

Curriculum Vitae

- **Current position:** Associate Professor of Agricultural Engineering at the Agriculture, Environment and Food Science Department, Graduate School of Agriculture, University of Molise (Italy), **2010**.
- Graduated cum laude in Agricultural Sciences, University of Reggio Calabria (Italy), **1994**.
- Qualified for joining the Italian Association of Agronomists, **1995**.
- Fellowships (European Union; Italian National Agency for New Technologies, Energy and Sustainable Economic Development; Italian National Research Council) for research in the USA, The Netherlands, Germany and United Kingdom, **1996, 1997**.
- Ph.D, University of Catania (Italy), **1999**.
- Research contract at the Design and Management of Agro-Zootechnical and Forestry Systems Department, University of Bari (Italy), **2000**.
- Technical Officer at the Agro-Forestry Science and Technology Department, University of Reggio Calabria (Italy), **2000-2001**.
- Researcher at the Agro-Forestry Science and Technology Department of the University of Reggio Calabria (Italy), **2001-2004**.
- Member of the Ph.D. Council in Agro-Forestry and Environment Engineering, STAfA Department, University of Reggio Calabria (Italy), **2003-2004**.
- Assistant Professor of Agricultural Engineering at the Animal, Vegetable, Environment Science Department, Graduate School of Agriculture, University of Molise (Italy), **2004-2010**.
- Member of the Ph.D. Council in “Protection and Quality of Agro-Food and Forestry Productions”, University of Molise (Italy), **2007-2014**.
- Member of the Ph.D. Council in “Agro-Forestry Engineering”, University of Tuscia (Italy), **2010-2016**.
- Fellowship “Japan Society for the Promotion of Science” (JSPS) for research, Division of Environmental Science and Technology - Graduate School of Agriculture, Kyoto University (Japan), **2011-2012**.
- Lecturer at the Xinjiang Agriculture University and at the Zhejiang University of Technology (China), **2015-2016**.
- Visiting Associate Professor at the Bio-Sensing Engineering Lab, Division of Environmental Science & Technology, Graduate School of Agriculture, Kyoto University (Japan), **2016-2017**.
- Joined several national and international research programs and scientific congresses also as chairman.
- Coordinator and member of several scientific projects.
- Member of the French *Société Japonaise pour la Promotion de la Science*.
- Coordinator of an EU Erasmus Plus Mobility Project Italy – Japan, **2020-2023**.

- Member of the Ph.D. Council in “Technologies and Bio-technologies”, University of Molise (Italy), **2021-2023**.
- Member of both the Scientific and Organizing Committee of the XX CIGR World Congress 2022 (Computer Image Analysis and Spectroscopy in Agriculture).
- Member of the Industrial Research and Experimental Development Project, area of specialization "Agrifood" - "INTEGRI - Pasta and bakery products: Integrity, Healthiness and Sustainability process and product innovation" - PON R&I 2014-2020 and FSC funds., **2023-current**.
- Member of the Italian Association of Agriculture Engineering (AIIA).
- Member of the Japanese Society of Agricultural Machinery and Food Engineers (JSAM).
- Member of the Italian National Academy of Olive and Oil.
- Author of 138 published scientific papers.

Teaching (Graduate School of Agriculture, University of Molise, Italy):

Complementary Engineering

Energy Engineering for Agriculture

Agricultural Mechanization

Agricultural Mechanics

Special Mechanics.

Teaching (Graduate School of Agriculture, Kyoto University, Japan):

Agricultural Machinery in Southern EU Countries.

Short list of published papers

Technical – economic analysis of 3 different harvesting chains for almond – trees.

Giametta F., Caccetta A. - *Proceedings of the XIII International Symposium on Horticultural Economics – (International Society for Horticultural Science); New Brunswick (U.S.A.). 1996 - Acta Hort. (ISHS) n. 429, p.235-242.*

The variability of agrofood product consumer prices.

Giametta F. - *Proceedings of the XIVth International Symposium on Horticultural Economics – ISHS – Guernsey (Channel Island). 2000 - Acta Hort. (ISHS) n. 536, p.493-498.*

Selection and calibration of eating olives technical and economic aspects.

Giametta F., Zimbalatti G. - *Proceedings of the 4th International Symposium on Olive Growing – ISHS – Istituto Agronomico Mediterraneo. 2002 - Acta Hort. (ISHS) n.586, p.679-682.*

Olive oil wastes biodegradation simple plants.

Giametta F., Amirante P., Leone A., Montel G. - *Proceedings of the Fourth International Conference of ORBIT Association on Biological processing of organics: Advances for a sustainable society, Perth (Australia), 29 April - 5 May 2003, p.92-98.*

Prove di calibratura su agrumi con due moderne calibratrici ottiche.

Giametta F., Morabito S. - *Journal of Agricultural Engineering* n.3, 2003.

Bergamot-orange industrial processing.

Giametta F. - *Proceedings of the WOCMAP III Medicinal and aromatic plants for human welfare, ChiangMai, (Thailand), 2005 - Acta Hort. (ISHS) n.679, p.61-69.*

Aspetti produttivi e livelli acustici in un moderno impianto per la torrefazione del caffè.

Giametta F., Mauro S., Morabito S., Cocchiara C. - *Journal of Agricultural Engineering* n.3, 2005.

Esposizione al rumore nella prima trasformazione del legno.

Giametta F., Proto A., Zimbalatti G. - *Sherwood* n.129, 2007.

Vibration analysis of an olives mechanical harvesting system.

Giametta F., Amirante P., Catalano P., Leone A., Montel G. - *CIGR EJournal, manuscript PM 07 012. Vol. IX. July 2007.*

A system for food drying using humidity control and low temperature.

Giametta F., Catalano P., Fucci F., La Fianza G. - *CIGR EJournal manuscript, FP 07 012. Vol X March 2008.*

Preliminary tests to assess the dynamics of the vibrations transmitted on olive trees by mechanized harvest by shakers.

Giametta F., D'Agostino A., Mauro S., Zimbalatti G. - *Proceedings of the 5th International Symposium on olive growing, Izmir (Turkey) – Acta Hort. (ISHS) 2008, n791, p.285-295.*

Simulazione e validazione sperimentale di un impianto pilota per la stagionatura degli insaccati.

Giametta F., Brunetti L., Fucci F., La Fianza G. - *La Termotecnica, March 2008.*

An integrated technological traceability model in the olive growing production chain.

Giametta F., Sciarrone G. - *Journal of Agricultural Engineering* n.4, 2008.

A method of control for the ventilation and recording of temperature, relative humidity and light in beef traceability.

Giametta F., Simoni A., La Fianza G., *The Open Agriculture Journal, – Bentham OPEN, 2008, 2, p. 49-53.*

Innovations in mechanization and control systems of production in olive sector.

Giametta F., Bernardi B., Sciarrone G. - *CIGR EJournal, manuscript MES 08 003. Vol. X. September 2008.*

Analisi termofluidodinamica e validazione sperimentale di un impianto di surgelazione a letto fluido.

Giametta F., Catalano P., La Fianza G., Fucci F. - *La Termotecnica, n.12, 2011.*

Climate conditions in a broiler house in Molise: experimental and numerical analysis.

Giametta F., Catalano P., La Fianza G., Simoni A., Gentile A. - *Proceedings of the “International Conference RAGUSA SHWA 2012 - Safety Health and Welfare in Agro-food Agricultural and Forest Systems”, 3-5 September 2012, Ragusa (Italy).*

Experimental study on optimizing cheese drying and ripening process.

Giametta F., Sorrentino E., Lapenna A., La Fianza G. - *International Journal of Agricultural and Biological Engineering, vol.5 n.4, p. 74-82, 2012.*

Thermo-fluid-dynamic modelling of a cold store for cheese maturation.

Giametta F., Catalano P., La Fianza G., Fucci F. - *Journal of Agricultural Engineering. vol. XLIII, p. 170-175, 2012.*

Vibration analysis using a contactless acquisition system.

Giametta F., Catalano P., Fucci F., La Fianza G., Bianchi B. – *Proceedings of the SeTBio 2013: Sensing Technologies for Biomaterial, Food, and Agriculture, Society of Photo-Optical Instrumentation Engineers (SPIE), 23-26 April 2013, Yokohama, Japan. Vol. 8881, 888108.*

Experimental system and tests to optimize a tomato drying process.

Giametta F., Catalano P., La Fianza G., Fucci F., La Penna A. - *The Open Agriculture Journal*, vol. 7, p. 73-797, 2013.

Modified atmosphere packaging, ultrasound and chitosan: effect of co-treatments on the shelf-life of black truffle (tuber aestivum).

Giametta F., Catalano P., Tremonte P., Reale A., Tipaldi L., Pannella G., Di Renzo T., Succi M., La Fianza G., Sorrentino E. - *XI International Controlled & Modified Atmosphere Research Conference - ISHS - CaMa2013 - June 2013. Acta Hort. vol. 1051, 2015.*

Microclimate measuring and fluid-dynamic simulation in an industrial broiler house: testing of an experimental ventilation system.

Giametta F., Catalano P., La Fianza G., Bianchi B., Gentile A. - *Veterinaria italiana*, vol. 51 (2), p. 85-92, 2015.

Ecological efficiency assessment of a specific machine for distribution of pesticides in vineyards of Apulian region.

Giametta F. Bianchi B., Brunetti L., Romaniello R. - *Proceedings of the WSEAS Conferences, Salerno, June 27-29, 2015.*

Energy consumption and analysis of industrial drying plants for fresh pasta process.

Giametta F., Brunetti L., Catalano P., Villani F., Fioralba J., Fucci F., La Fianza G. - *Journal of Agricultural Engineering. vol.46, n.478, 2015. doi:10.4081/jae.2015.478.*

Study of a prototype of an advanced mechanical ventilation system with heat recovery integrated by heat pump.

Giametta F., Fucci F., La Fianza G., Brunetti L., Catalano P., - *Energy and Buildings 133, p. 111–121, 2016.*

A new supporting tool for pigs handling in the production chain breeding-slaughterhouse.

Giametta F., Catalano P., Gentile A., Perone C., Bianchi B. - *Rivista Veterinaria Italiana n.975, 2017. doi: 10.12834/VetIt.975.5171.2.*

Study and analysis of a cogeneration system with microturbines in a food farming of dry pasta.

Perone C., Fucci F., La Fianza G., Brunetti L., Giametta F., Catalano P., Bianchi B. - *Chemical Engineering Transactions vol.58, 2017. doi: 10.3303/CET1758136.*

A preliminary study on the potential of front face fluorescence spectroscopy for italian mono-cultivar extra virgin olive oil discrimination.

Al Riza D., Kondo N., Catalano P., Giametta F. - *Journal of Agricultural Engineering. vol. 50 n.1, 2019. doi:10.4081/jae.0.877.*

Thermo-fluid-dynamic characteristics of confluent jets for distribution of treated air in small environment La Fianza G., Giametta, F., Brunetti L., Orsino, M., Bianchi B., Perone, C., Catalano, P. *Proceedings of Model-IT, International Symposium on Applications of Modelling as an Innovative Technology in the Horticultural Supply Chain. Molfetta (Italy), 9-12 June 2019.*

Controlled Mechanical Ventilation to Reduce Primary Energy Consumption in Air Conditioning of Greenhouses.

Perone C., Catalano P., Giametta F., La Fianza G., Brunetti L., Bianchi B. - *Innovative Biosystems Engineering for Sustainable Agriculture, Forestry and Food Production, 2020. https://doi.org/10.1007/978-3-030-39299-4_45.*

Thermal oxidation assessment of Italian extra virgin olive oil using an ultraviolet (UV) induced fluorescence imaging system.

Rotich V., Al Riza D., Giametta F., Suzuki T., Ogawa Y., Kondo N. - *Spectrochimica Acta. Part A, Molecular and Biomolecular Spectroscopy*. vol. 237, 2020. <https://doi.org/10.1016/j.saa.2020.118373>.

Modified rotating reel for malaxer machines: assessment of rheological characteristic, energy consumption, temperature profile and virgin olive oil quality.

Bianchi B., Tamborrino A., Giametta F., Squeo G., Di Fonzo G., Catalano P. – *Foods*. 2020, 9(6), 813.

Cultivar and geographical origin authentication of Italian extra virgin olive oil using front-face fluorescence spectroscopy and chemometrics.

Al Riza, D.F., Kondo N., Rotich V., Perone C., Giametta F. - *Food Control - Volume 121* (2021). <https://doi.org/10.1016/j.foodcont.2020.107604>.

Potential of front face fluorescence spectroscopy and fluorescence imaging in discriminating adulterated extra-virgin olive oil with virgin olive oil.

Omwange K., Al Riza, D.F., Saito Y., Suzuki Y., Shiraga K., Giametta F., Kondo N. - *Food Control. Volume 124* (2021). <https://doi.org/10.1016/j.foodcont.2021.107906>.

Study of a mechanical ventilation system with heat recovery to control temperature in a monitored agricultural environment under summer conditions.

Perone C., Orsino M., Giametta F., Catalano P. - *Journal of Building Engineering. Volume 43* (2021). <https://doi.org/10.1016/j.jobbe.2021.102745>.

Estimation of K value and free fatty acids of adulterated olive oil using fluorescence spectroscopy coupled with multivariate analysis and convolutional neural network models.

Omwange K., Saito Y., Itakura K., Al Riza D. F., Giametta F., Kondo N. - *Engineering in Agriculture, Environment and Food. EAEF 15 (1): 34-46*, 2022. https://doi.org/10.37221/eaef.15.1_34.

Optimization of process variables for the sustainable extraction of phenolic compounds from chicory and fennel by-products.

Baiano A., Romaniello R., Giametta F., Fiore A. - *Applied Sciences* 2023, 13, 4191. <https://doi.org/10.3390/app13074191>.

Experimental Tests in Production of Ready-to-Drink Primitive Wine with Different Modes of Circulation of the Fermenting Must.

Catalano F., Romaniello R., Orsino M., Perone C., Bianchi B., Giametta F. - *Applied Sciences* 2023, 13, 5941. <https://doi.org/10.3390/app13105941>.

A Novel Approach to Optimize the Industrial Process of Membrane Concentration of Grape Musts.

Bianchi B., Molino B., Catalano F., Giametta F., Molino A.J., Ambrosone L. - *ChemEngineering* 2023, 7(3), 48. <https://doi.org/10.3390/chemengineering7030048>.