CV Battista Federico

PERSONAL INFORMATION

Federico Battista

WORKPLACE
Università di Verona – Biotechnology Department
Via Le Grazie 15
37134 Verona
ITALY

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ORCID ID: http://orcid.org/0000-0002-3703-3557

H-INDEX: 26 on SCOPUS with about 1650 citations

WORK EXPERIENCES AND PROJECTS

From 01/01/2022

Assistant Professor in Chemical Engineering

University of Verona, via dell'Artigliere 8, 37129, Verona – www.univr.it

Main activities: Teaching i) Mass and Energy balances ii) Biorefinery's Technologies for the valorisation of agro-industrial residues into bio-based products and biofuels iii) Life Cycle Assessment and Life Cycle Costing of biorefinery's technologies; supervision of a group of 2 PhD students and 8 Master students

From 29/08/2023
To 31/10/2023

Visiting Professor in Chemical Engineering

Federal University of Pernambuco (UFPE), Recife (Brazil)

Main activities: 32 hours on the most recent European normative for the environment and the state of art of biorefinery in the European Union; support to the research activity performed in the UFPE.

From 01/10/2017
to 31/12/2021

Postdoc researcher, Chemical Engineer

Università di Verona – Department of Biotechnology

- Cascade biorefinery approach for the extraction of valuable molecules from orange peels and Spent Coffee Grounds
- Single Cell Protein's production
- Solar energy exploitation for ammonia recovery from anaerobic digestate
- Optimization of Volatile Fatty Acids from food wastes
- BioMethane Potential tests
- Teaching of "Biological Reactors" course and PhD and Master students' supervisor.

From 01/04/2016
To 30/09/2017

Post Doc Researcher

IFP Energies Nouvelles - Intensification de l'expérimentation R151

- Experimental tests of different feeding strategies of batch and fed batch for the bioethanol production from wheat straw and miscanthus
- Optimization of the bioreactor geometry at high content of Dry Matter
- Improvement of the enzymatic hydrolysis to optimize glucose concentration from wheat straw

From 01/01/2015
To 29/02/2016

Post Doc Researcher

Politecnico di Torino – Department of Applied Science and Technology

- Biogas Production from Agro-food wastes (Olive pomace and coffee residues)
- Chemical and Physical Pretreatments to improve hydrolysis
- Study of the fluid-dynamics of high viscosity organic reaction medium
- Life Cycle Assessment of an Auto-thermal reforming process for the hydrogen production

Collaborations with the Public Administration

From 10/01/2024 to 10/06/2024. Contribution to the Green Public Procurement on the waste management during the organization of big international and national events. Regione Veneto: https://www.regione.veneto.it/documents/11439163/13877384/DGR+n.+605+del+04.06.2024+-+Approvazione+risultati+quinto+anno+attivita+Protocollo+Intesa+sul+GPP.pdf/68ac4d64-3c56-4300-b09c-75ed7e534da5

Editorial Roles

- Associate Editor of "Frontiers in Chemical Engineering", Springer. Editor in Chief: Fengqi You, Impact Factor: 4.204
- Member of the Editorial Board of "Renewable Energy – An International Journal", Elsevier Editor in Chief: Soteris Kalogirou. Impact Factor: 8.634. ISSN: 0960-1481
- Managing Guest Editor for "Renewable Energy – An International Journal" with the Special Issue INTEGRATED BIOREFINERY FOR THE PLANET'S FUTURE" (Guest Editors: F. Battista, K. Moustakas, A.-S. Nizami)
- Managing Guest Editor for "Renewable Energy – An International Journal" with the Special Issue THE BIOREFINERY BEYOND THE "VALLEY OF DEATH" (Guest editors: F. Battista, K. Moustakas, A. Maalouf)

Projects

From 01/04/2024 (36 months)
Sistemi innovativi per la produzione sostenibile di biometano da FORSU ed altre matrici organiche. National Project funded by "Ministero delle Imprese e del Made in Italy"

From 01/09/2023 (56 months)
Dimitra. Valorising anaerobic digestates into bio-fertilisers for climate friendly agriculture. LIFE-2022-SAP-CLIMA. Role: WP Leader

From 01/05/2023 to 30/04/2025.
Bric INAIL. National project. Role: Local leader

From 01/05/2023 to 30/04/2027
Ellipse: Efficient and novel waste streams co-processing to obtain bio-based solutions for packaging and agricultural sectors. HORIZON-JU-CBE-2022

From 01/12/2022 to 30/11/2026
AgriLoop. Pushing the frontier of circular agriculture by converting residues into novel economic, social and environmental opportunities. HORIZON.2.6 - Food, Bioeconomy Natural Resources, Agriculture and Environment

From 23/06/2022 to 30/11/2022
Hydrogen BECCS Innovation Programme (Phase 1)
Project Manager for University of Verona

From October 2019
A circular economy system for multi-source biomass conversion to added value products. Life Plus program

From June 2018
Sistemi Avanzati per il Recupero dei Rifiuti (SARR) – Regional Project for the Organic wastes recovery

From March 2018 to 31 December 2019
ReSUrbis (www.resurbis.eu) – European Union Project for the PHAs and bio-energy production from food wastes

CV Battista Federico

EDUCATION AND TRAINING

30/01/2015

PhD Degree in Chemical Engineering

Thesis Dissertation: “Optimization of the Anaerobic Digestion from olive oil production’s wastes”

Academic Tutor: Prof. Debora Fino

Politecnico di Torino (ITALY)

29/09/2014

Engineering Licence

passed the government exam and licensed as Engineer

21/07/2011

Master of Science in Chemical Engineering

Thesis Dissertation: “Biogas emissions from landfill for Urban Solid Wastes

From 01/09/2009
to 31/08/2010

Erasmus Experience

Universitat Politecnica de Catalunya – ETSEIB
Barcelona

11/12/2008

Bachelor Degree in Chemical Engineering

Thesis Dissertation: ‘‘Application of the Kyoto Protocol to a pig farm (located in Chile) for the exploitation of biogas by anaerobic digestion”.

PERSONAL SKILLS

Mother tongue: Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C2	B2	B2	C1
Spanish	B2	B2	A2	A2	A2
French	B2	C1	B2	C1	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills
- Very good communication skills gained through my experience as Delegate of PhD Students, teacher and Invited Speaker to International Conference

Computer skills
- Very good command of Microsoft Office™ tools
- Some experience with SimaPro for LCA studies

Other skills
- FIRST AID CERTIFICATION
  Croce Rossa Italiana – April 2013

PATENTS and TRADEMARK

TRADEMARK

- 2024. Nicola Frison, **Federico Battista**, David Bolzonella. Filing a trademark named “Fertibox” for the high added value recovery through sequential filtration steps. Under evaluation

PATENTS

- 2018. **Federico Battista**, Melanie Gomez Almendros. Process for enzymatic hydrolysis from a mixture of pretreated substrates of different porosities. US 20190093136A1.
- 2018. **Federico Battista**, Melanie Gomez Almendros, Romain Rousset. Sequentially-fed process for enzymatic hydrolysis with addition of pretreated substrates increasingly spread out over time. US 20190093133A1.
- 2019. **Federico Battista**, Melanie Gomez Almendros, Romain Rousset. Procede de production de composes oxygenes et/ou d'alcenes, d'hydrogene et de methane a partir de biomasse lignocellulosique. FR3075796A1.

PUBLICATIONS

- **BOOKS**

2015

F. Battista. Resolution for Anaerobic Digestion of Agro-Food Wastes. The case of olive oil production wastes. Lambert. ISBN 978-3-659-47628-0

2013

F. Battista. Esame di Chimica – Simulazioni risolte dell’esame di Chimica. CLUT Editore, Torino. ISBN: 9788879923538

- **PAPER ON INTERNATIONAL JOURNALS**

- **F. Battista**, D. Bolzonella, 2024. Beyond the anaerobic digestion: new perspectives for the development of a biorefinery platform for the simultaneous production of medium chain fatty acids by chain elongation and biogas from food wastes. ACS Sustainable Chem. Eng., 12, 42, 15294–15306.

- F. Rizzioli, A. C. Magonara, G. Mengoli, D. Bolzonella, **F. Battista.** Production, purification and recovery of caproic acid, volatile fatty acids and methane from Opuntia Ficus Indica, 2024. Renewable and Sustainable Energy Review, 190, 114083.

- **F. Battista**, A. Zeni, M. Andreolli, E. Salvetti, F. Rizzioli, S. Lampis, D. Bolzonella. Treatment of food processing wastes for the production of medium chain fatty acids via chain elongation, 2024. Environmental Technology and Innovation, 33, 103453.

- D. Bertasini, **F. Battista**, R. Mancini, N. Frison, D. Bolzonella, 2024. Hydrogen and methane production through two stage anaerobic digestion of straw residues. Environmental research, 247, 118101.

- M. Gottardo, **F. Battista**, D. Bolzonella, R. Lauri, L. Girotto, A. Piasentin, F. Valentino, 2024. Enhancing Hydrogen Production by Zeolite Addition in the Dark Fermentation Process of Urban Organic Waste. Chemical Engineering Transactions,110 265 – 270.

- **F. Battista**, C. Padovan, E. Salvetti, V. Gatto, F. Rizzioli, D. Bertasini, D. Bolzonella. A groundbreaking biorefinery loop for the valorization of cigarette butts into fermentable sugars and bioethanol, 2023. Sustainable Chemistry and Pharmacy, 31, 10094

- F. Rizzioli, D. Bertasini, D. Bolzonella, N. Frison, **F. Battista.** A critical review on the techno-economic feasibility of nutrients recovery from anaerobic digestate in the agricultural sector, 2023. Separation and Purification Technology, 306, 122690

- D. Bertasini, **F. Battista**, F. Rizzioli.N. Frison, D. Bolzonella. Decarbonization of the European natural gas grid using hydrogen and methane biologically produced from organic waste: A critical overview, 2023. Renewable Energy 206, 386-396.

- F. Rizzioli, V. Benedetti, F. Patuzzi, M. Baratieri, D. Bolzonella, **F. Battista.** Valorization of orange peels in a biorefinery loop: recovery of limonene and production of volatile fatty acids and activated carbon, 2023. Biomass Conversion and Biorefinery.

D. Bolzonella, D. Bertasini, R. Lo Coco, M. Menini, F. Rizzioli, A. Zuliani, **F. Battista**, N. Frison, A Jelic, G. Pesante. Toward the Transition of Agricultural Anaerobic Digesters into Multiproduct Biorefineries, 2023. Processes 2023, 11, 415

- S. Possente, D. Bertasini, F. Rizzioli, D. Bolzonella, **F. Battista**. Volatile fatty acids production from waste rich in carbohydrates: optimization of dark fermentation of pasta by products, 2022. Biochemical Engineering journal, 189, 108710.

- M. Gottardo, D. Bolzonella, A. Tuci, F. Valentino, M. Majone, P. Pavan, **F. Battista**. Producing volatile fatty acids and polyhydroxyalkanoates from foods by-products and waste: A review, 2022, Bioresource technology, 361, 127716.

- **F. Battista,** G. Strazzera, F. Valentino, M. Gottardo, M. Villano, M. Matos, F. Silva, M Reis, J. Mata-Alvarez, S. Astals, J. Dosta, J. Rhys, J. Massanet-Nicolau, A. Guwy, P. Pavan, D. Bolzonella, M. Mauro. New insights in food waste, sewage sludge and green waste anaerobic fermentation for short-chain volatile fatty acids production: A review, 2022, Journal of Environmental Chemical Engineering, 2022, 10(5), 108319

- D. Bertasini, R. Leal Binati, D. Bolzonella, David, **F. Battista.** Single Cell Proteins production from food processing effluents and digestate, 2022, Chemosphere, 296, 134076

- F. Rizzioli, N. Frison, D. Bolzonella, **F. Battista**. Optimization of Volatile Fatty Acids Production for PHAs Synthesis from Food Wastes. Chemical engineering transactions, 2022, 93: 133–138

- P. Critelli, G.Pesante, S. Lupinelli, M. Modesti, S. Zanatta, **F. Battista**, D .Bolzonella, N. Frison. Production and characterization of PHAs by pure culture using protein hydrolysates as sole carbon source. Environmental Technology & Innovation, 2022, 102919.

- **F. Battista,** L. Zuliani, F. Rizzioli, S. Fusco, D. Bolzonella. Biodiesel, biogas and fermentable sugars production from Spent coffee Grounds: A cascade biorefinery approach. Bioresource Technology, 2021, 342, 125952.

- F. Rizzioli, **F. Battista,** D. Bolzonella, N. Frison. Volatile Fatty Acid Recovery from Anaerobic Fermentate: Focusing on Adsorption and Desorption Performances. Industrial and Engineering Chemistry Research, 2021

- G Strazzera, **F. Battista,** M Andreolli, M Menini, D Bolzonella, S Lampis. Influence of different household food wastes fractions on volatile fatty acids production by anaerobic fermentation. Bioresource Technology, 2021, 335, 125289

- **F. Battista**, C. Masala, A. Zamboni, Z. Varanini, D. Bolzonella. Valorisation of agricultural digestate for the ammonium sulfate recovery and soil improvers production. Waste and biomass valorization, 2021, 12(12), pp. 6903–6916

- G Strazzera, **F. Battista**, B Tonanzi, S Rossetti, D Bolzonella. Optimization of short chain volatile fatty acids production from household food waste for biorefinery applications. Environmental Technology & Innovation (2021), 101562

- **F. Battista**, K. Moustakas, A.S. Nizami. Integrated biorefinery for the planet's future, Renewable Energy (2021), 170: 796-799.

- **F. Battista,** N. Frison, D. Bolzonella. Can bioplastics be treated in conventional anaerobic digesters for food waste treatment?. Environmental Technology & Innovation (2021), 22: 101393.

- G. Chinellato, **F. Battista,** D. Bolzonella, C. Cavinato. Single-phase anaerobic digestion of the organic fraction of municipal solid waste without dilution: Reactor stability and process performance of small, decentralised plants. Waste Management (2021), 125: 103-111.

- A. Botturi, **F. Battista**, M. Andreolli, F. Faccenda, S. Fusco, D. Bolzonella, S. Lampis, N. Frison. Polyhydroxyalkanoated-Rich Microbial Cells from Bio-Based Volatile Fatty Acids as Potential Ingredient for Aquaculture Feed. Energies (2021), 14(1): 38.

- **F. Battista,** E.M. Barampouti, S. Mai, D. Bolzonella, M. Dimitris, K. Moustakas, M. Loizidou. Added-Value Molecules Recovery and Biofuels Production from Spent Coffee Grounds. Renewable & sustainable energy reviews. 131 (2020): 110007.

- ***F. Battista**, S. Zanzoni, G. Strazzera, M. Andreolli, D. Bolzonella. The Cascade Biorefinery Approach for the Valorization of the Spent Coffee Grounds. Renewable energy 157 (2020): 1203–1211.*

- D. Bolzonella, **F. Battista**, A. Mattioli, C. Nicolato, N. Frison, S. Lampis. Biological Thermophilic Post Hydrolysis of Digestate Enhances the Biogas Production in the Anaerobic Digestion of Agro-Waste." Renewable & sustainable energy reviews. 134 (2020): 110174

- **F. Battista**, G. Remelli, S. Zanzoni, D. Bolzonella. Valorization of Residual Orange Peels: Limonene Recovery, Volatile Fatty Acids, and Biogas Production. ACS sustainable chemistry & engineering. 8.17 (2020): 6834–6843.

- **F. Battista**, N. Frison, P. Pavan P., C. Cavinato, M. Gottardo, F. Fatone, A.L. Eusebi., M. Majone, M. Zeppilli, F. Valentino, D. Fino, T. Tommasi, D. Bolzonella. Food wastes and sewage sludge as feedstock for an urban biorefinery producing biofuels and added-value bioproducts. Journal of Chemical Technology and Biotechnology (2020); 95: 328–338

- D. Bolzonella, F. Micolucci, **F. Battista**, C. Cavinato, M. Gottardo, S. Piovesan, P. Pavan. Producing Biohythane from Urban Organic Wastes. Waste and Biomass Valorization (2020), 11(6): 2367–2374

- **F. Battista**, N. Frison, D. Bolzonella. Energy and nutrients' recovery in anaerobic digestion of agricultural biomass: An Italian perspective for future applications. Energies (2019), 12 (17): 3287.

- N.H. Garcia, A. Mattioli, A.Gil, N. Frison, **F. Battista**, D. Bolzonella. Evaluation of the methane potential of different agricultural and food processing substrates for improved biogas production in rural areas. Renewable and Sustainable Energy Reviews (2019), 112: 1-10.

- E. Batuecas, T. Tommasi, **F. Battista**, V. Negro, G. Sonetti, P. Viotti, D. Fino, G. Mancini. Life Cycle Assessment of waste disposal from olive oil production: Anaerobic digestion and conventional disposal on soil. Journal of Environmental Management (2019), 237: 94-102.

- **F. Battista**, D. Bolzonella. Exploitation of solar energy for ammonium sulfate recovery from anaerobic digestate of different origin. Waste and Biomass Valorization (2019), 10(12), pp. 3701–3709

- **F. Battista**, M. Gomez Almendros, R. Rousset, P.A. Bouillon. Enzymatic Hydrolysis At High Lignocellulosic Content: Optimization Of The Mixing System Geometry And Of A Fed-Batch Strategy To Increase Glucose Concentration. Renewable Energy 131 (2019): 152-158.

- **F. Battista**, D. Bolzonella. Some critical aspects of the enzymatic hydrolysis at high dry-matter content: A review. Biofuels, Bioproducts and Biorefining 12 (4) (2018): 711-723.

- G. Strazzera. **F. Battista**, N. Herrero Garcia, N. Frison, D. Bolzonella. Volatile fatty acids production from food wastes for biorefinery platforms: a review. Journal of Environmental Management 226 (2018): 278-288.

- D. Bolzonella, **F. Battista**, C. Cavinato, M. Gottardo, F. Micolucci, G. Lyberatos, P. Pavan. Recent developments in biohythane production from household food wastes: A review. Bioresource Technology (2018), 257: 311-319.

- **F. Battista,** M. Gomez Almendros, R. Rousset, S. Boivineau, P.A. Bouillon. Enzymatic hydrolysis at high dry matter content: the influence of the substrates' physical properties and of loading strategies on mixing and energetic consumption. Bioresource Technology 250: 191-196.

- **F. Battista**, Y. S. Montenegro Camacho, S. Hernandez, S. Bensaid, A. Herrmann, H. Krause, D. Trimis, D. Fino. LCA evaluation for the hydrogen production from biogas through the innovative biorobur project concept. Journal of Hydrogen Production (2017), 42(19): 14030-14043

- **F. Battista**, D. Fino, G. Mancini, B. Ruggeri. Mixing in digesters used to treat high viscosity substrates: the case of olive oil production wastes. Journal of environmental chemical engineering 1 (4) (2016): 915-923.

- **F. Battista**, D. Fino, G. Mancini. Optimization of Biogas production from coffee production waste. Bioresource Technology 200 (2016): 884-890.

- **F. Battista**, G. Mancini, B. Ruggeri, D. Fino. Selection of the best pretreatment for hydrogen and bioethanol production from olive oil waste products. Renewable Energy 88 (2016): 401-407.

- **F. Battista,** D. Fino, F. Erriquens, B. Ruggeri, G. Mancini. Scaled-up experimental biogas production from two agro-food waste mixtures having high inhibitory compound concentrations. Renewable Energy 81 (2015):71-77.

- B. Ruggeri, **F. Battista**, M. Bernardi, D. Fino, G. Mancini. The Selection Of Pretreatment Options For Anaerobic Digestion (Ad): A Case Study In Olive Oil Waste Production. Chemical Engineering Journal 259 (2015): 630-639.

- **F. Battista**, B. Ruggeri, M. Bernardi, D. Fino. Polyphenols Concentration's Effect On The Biogas Production By Wastes Derived From Olive Oil Production. Chemical Engineering Transactions 38 (2014): 373 -378.

- **F. Battista**, B. Ruggeri, D. Fino, F. Erriquens, L. Rutigliano, D. Mescia. Toward the Optimization of Agro-Food Feed Mixture for Biogas Production. Journal of Enviromental Chemical Engineering 1 (2013): 1223-1230.

Reviewer for the International Journals:

BIORESOURCE TECHNOLOGY; CHEMOSPHERE; RENEWABLE ENERGY; JOURNAL OF ENVIRONMENTAL MANAGEMENT; JOURNAL OF CLEANER PRODUCTION; INTERNATIONAL JOURNAL OF HYDROGEN ENERGY; WASTE MANAGEMENT; WASTE AND BIOMASS VALORIZATION; BIOMASS AND BIOENERGY; CHEMICAL ENGINEERING JOURNAL; CHEMICAL ENGINEERING TRANSACTIONS; JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING and others

CONFERENCES

ORAL AND POSTER PARTECIPATIONS

- Nutrients recovery by sequential filtration steps from agricultural digestate: towards a DEMO scale plant. 5th European Sustainable Phosphorus Conference. October 8-10, 2024, Lleida (Spain).
- Nutrients recovery by sequential filtration steps from agricultural digestate: a pilot-scale case study. 18th IWA World Conference on Anaerobic Digestion. June 2-6, 2024 / Istanbul, Turkey.
- Production of PHAs with variable HV content from agricultural residues. 11th International Conference on Sustainable Solid Waste Management. Rhodi (Greece): 19-22th June 2024.
- Valorization of agricultural digestate by sequential filtration steps for the recovery of nitrogen and phosphorous compounds. 11th International Conference on Sustainable Solid Waste Management. Rhodi (Greece): 19-22nd June 2024.
- Hydrogen production through Dark Fermentation process of Agricultural Residues. 11th International Conference on Sustainable Solid Waste Management. Rhodi (Greece): 19-22nd June 2024.
- Production and recovery of medium chain fatty acid from Opuntia Ficus Indica. 2nd GREENERING INTERNATIONAL CONFERENCE, Valladolid (Spain) from March 21st to March 23rd, 2023.
- Recovery of bio-based volatile fatty acid by pertraction techniques using green solvents. 2nd GREENERING INTERNATIONAL CONFERENCE, Valladolid (Spain) from March 21st to March 23rd, 2023.
- Anaerobic bioprocesses toward the conversion of carbon dioxide into bio-based products. 2nd GREENERING INTERNATIONAL CONFERENCE, Valladolid (Spain) from March 21st to March 23rd, 2023.
- A biorefinery case study based on the valorization of Opuntia Ficus Indica for biofuels and bio-compounds productions. 10th International Conference on Sustainable Solid Waste Management. Chania (Greece): 21-24th June 2023.
- Valorisation of Agricultural residues to produce H2 through Two Stage Anaerobic Digestion process. 10th International Conference on Sustainable Solid Waste Management. Chania (Greece): 21-24th June 2023.
- Biorefineries for Biomethane and Volatile Fatty Acids production from microalgae and sugarcane vinasse. 10th International Conference on Sustainable Solid Waste Management. Chania (Greece): 21-24th June 2023.

- Caproic Acid Production by Biological Chain Elongation. GRICU 2022 National Conference. Ischia, 3-6 July 2022.
- Invited Speaker at the "Anaerobic Digestion in the energy and biorefinery context" organized by MDPI processes. 8 June 2022
- Single Cell Proteins production from effluents of candies production. 8th International Conference on Sustainable Solid

Waste Management. Thessaloniki. 23-25 June 2021.

- The sequential biorefinery approach for biodiesel and glucose production from Spent Coffee Grounds. 8th International Conference on Sustainable Solid Waste Management. Thessaloniki. 23-25 June 2021.
- VFA recovery from anaerobic fermentate: focusing on adsorption and desorption performances. . 8th International Conference on Sustainable Solid Waste Management. Thessaloniki. 23-25 June 2021.
- Production of bio-based VFAs by acidogenic fermentation of protein hydrolysates from agriculture and tannery wastes. . 8th International Conference on Sustainable Solid Waste Management. Thessaloniki. 23-25 June 2021.
- Valorisation of agricultural digestate for the ammonia sulfate recovery and soil improvers production. Online Conference on Biogas Production and Digestate Valorisation from Wastes. Madrid, Spain. 17-18th November 2020.
- Presentation of the EranetMed BiogasMena project. 3rd IWA Resource Recovery Conference. Venice 2019. 8-12 September 2019.
- The cascade biorefinery approach for the valorization of the Spent Coffee Grounds. 7th International Conference on Sustainable Solid Waste Management. Heraklion 2019. 26-29 June 2019.
- Biological post hydrolysis of digestate enhances the biogas production in anaerobic digestion of agro-waste. 7th International Conference on Sustainable Solid Waste Management. Heraklion 2019. 26-29 June 2019.
- Optimization of Volatile Fatty Acids production from household food waste for the biorefinery supply chain. 7th International Conference on Sustainable Solid Waste Management. Heraklion 2019. 26-29 June 2019.
- Exploitation of solar energy for ammonia sulfate recovery from digestate. 6th International Conference on Sustainable Solid Waste Management, Naxos Island, Greece, 13–16 June 2018
- Systematic Evaluation Methodology Of Different Innovative Decentralized Concepts For Technology Based Decision-Making Processes – A Case Study In The Synthesis Gas Production. Life Cycle Management 2015. 30th August – 2nd September 2015. Bordeaux, France.
- PHA production from biogas. Cremona Fiere. February 2015.
- Biogas production from coffee production's wastes. 13th International Conference on Clean Energy. Istanbul. June 2014.
- Biogas from Olive Oil Production's Wastes. 4th International Symposium on Energy from Biomass and Waste. November 2012.

AWARDS and INTERNATION ASSIGNMENTS

Year	Description	Released by
2024	**World's 2% Top Scientists ranking -2022**	Stanford University and Elsevier
2024	**Evaluator of two project proposals from the Israeli Ministry of Innovation, Science and Technology**	Israeli Ministry of Innovation, Science and Technology
2024	**PhD thesis evaluation** "Mixotrophic growth study of the diatom Phaeodactylum tricornutum and extraction of high-value products from its biomass through green chemistry processes". PhD candidate: Caterina Celi	Politecnico di Torino
2024	**PhD thesis evaluation** "Microbial CO2 Conversion to Acetic Acid: From Laboratory Testing to an Industrial-Scale Model". PhD candidate: Francesco Regis	Politecnico di Torino
2024	**CHAIRMAN of the session "Energy from Waste II & Anaerobic Digestion, WEEE"** at the 11th International Conference on Sustainable Solid Waste Management. Rhodi (Greece): 19-22nd June 2024.	
2024	**PhD thesis evaluation** "Syngas biomethanation by co-digestion with organic waste streams". PhD Candidate: Pietro Postacchini	Libera Università di Bolzano
2023	**World's 2% Top Scientists ranking -2022**	Stanford University and Elsevier
2023	CHAIRMAN **of the session "Recycling & Resource Recovery" at the 10th International Conference on Sustainable Solid Waste Management.** Chania (Greece): 21-24th June 2023.	
2023	**PhD thesis evaluation** "Multiple valorization pathways to recover high added resources from dairy wastewater and beyond". PhD Candidate: Pablo Martin Binder	University of Vic (Spain)
2023	**Evaluator for one grant proposals from National Science Center (Poland)**	National Science Center, Poland-Funding Scheme PRELUDIUM-21
2022	**Evaluator for two grant proposals from National Science Center (Poland)**	National Science Center, Poland-Funding Scheme PRELUDIUM-21
2022	**CHAIRMAN of the XVIII session "Management of Specific Waste Streams, Recycling & Resources Recovery" of the 9th International Conference on Sustainable Solid Waste Management**. Corfu 2022. 14-17 June 2022.	
2022	**Elsevier 2021 Outstanding Paper Award:** Can bioplastics be treated in conventional anaerobic digesters for food waste treatment?. Environmental Technology & Innovation (2021), 22: 101393	Environmental Technology & Innovation
2022	**Top Cited Article 2020-2021.** Battista F., Frison N., Pavan P., Cavinato C., Gottardo M., Fatone F., Eusebi A. L., Majone M., Zeppilli M., Valentino F., Fino D., Tommasi T., Bolzonella D. (2020). Food wastes and sewage sludge as feedstock for an urban biorefinery producing biofuels and added-value bioproducts. JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol. 95, p. 328-338	Journal of chemical technology and biotechnology
2022	**Guest editor of special issue** "THE BIOREFINERY BEYOND THE "VALLEY OF DEATH"" for the international scientific journal "Renewable Energy" (IF 8,634) by Elsevier	Renewable Energy
2021	**Scientific committee of the International Conference "THE PATH TOWARDS 2030.** The envisioned decade of changes towards a circular economy era. Are you a young professional ready for this challenge?"	International Solid Waste Association (ISWA) - Young Professionals Group

2021	**CHAIRMAN of the III session "Marine Litter, Plastics and Bioplastics" of the 8th International Conference on Sustainable Solid Waste Management**. Thessaloniki 2021. 23-26 June 2021.	
2020	**Reviewer for grant proposal from the National Science Center (Poland)**	National Science Center, Poland-Funding Scheme SONATA
2020	**PhD thesis evaluation** "Anaerobic Digestion of microalgae biomass for the volatile fatty acids production". PhD Candidate: Jose Antonio Magdalena Cadelo	Universidad Complutense de Madrid (Spain)
2019 -Ora	**Editorial Board member of the international scientific journal "Renewable Energy"** (IF 8,364) by Elsevier	Elsevier
2020	**TOP DOWNLOADED PAPER 2018-2019**: Battista F., Frison N., Pavan P., Cavinato C., Gottardo M., Fatone F., Eusebi A. L., Majone M., Zeppilli M., Valentino F., Fino D., Tommasi T., Bolzonella D. (2020). Food wastes and sewage sludge as feedstock for an urban biorefinery producing biofuels and added-value bioproducts. JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol. 95, p. 328-338	Journal of chemical technology and biotechnology
2019 - 2020	**Guest editor of special issue** "INTEGRATED BIOREFINERY FOR THE PLANET'S FUTURE" for the international scientific journal "Renewable Energy" (IF 6,274) by Elsevier	Elsevier
2019	**Member of the "Young Water Professional" Team of the "3RD IWA Resource Recovery Conference 2019**" - Venezia 8/12 Gennaio 2019	International Water Association
2019	**CHAIRMAN of the II session "Circular Economy & Symbiosis Networks" of the 7th International Conference on Sustainable Solid Waste Management**. Heraklion 2019. 26-29 June 2019.	
2019	**Publons Peer Reviews Awards 2019**, for placing in the global top 1% of reviewers in **Engineering;**	Publons
2019	September 2019. **Publons Peer Reviews Awards 2019**, for placing in the top global 1% of reviewers in **Environmental and Ecology;**	Publons
2019	September 2019. **Publons Peer Reviews Awards 2019**, for placing in the top global 1% of reviewers in **Cross-Field;**	Publons
2018	September 2018. **Publons Peer Reviews Awards 2018**, for placing in the top global 1% of reviewers in **Engineering;**	Publons

Verona, 22nd O 2024

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