS rapid pre-clinical screening. *DIFFA23 – 1st International Symposium on Direct Injection Food Flavour Analytics*. San Michele all'Adige (TN), September 20-22, 2023.

Moretton, M., Cattaneo, C., Proserpio, C., Anese, M., Pagliarini, E., Pellegrini, N. Formulation strategy to improve the nutritional and sensory properties of foods for elderly consumers: a case study on bread. *15th Pangborn Sensory Science Symposium*. Nantes, France, August 20-24, 2023.

Moretton, M., Capuano, E., Fogliano, V., Pellegrini, N., Anese, M. Formulation and nutritional functionality assessment of pea protein-rich bread intended for the elderly. *XLIII Congresso Nazionale SINU 2023*. Arezzo, June 7-9, 2023. *

Baggio, M., Dal Mas, C., Tagliasco, M., **Moretton, M.**, Pellegrini, N. Oral processing of apple cultivars at different storage times. *XLIII Congresso Nazionale SINU 2023*. Arezzo, June 7-9, 2023. Poster.

Moretton, M., Cattaneo, C., Mosca, A. C., Proserpio, C., Anese, M., Pagliarini, E., Pellegrini, N. Exploring directions for the development of a bread targeting elderly consumers. *XLII Congresso Nazionale SINU 2022*. Napoli, April 4-6, 2022. *

Moretton, M., Alongi, M., Calligaris, S., Anese, M. Comparison between adult and elderly *in vitro* digestibility patterns of proteins and carbohydrates as affected by different bread types. *XLII Congresso Nazionale SINU 2022*. Napoli, April 4-6, 2022. *.

Moretton, M. *In vitro* digestibility of proteins under adult and elderly condition. *1st telematic Workshop on the Developments in the Italian PhD Research on Food Science, Technology & Biotechnology*. Online, September 14-15, 2021. *

Mosca, A. C., **Moretton, M.**, Angelino, D., Pellegrini, N. Oral processing behaviour of gluten-free and gluten-containing bread with and without spreads. *XLI Congresso Nazionale SINU 2021*. Virtual edition. Online, April 9-10 / 16-17, 2021. *

*Delivered personally.

Entrepreneurship

M. Moretton has been involved in technology transfer activities and has participated as a member of research teams in the following projects funded by companies:

Period	Project
2023/2024	Valutazione tramite metodi di scienza del consumatore della qualità sensoriale post-conservazione di nuove varietà di melo a confronto con varietà club
2021	Events occurring during soil food preparation
2019	Valutazione dell'effetto di variabili di formulazione e di processo sulla digeribilità di prodotti da forno
2019	Studio delle caratteristiche e delle performance di nuovi derivati di proteine vegetali

Language competence

M. Moretton, during her training and research activity, has developed a good knowledge of the English language (B2 level, EFSET Level/Council of Europe Level, both written and spoken) and holds a B1 level in German. M. Moretton is a native Italian speaker.

Awards

In 2022, M. Moretton received the following award for her research activity:

Best poster - XLII Congresso Nazionale SINU 2022. Napoli, April 4-6, 2022. **Moretton, M.***, Cattaneo, C., Mosca, A.C., Proserpio, C., Anese, M., Pagliarini, E., Pellegrini, N. Exploring directions for the development of a bread targeting elderly consumers.

In 2026, M. Moretton received an Honorable Mention for the Premio Ghiselli 2025, promoted by the Fondazione Istituto Danone and the Società Italiana di Nutrizione Umana, in recognition of the quality of her PhD thesis.

Professional training and development

M. Moretton has participated in various training and professional development activities and is an active member of an Italian society for scientific dissemination, as outlined below.

Qualifications

- 2021
- Auditor/Lead auditor for quality management systems UNI EN ISO 9001 (qualified KHC).
 - ISO 22000 internal food safety auditor (certified NSF Italy).
 - IFS and BRC internal auditor (certified NSF Italy).

Certification

- 2019
- Certification for the "24 CFU Training Path – 3rd cycle (2019)" required by D.M. 616/2017 to access teaching competitions in secondary schools. The educational training requires the acquisition of 24 credits in subjects such as anthropology, psychology, pedagogy, and teaching methods.

Courses and seminars

- 2024
- Effective presentations and written communication for researchers and

	technologists course- Fondazione Edmund Mach
2024	Course Public Speaking – Advance Level - Fondazione Edmund Mach
2024	Course Public Speaking – Basic Level - Fondazione Edmund Mach
2024	Course Functional communication - Fondazione Edmund Mach
2023	<i>La scienza raccontata ai media</i> Yakult Italia SRL
2023	Healthy Food Design - Wageningen University & Research, The Netherlands
2019	<i>Storia, Scienza e Cultura dell'Alimentazione</i> – University of Udine
2019	Nutrient Delivery and Impact on Human Health - University of Udine

Dissemination

M. Moretton has been involved in dissemination activities through oral presentations and online contributions.

Oral presentations

Moretton, M. *Tecnologie alimentari, nutrizione ed analisi sensoriale: un percorso di innovazione tra cucina e ricerca. Master Project Work* - I.P.S.S.E.O.A. "A. Beltrame" Vittorio Veneto, February 17, 2025.

Moretton, M. *Un approccio integrato tecnologico nutrizionale per lo sviluppo di alimenti destinati agli anziani. Per un domani sostenibile, un patto per lo sviluppo del territorio. Le giovani ricercatrici e i giovani ricercatori UNIUD raccontano l'invecchiamento - Progetto Alt Frailty.* Udine, October 29, 2021.

Online contributions

Creation and publication of periodic posts of technological-nutritional interest on the social media pages of the Italian Society of Human Nutrition (SINU).

Moretton, M., Devecchi, A. *Sicurezza e sicurezza alimentare in Italia: un divario Nord-Sud ancora evidente.* Newsletter SINU, November 2025

(https://sinu.it/wp-content/uploads/2025/11/NL_sinu_novembre25_ita.pdf)

Moretton, M. – OnFoods Foundation. Dal recupero dello scarto alla dieta su misura: l'economia circolare del cibo spiegata da OnFoods. (<https://www.youtube.com/watch?v=Gh5k-uf4qeU>, May 2025)

Moretton, M. *Un approccio tecnologico-nutrizionale per lo sviluppo di alimenti per anziani.* (<https://www.youtube.com/watch?v=8YuuKEB5Hyk&t=99s>, April 2022)

Moretton, M. *Approccio tecnologico-nutrizionale per lo sviluppo di pane destinato agli anziani.* Newsletter SINU, April 24, 2022 (<https://nl.biomedica.net/nlweb/2022/119.html>)

Participation in scientific events

Moretton, M., Khomenko, I., Biasioli, F. *Direct injection mass spectrometry for food volatiles: emerging green approaches for the rapid and online screening of microbial resources.* CIBUSTEC. Parma, October 27-30, 2025.

Student Services

Tutoring Activities for Students

In the academic years 2020-2021 and 2021-2022, M. Moretton was a cross-disciplinary academic tutor for all bachelor's and master's degree programs in the Department of Agro-Food, Environmental, and Animal Sciences. The role involved supporting students and faculty during teaching and laboratory activities, as well as managing the social media profiles of the Department of Agro-Food, Environmental, and Animal Sciences (Instagram: Di4a_uniud and stal_uniud). Contacts: Prof. Giannina Vizzotto and Maurizia Sigura.

In the academic year 2019-2020, M. Moretton was an academic tutor for the *Ispezione delle carni* course in the bachelor's degree program (L-26) in Food Science and Technology at the University of Udine.

Contact: Prof. Mara Lucia Stecchini.

Date 02.04.2026