Alessio Tugnolo

CURRICULUM VITAE

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CURRICULUM VITAE

PRESENT OCCUPATION

Appointment	**Organization**
Research fellow	Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, Università Degli Studi di Milano La Statale

EDUCATION, TRAINING and QUALIFICATIONS

Degree	**Sector/ Course**	**Organization**	year of achievement of the degree
National Scientific Qualification for Associate Professor	07/C1 (AGR-09)	Ministero dell'Università e della Ricerca	2023
PhD	Food Systems	Università Degli Studi di Milano	2022
Subject matter Expert	Viticulture and enology	Università Degli Studi di Milano	2021
Master	Food Science and Technology	Università Degli Studi di Milano	2017
Bachelor	Food Science and Technology	Università Degli Studi di Milano	2015

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FOREIGN LANGUAGES

Language	**level**
English	Upper-intermediate (B2, TOEIC and BULATZ certifications)
French	A2

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	**Award description**
2023	"Michele Stanca" award for Ph.D. thesis (entitled "Feasibility studies and engineering of optical simplified and stand-alone devices for agri-food applications") in Agricultural machinery and mechanization (AGR/09)
2022	Awarded during the workshop on "Innovazione nella meccanica e nell'impiantistica applicate ai biosistemi agroalimentari e forestali" (in memory of researchers Adriano Guarnieri and Gian Luca Montel) organized by the DISTAL (department of the University of Bologna), DAFNE (department of the University of Foggia) and FederUnacoma for a Ph.D. thesis entitled "Feasibility studies and engineering of optical simplified and stand-alone devices for agri-food applications".
2022	Awarded by the National Union of Academies for Applied Sciences for Agricultural Development, Food Safety and Environmental Protection with the "UNASA 2022 Giuseppe Pellizzi Award" dedicated to topics pertaining to "Agricultural Mechanics and Mechanization" for a scientific paper entitled "Optical specifications for a proximal sensing approach to monitor the vine water status in a distributed and autonomous fashion."
2022	Award for best poster at the NIR Spectroscopy Symposium, NIRITALIA 2022 (Izola, Slovenia) for a contribution entitled "Development of a cost-effective IoT hyperspectral device for distributed and autonomous monitoring of vine crops".
2021	Awarded as second classified by the Italian network of PhDs in Food Science, Technology and Biotechnology and Federalimentare for the V Edition of the "What for" Award.
2021	Award for best oral communication at the NIR Spectroscopy Symposium, NIRITALIA online
2018	Award for best oral communication at the VIII NIR Spectroscopy Symposium, NIRITALIA 2018, held at the Genoa Aquarium
2017	Scholarship for scholastic merit by the municipal administration of Gorla Maggiore
2015	Scholarship for scholastic merit by the municipal administration of Gorla Maggiore
2013	Scholarship for scholastic merit by the municipal administration of Gorla Maggiore

Date	**Professional experience**
1/01/2022-	Research Fellow Università degli Studi di Milano
05/11/2021–31/01/2022	Tutor for proximal sensing for agricultural products Responsible: Prof. Roberto Beghi Università degli Studi di Milano
05/11/2021–31/01/2022	Tutor for “Progettazione della cantina” Responsible: Prof. Roberto Beghi Università degli Studi di Milano
15/09/2021–31/01/2022	Tutor for “Progettazione e gestione degli impianti nell’impresa”

	Responsible: Prof. Riccardo Guidetti Università degli Studi di Milano
15/10/2020–30/12/2020	Tutor for "Progettazione e gestione degli impianti nell'impresa" Responsible: Prof. Riccardo Guidetti Università degli Studi di Milano
09/06/2020-06/10/2020	Tutor for "Laboratorio REE FUDGE+QUA-AGRI" Responsible: Prof. Riccardo Guidetti e Prof. Daniele Bassi Università degli Studi di Milano
01/10/2019–31/01/2020	Tutor for "recupero OFA di matematica" Università degli Studi di Milano
05/07/2019–10/09/2019	Tutor for "Laboratorio REE FUDGE+QUA-AGRI" Università degli Studi di Milano
01/12/2017–30/09/2018	Research Fellow Università degli Studi di Milano

PROJECT ACTIVITY

PATENTS

Patent
Inventor of the Italian Smart-HAND patent (invention patent application filed on February 10, 2021 at No. 102021000002888), "Dispositivo portatile per l'analisi di matrici vegetali sul campo e relativo sistema e metodo".

CONGRESSES AND SEMINARS

Year	**Title**	**Place**
2024	AIIA 2024- Biosystems engineering promoting resilience to climate change	Padova, Italy
2024	NIRItalia 2024	Torino, Italy
2023	NIR2023 International Conference	Innsbruck, Austria
2022	AIIA 2022: BIOSYSTEMS ENGINEERING TOWARDS THE GREEN DEAL, Improving the resilience of agriculture, forestry and food systems in the post-Covid era	Palermo, Italy
2022	Frutic, 14th International symposium	Valencia, Spain.
2022	NIR Italia	Izola, Slovenia
2021	First virtual (XXV) workshop on the developments in the Italian PhD research on food science technology and biotechnology	On-line
2021	NIR2021 International Conference	On-line

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2021	NIR Italia online	On-line
2019	VI International Symposium on Applications of Modeling as an Innovative Technology in the Horticoltural Supplay Chain	Molfetta, Italy
2019	International Conference Near-Infrared Spectroscopy	Gold Coast, QLD, Australia
2019	National Conference Post-harvest of fruit and vegetable products	Milan, Italy
2019	Workshop on innovation in mechanics and plant engineering applied to biosystems	Bari, Italy
2019	XXIV Workshop on the developments in the Italian PhD research on food science, technology and biotechnology	Florence, Italy
2018	7th National Conference of Viticulture-CO.NA.VI.	Piacenza, Italy
2018	VIII NIR Spectroscopy Symposium, NIRITALIA	Genoa, Italy
2018	FRUTIC Symposium, Optimizing Water Use in the Supply Chain of Fresh Produce	Berlin, Germany
2017	Enoforum 2017	Vicenza, Italy
2017	Valutazione dell'impatto ambientale delle filiere agroalimentari: l'approccio Life Cycle Assessment	Milan, Italy
2017	Gastrointestinal engineering: the role of material properties and microstructure of foods in nutrient release in gastro-intestinal tract	Milan, Italy
2010	Cosa c'è nel piatto? Alimentazione fra benessere ed equità	Busto Arsizio, Italy

PUBLICATIONS

Articles in journals (peer review)
Vignati, S., Tugnolo, A., Giovenzana, V., Pampuri, A., Casson, A., Guidetti, R., & Beghi, R. Hyperspectral Imaging for Fresh-Cut Fruit and Vegetable Quality Assessment: Basic Concepts and Applications. (2023) Applied Sciences, 13(17), 9740. DOI: 10.3390/app13179740
Casson, A., Zambelli, M., Giovenzana, V., Tugnolo, A., Pampuri, A., Vignati, S., Beghi, R., Guidetti, R. (2023).

Simplified environmental impact tools for agri-food system: A systematic review on trends and future prospective.

(2023) Environmental Impact Assessment Review, 102, 107175.

DOI: 10.1016/j.eiar.2023.107175

Zambelli, M., Giovenzana, V., Casson, A., Tugnolo, A., Pampuri, A., Vignati, S., Beghi, R., Guidetti, R.

Is there mutual methodology among the environmental impact assessment studies of wine production chain? A systematic review

(2023) Science of the Total Environment, 857, art. no. 159531.

DOI: 10.1016/j.scitotenv.2022.159531

Casson, A., Giovenzana, V., Frigerio, V., Zambelli, M., Beghi, R., Pampuri, A., Tugnolo, A., Merlini, A., Colombo, L., Limbo, S., Guidetti, R.

Beyond the eco-design of case-ready beef packaging: The relationship between food waste and shelf-life as a key element in life cycle assessment

(2022) Food Packaging and Shelf Life, 34, art. no. 100943.

DOI: 10.1016/j.fpsl.2022.100943

Tugnolo, A., Pampuri, A., Giovenzana, V., Casson, A., Guidetti, R., Beghi, R.

Test of a light emitting diode fully integrated pre-prototype spectrometer for rapid evaluation of table tomato (Solanum lycopersicum L., Marinda F1) quality

(2022) Journal of Near Infrared Spectroscopy, 30 (5), pp. 279-287.

DOI: 10.1177/09670335221119721

Tugnolo, A., Beghi, R., Cocetta, G., Finzi, A.

An integrated device for rapid analysis of indoor air quality in farms: The cases of milking parlors and greenhouses for baby leaf cultivation

(2022) Journal of Cleaner Production, 369, art. no. 133401.

DOI: 10.1016/j.jclepro.2022.133401

Pampuri, A., Tugnolo, A., Giovenzana, V., Casson, A., Pozzoli, C., Brancadoro, L., Guidetti, R., Beghi, R.

Application of a Cost-Effective Visible/Near Infrared Optical Prototype for the Measurement of Qualitative Parameters of Chardonnay Grapes

(2022) Applied Sciences (Switzerland), 12 (10), art. no. 4853.

DOI: 10.3390/app12104853

Pampuri, A., Tugnolo, A.*, Bianchi, D., Giovenzana, V., Beghi, R., Fontes, N., Oliveira, H., Casson, A., Brancadoro, L. & Guidetti, R. (2021). Optical specifications for a proximal sensing approach to monitor the vine water status in a distributed and autonomous fashion, Biosystems Engineering.

DOI: https://doi.org/10.1016/j.biosystemseng.2021.11.007

Giovenzana, V., Baroffio, S., Beghi, R., Casson, A., Pampuri, A., Tugnolo, A., De Filippi, D. & Guidetti, R. (2021). Technological innovation in the winery addressing oenology 4.0: testing of an automated system for the alcoholic fermentation control, Journal of Agricultural Engineering.

DOI: 10.4081/JAE.2021.1213

Giovenzana, V., Casson, A., Beghi, R., Pampuri, A., Fiorindo, I., Tugnolo, A., & Guidetti, R. (2021). Evaluation of consumer domestic habits on the environmental impact of ready-to-eat and minimally processed fresh-cut lamb's lettuce. Sustainable Production and Consumption, 28, 925-935.

DOI: https://doi.org/10.1016/j.spc.2021.07.021

Pampuri, A., Tugnolo, A. *, Giovenzana, V., Casson, A., Guidetti, R., & Beghi, R. (2021). Design of cost-effective LED based prototypes for the evaluation of grape (Vitis vinifera L.) ripeness. Computers and Electronics in Agriculture, 189, 106381.

DOI: https://doi.org/10.1016/j.compag.2021.106381

Tugnolo, A., Giovenzana, V., Beghi, R., Grassi, S., Alamprese, C., Casson, A., ... & Guidetti, R. (2021). A

diagnostic visible/near infrared tool for a fully automated olive ripeness evaluation in a view of a simplified optical system. Computers and Electronics in Agriculture, 180, 105887.

DOI: https://doi.org/10.1016/j.compag.2020.105887

Casson, A., Giovenzana, V., Tugnolo, A., Pampuri, A., Fiorindo, I., Beghi, R., & Guidetti, R. (2021). Assessment of an expanded-polypropylene isothermal box to improve logistic sustainability of catering services. Journal of Agricultural Engineering, 52(2).

DOI: https://doi.org/10.4081/jae.2021.1139

Tugnolo, A., Giovenzana, V., Malegori, C., Oliveri, P., Casson, A., Curatitoli, M., ... & Beghi, R. (2021). A reliable tool based on near-infrared spectroscopy for the monitoring of moisture content in roasted and ground coffee: a comparative study with thermogravimetric analysis. Food Control, 108312.

DOI: https://doi.org/10.1016/j.foodcont.2021.108312

Grassi, S., Jolayemi, O. S., Giovenzana, V., Tugnolo, A., Squeo, G., Conte, P., ... & Alamprese, C. (2021). Near Infrared Spectroscopy as a Green Technology for the Quality Prediction of Intact Olives. Foods, 10(5), 1042.

DOI: https://doi.org/10.3390/foods10051042

Alamprese, C., Grassi, S., Tugnolo, A., & Casiraghi, E. (2021). Prediction of olive ripening degree combining image analysis and FT-NIR spectroscopy for virgin olive oil optimisation. Food Control, 123, 107755.

DOI: https://doi.org/10.1016/j.foodcont.2020.107755

Pampuri, A., Casson, A., Alamprese, C., Di Mattia, C. D., Piscopo, A., Difonzo, G., ... & Giovenzana, V. (2021). Environmental Impact of Food Preparations Enriched with Phenolic Extracts from Olive Oil Mill Waste. Foods, 10(5), 980.

DOI: https://doi.org/10.3390/foods10050980

Beghi, R., Giovenzana, V., Tugnolo, A., & Guidetti, R. (2019, June). Visible/near infrared spectroscopy for horticulture: case studies from preharvest to postharvest. In VI International Symposium on Applications of Modelling as an Innovative Technology in the Horticultural Supply Chain Model-IT 1311 (pp. 123-130).

DOI: 10.17660/ActaHortic.2021.1311.16

A. Casson, R. Beghi, V. Giovenzana, I. Fiorindo, A. Tugnolo, R. Guidetti (2019). Visible near infrared spectroscopy as a green technology: an environmental impact comparative study on olive oil analyses. Sustainability.

DOI: https://doi.org/10.3390/su11092611

A. Casson, V. Giovenzana, R. Beghi, A. Tugnolo, R. Guidetti (2019). Environmental Impact Evaluation of Legume-Based Burger and Meat Burger. Chemical Engineering Transactions.

DOI: https://doi.org/10.3303/CET1975039

V. Giovenzana, A. Casson, R. Beghi, A. Tugnolo, S. Grassi, C. Alamprese, E. Casiraghi, S. Farris, I. Fiorindo, Guidetti R. (2019). Environmental benefits: traditional vs innovative packaging for olive oil. Chemical Engineering Transactions.

DOI: http://dx.doi.org/10.3303/CET1975033

A. Tugnolo, R. Beghi, V. Giovenzana, R. Guidetti (2019). Characterization of green, roasted beans and ground coffee by using near infrared spectroscopy: a comparison of two devices.

DOI: https://doi.org/10.1177/0967033519825665

Giovenzana, V., Tugnolo, A.*, Casson, A., Guidetti, R., & Beghi, R. (2018). Application of visible- near infrared spectroscopy to evaluate the quality of button mushrooms. Journal of Near Infrared Spectroscopy.

DOI: https://doi.org/10.1177/0967033518811921

Giovenzana, V., Beghi, R., Tugnolo, A., Brancadoro, L., & Guidetti, R. (2018). Comparison of two immersion probes coupled with visible/near infrared spectroscopy to assess the must infection at the grape receiving area. Computers and Electronics in Agriculture, 146, 86-92.

DOI: https://doi.org/10.1016/j.compag.2018.01.017

Beghi R., Giovenzana V., Tugnolo A., Guidetti R. (2017). Application of visible/near infrared spectroscopy to quality control of fresh fruits and vegetables in large-scale mass distribution channels: a preliminary test on carrots and tomatoes. Journal of the Science of Food and Agriculture DOI: https://doi.org/10.1002/jsfa.8768
Casson, A., Beghi, R., Giovenzana, V., Fiorindo, I., Tugnolo, A., & Guidetti, R. (2020). Environmental advantages of visible and near infrared spectroscopy for the prediction of intact olive ripeness. Biosystems Engineering, 189, 1-10. DOI: https://doi.org/10.1016/j.biosystemseng.2019.11.003
Beghi, R., Giovenzana, V., Tugnolo, A., Pessina, D., & Guidetti, R. (2020). Evaluation of energy requirements of an industrial scale plant for the cultivation of white button mushroom (Agaricus bisporus). Journal of Agricultural Engineering, 51(2), 57-63. DOI: https://doi.org/10.4081/jae.2020.1000
Casson, A., Giovenzana, V., Tugnolo, A., Fiorindo, I., Beghi, R., & Guidetti, R. (2020). Environmental impact of a new concept of food service: a case study for the re-use of naval shipping containers. Journal of Cleaner Production, 122912. DOI: https://doi.org/10.1016/j.jclepro.2020.122912

*Corresponding author

Articles in journals **(not peer review)**
A. Tugnolo, R. Beghi, V. Giovenzana, A. Pampuri, A. Casson, R. Guidetti (2020). SENSORISTICA INNOVATIVA: il progetto internazionale i-GRAPE pp.12-13. In IL CORRIERE VINICOLO - ISSN:1827-5419 vol. 93 (26)
A. Pampuri, A. Tugnolo, V. Giovenzana, A. Casson, R. Guidetti, R. Beghi (2020). Sistemi innovativi per la misura dello stato idrico della vite. pp.11-13. In IL CORRIERE VINICOLO - ISSN:1827-5419 vol. 93 (24)
R. Beghi, A. Tugnolo, V. Giovenzana, S. Marai, E. Ferrari, R. Guidetti (2019). Utilizzo degli ultrasuoni per il processo di remuage di vini spumante metodo classico. Vite e vino
I. Fiorindo, V. Giovenzana, A. Casson, A. Tugnolo, R. Beghi, R. Guidetti (2019). Environmental impact assessment and comparison of one meat burger and one legume-based burger. (www.legerete.it).
Casson A., Beghi R., Giovenzana V., Tugnolo A., Fiorindo I., Guidetti R. (2019) Il Life Cycle Assessment come strumento per l'analisi della sostenibilità delle filiere agroalimentari: l'esperienza DISAA-UNIMI. Newsletter Rete LCA, Aprile 2019
A. Casson, R. Beghi, V. Giovenzana, I. Fiorindo, A. Tugnolo, R. Guidetti (2019). The environmental impact of the production of 15g of proteins: a comparison between a meat and a legume-based burger.(www.legerete.it)
R. Beghi, V. Giovenzana, A. Tugnolo, A. Casson, R. Guidetti (2018). Uva e stato sanitario: per una classificazione oggettiva al conferimento. pp.20-21. In IL CORRIERE VINICOLO - ISSN:1827-5419 vol. 91 (37).
Beghi R., Giovenzana V., Tugnolo A., Casson A., Guidetti R. (2019) LED per l'analisi in campo della maturazione degli acini. L'informatore Agrario - ISSN:0020-0689 vol. 75 (22) pp.41-43.
Beghi R., Giovenzana V., Tugnolo A., Casson A., Guidetti R. (2018). Uva e stato sanitario: per una classificazione oggettiva al conferimento. pp.20-21. IL CORRIERE VINICOLO – ISSN:1827-5419 vol. 91 (37).
R. Beghi, V. Giovenzana, A. Tugnolo, R. Guidetti (2018). Assessing the use of visible and near infrared spectroscopy to rapidly evaluate the health status of grapes entering wineries. pp.26-29. In WINE & VITICULTURE JOURNAL - ISSN:1838-6547 vol. 33 (3)
R. Beghi, V. Giovenzana, A. Tugnolo, R. Guidetti (2018). Progettazione di sistemi ottici semplificati per il settore agroalimentare. pp.145-151. In La meccanica agraria oggi: un confronto aperto su concetti idee e aspettative di una disciplina in continua evoluzione - ISBN:9788867879472
A. Tugnolo, V. Giovenzana, R. Beghi, R. Guidetti (2018). Verso un'enologia 4.0. Parola chiave: connessione. pp.8-9. In IL CORRIERE VINICOLO - ISSN:1827-5419 vol. 91 (8)
Tugnolo, A., Giovenzana, V., Beghi, R., Guidetti, R. (2017). Potenzialità e prospettive del monitoraggio

real time della fermentazione. pp.28-29. In IL CORRIERE VINICOLO - ISSN:1827-541 vol. 91 (15).
Tugnolo, A., Giovenzana, V., Beghi, R., Brancadoro, L., Guidetti, R. (2017). Application of visible/near infrared spectroscopy to assess the grape infection at the winery. pp.1-6. In INFOWINE - ISSN:1826-1590
Tugnolo, A., Giovenzana, V., Beghi, R., Guidetti, R. (2017). Le potenzialità dell'ozono in vigna e in cantina. pp.20-21. In IL CORRIERE VINICOLO - ISSN:1827-5419 vol. 90 (21)

Congress proceedings
Roberto Beghi*, Alessio Tugnolo, Alessia Pampuri, Andrea Casson, Sara Vignati, Martina Zambelli, Riccardo Guidetti, Valentina Giovenzana. Polyphenol Content Prediction Using vis/NIR Spectroscopy Directly at the Check Point Station Entering the Winery. Frutic 2022
Alessia Pampuri*, Valentina Giovenzana, Alessio Tugnolo, Andrea Casson, Sara Vignati, Martina Zambelli, Riccardo Guidetti, Roberto Beghi. Grape-HAND: a Handheld Optical Prototype for Determining the Quality Parameters of Grapes. Frutic 2022 (Poster).
Alessia Pampuri*, Alessio Tugnolo, Valentina Giovenzana, Sara Vignati, Andrea Casson, Martina Zambelli, Roberto Beghi, Riccardo Guidetti. Grape polyphenol content prediction through vis/NIR spectroscopy in a view of real time application at winery consignment. NIRItalia 2022 (Oral)
Martina Zambelli, Roberto Beghi*, Andrea Casson, Alessia Pampuri, Alessio Tugnolo, Riccardo Guidetti, Valentina Giovenzana. Environmental Performance Comparison Between Optical and Wet-chem Analyses to Assess Quality Parameters of Grape (Vitis vinifera L.) NIRItalia 2022 (Poster).
Sara Vignati*, Alessia Pampuri, Alessio Tugnolo, Valentina Giovenzana, Andrea Casson, Martina Zambelli, Riccardo Guidetti, Roberto Beghi. Smart-HAND: a low-cost and portable visible/Near Infrared prototype for measuring qualitative parameters of fruits. NIRItalia 2022 (Poster).
Alessio Tugnolo*, Valentina Giovenzana, Sara Vignati, Alessia Pampuri, Andrea Casson, Martina Zambelli, Riccardo Guidetti, Roberto Beghi. Development of a cost-effective IoT hyperspectral device for distributed and autonomous monitoring of vine crops. NIRItalia 2022 (Poster).
A. Tugnolo, Feasibility studies and engineering of optical simplified and stand-alone devices for agri-food applications. First Virtual Workshop on the Developments in the Italian PhD Research on Food Science, Technology and Biotechnology (2021). (Oral communication)
A. Tugnolo, V. Giovenzana, R. Beghi, A. Pampuri, A. Casson, R. Guidetti, I. Consortium, Stand-alone LED sensors for future field monitoring of grape (Vitis vinifera L.) ripeness. Presented at the 20th International Conference on Near Infrared Spectroscopy (ICNIRS) held in Beijing in 2021. (Oral communication)
A. Pampuri, V. Giovenzana, R. Beghi, A. Tugnolo, A. Casson, R. Guidetti, Smart-HAND: a simplified LED device for intact olives quality evaluation. Presented at the 20th International Conference on Near Infrared Spectroscopy (ICNIRS) held in Beijing in 2021. (Poster)
A. Casson, V. Giovenzana, R. Beghi, A. Pampuri, A. Pampuri, Tugnolo, A., Grape-HAND Evoluzione e ottimizzazione di sistemi portatili di analisi non distruttive per valutare parametri qualitativi dell'uva. Startcup Lombardia 2021 (Oral communication)
A. Tugnolo, V. Giovenzana, R. Beghi, A. Casson, A. Pampuri, R. Guidetti i-GRAPE Consortium. Stand-alone LED sensors for future field monitoring of grape (Vitis vinifera L.) ripeness. NIRITALIA online 2021. (Oral communication)
A. Tugnolo, V. Giovenzana*, A. Casson, R. Guidetti, R. Beghi. Experimentation of an optical prototype for monitoring the ripening of table tomatoes (Solanum lycopersicum L., Marinda F1) and oil olives (Olea europaea L.). (Poster)
Beghi R., Giovenzana V., Tugnolo A., Casson A., Guidetti R., 2019. Design of prototypes of LED based devices for the evaluation of grape (Vitis Vinifera L.) ripeness. Presented at Model-IT 2019 - International Symposium on Modeling in Horticultural Supply Chain held in Molfetta. (Oral communication)
A. Tugnolo (2019). Optical LED prototypes for ripeness evaluation of grape (Vitis Vinifera L.). (Oral communication)

A. Casson, R. Beghi, V. Giovenzana, I. Fiorindo, A. Tugnolo, R. Guidetti (2019). Life Cycle Thinking applied to the analyses sector: a case study on olive oil analyses using E-LCA and LCC approach. (Oral communication)
A. Tugnolo (2019). Feasibility studies and engineering of optical simplified and stand-alone instruments for agro-food applications. (Poster)
A. Tugnolo, R. Beghi, V. Giovenzana, A. Casson, I. Fiorindo, R. Guidetti (2019). The E-LCA as a tool to quantify the environmental impact of meat and legumes-based burgers. (Poster)
I. Fiorindo, A. Casson, R. Beghi, V. Giovenzana, A. Tugnolo, R. Guidetti (2019). Environmental benefits: conventional vs innovative packaging for olive oil. (Poster)
R. Beghi, V. Giovenzana, A. Tugnolo, A. Casson, R. Guidetti (2019). Testing of optical prototypes for the fruit and vegetable sector: case studies from pre- to post-harvest. (Oral communication)
A. Tugnolo, V. Giovenzana, A. Casson, R. Guidetti, R. Beghi (2019) Characterization of green, roasted beans, and ground coffee using near infrared spectroscopy: a comparison of two devices. (Poster)
A. Tugnolo, V. Giovenzana, A. Casson, R. Guidetti, R. Beghi (2019) LED based simplified prototypes for field evaluation of ripeness: tests on grape (Vitis vinifera L.). (Oral communication)
R. Beghi, V. Giovenzana, A. Tugnolo and R. Guidetti (2019). Visible/near infrared spectroscopy for horticulture: case studies from pre-harvest to post-harvest. (Poster)
R. Beghi, V. Giovenzana, A. Tugnolo, A. Casson, and R. Guidetti (2019). Design of prototypes of LED based devices for the evaluation of grape (Vitis Vinifera L.) ripeness. (Oral communication)
A. Tugnolo, C. Alamprese, R. Beghi, S. Grassi, E. Casiraghi, V. Giovenzana (2018). La spettroscopia NIR per determinare il grado di maturazione delle olive: confronto tra uno spettrofotometro vis/NIR e uno FT-NIR. (Poster)
V. Giovenzana, A. Tugnolo, R. Guidetti, R. Beghi (2018). Sviluppo di un sistema ottico semplificato per la valutazione rapida della maturazione dell'uva. 7th National Conference of Viticulture. (Oral communication)
A. Tugnolo, S.V. Marai, R. Beghi, V. Giovenzana, E. Ferrari, R. Guidetti (2018). L'impiego di ultrasuoni per velocizzare l'operazione di remuage. 7th National Conference of Viticulture. (Poster)
A. Tugnolo, V. Giovenzana, R. Beghi, R. Guidetti (2018). Application of vis/NIR spectroscopy to evaluate the quality of Agaricus bisporus mushrooms. NIRITALIA 2018. (Oral communication)
V. Giovenzana, A. Tugnolo, R. Guidetti, R. Beghi (2018). Potential effectiveness of visible and near infrared spectroscopy coupled with wavelengths selection for real time control of the fresh fruit and vegetable quality in large-scale mass distribution channel: the case study of tomatoes. NIRITALIA 2018. (Poster)
R. Beghi, A. Tugnolo, V. Giovenzana, R. Guidetti (2018). Preliminary tests on toasted coffee beans and grinded coffee for the setup of online vis/NIR measurements to detect process failures. NIRITALIA 2018. (Poster)
R. Beghi, V. Giovenzana A. Tugnolo, L. Brancadoro, R. Guidetti (2018). Water status evaluation of grapevine leaf by means of NIR spectroscopy for a better irrigation scheduling. FRUTIC Symposium, Optimizing Water Use in the Supply Chain of Fresh Produce. (Poster)
Tugnolo A., Giovenzana V., Beghi R., Brancadoro L., Guidetti R. (2017). Application of visible/near infrared spectroscopy to assess the grape infection at the winery. Enoforum 2017 (Poster)

OTHER INFORMATION

Courses	
Date	**Course**
18-29/07/2022	Basic and advanced school of scientific computing with MATLAB
08-12/11/2021	School of experimental design, DiFAR, Università degli studi di Genova

Alessio Tugnolo

CURRICULUM VITAE

08/10/2020-20/11/2020	International school of chemometrics (ISC 2020), Marine Institute of Plenzia, Spain and University of Copenhagen
30/09/2019-04/10/2019	School of multivariate analysis, DiFAR, Università degli studi di Genova
18/02/2019-01/04/2019	"Comunicazione Efficace" held by Assolombarda
14-18/01/2019	Winter School Combining NIR Spectroscopy and Chemometrics
2017-2018	Chemometrics course given by Professor Roberto Todeschini at Università degli Studi di Milano-Bicocca

Digital skills
Knowledge of programming and statistical analysis software such as: -Unscrambler 9.7 e X -MATLAB -PLS Toolbox -Microsoft Excel -R -SPSS -MyMathLab

peer review revision activities
AT is a reviewer for international scientific journals (Journal of near-infrared spectroscopy, Computers and Electronics In Agriculture, Horticulturae, etc.).

Thesis teaching activities
Since 2017, he has been a co-rapporteur for more than 10 master's and bachelor's theses in the Food Science and Technology, Food Service Science and Technology, and Viticulture degree programs.

Experience abroad
In 2020 AT spent a period abroad in Braga (PT), at the International Nanotechnology Laboratory (INL) working on the development of a hyperspectral optical system (design of cost-effective hyperspectral camera). Tutor: Dr. Joao Piteira

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Communication skills
Certificate of attendance and passing of the final test of the "Comunicazione Efficace" course held at Assolombarda. AT has acquired, strengthened and consolidated communication skills during his professional experience at the Department of Agricultural and Environmental Sciences - Production, Land, Agroenergy (DiSAA). Collaborations with small, medium and large companies, with national and European partners and seminars in which the candidate has actively participated, have allowed the achievement of good communication skills. AT has developed good communication skills in English, demonstrated during the different communicative activities faced during his PhD in Food Systems held totally in English (2018-2021). AT has had the opportunity to step outside of academia and increase communication skills through presenting company reports and pitches at accelerator programs for innovative startups.

Data

16/07/2024