PERSONAL INFORMATION PAOLO PAVAN

[redacted]

[redacted]

[redacted]

Sex Male | *Date of birth* [redacted] *Nationality* Italian

[Select you current working level]

Enterprise	University	EPR
☐ Management Level	☒ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

Nov 2015 - present

Full professor, ING-IND/25, chemical plants
University of Venice, Dept. of Envinronmental sciences, informatics and statistics
Main activities: wastewater treatment, nutrient removal, anaerobic digestion of complex substrates, biofuels, bioplastics, circular economy
Sector: chemical engineering

Jan 2003 – dec 2015

Associated Professor, ING-IND/25, chemical plants
University of Venice, Dept. of Envinronmental sciences, informatics and statistics
Main activities: wastewater treatment, nutrient removal, anaerobic digestion of complex substrates
Sector: chemical engineering

Jan 1997 – dec 2002

Researcher, ING-IND/25, chemical plants
University of Venice, Dept. of Envinronmental sciences
Main activities: wastewater treatment, nutrient removal, anaerobic digestion of complex substrates
Sector: chemical engineering

Jan 1992 – dec 1996

Technical assistant
University of Venice, Dept. of Envinronmental sciences
Main activities: wastewater treatment, nutrient removal, anaerobic digestion of complex substrates
Sector: chemical engineering

Jan1989 - Dec 1991

Research Assistant
University of Venice, Dept. of Envinronmental sciences
Main activities: research on semi-dry digestion of complex substrates
Sector: chemical engineering

EDUCATION AND TRAINING

Jan 1981-jun 1989

Degree in Industrial chemistry
University of Venice

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s) English

UNDERSTANDING		SPOKEN		WRITTEN
Ascolto	Lettura	Interazione	Produzione orale	
B2	C1	B2	B2	B2

Job-related skills

- advanced research in the field of waste stream treatments (anaerobic digestion, composting, chemical-physical treatments)
- advanced research in the field of wastewater treatments, in particular biological removal of nutrients, treatments with membranes and integrated water / waste processes
- executive level design of plants and unitary operations in the field of organic waste purification and treatment
- research and design of systems for the abatement and recovery of nitrogen and phosphorus in civil and agro-industrial sectors
- applied research on biohydrogen and biomethane production from complex wastes
- applied research on bioplastics production from waste streams
- principal investigator of local units in V, VI, VII EU framework programs and H2020 projects
- teaching in magistral degree courses and first and second level masters at national and international level
- participation in international congresses on specific research topics, many by invitation
- production of papers and books at an international level (>150 peer review journals publications, >250 partecipations in international and national workshops and congresses, co-author of 4 industrial patents, actual H-index=45 (scopus base), 5786 citations
- referee of some of the major international magazines in the field of environmental engineering, waste water and solid waste

ADDITIONAL INFORMATION actual H-index, scopus based: 45, n. of citations: 5810

Publications (last 5 years, only journals with I.F.)

EXPORT DATE:18 Dec 2023

Tuci, G.A., Valentino, F., Parmar, A.C., Pavan, P., Gottardo, M.
Minimizing tannery sludge in landfilling through a mixed microbial culture approach: Effect of oxidizing pretreatment, temperature and hydraulic retention time on process performances and chromium fate
(2023) Biochemical Engineering Journal, 200, art. no. 109073, . Cited 1 time.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85170086064&doi=10.1016%2fj.bej.2023.109073&partnerID=40&md5=e44fc716db2d1a4b5a4e68dc49028886

DOI: 10.1016/j.bej.2023.109073
DOCUMENT TYPE: Article
SOURCE: Scopus

Gottardo, M., Tuci, G.A., Parmar, A.C., Pavan, P., Valentino, F.
A combined treatment of aerobic activated sludge and powdered activated carbon: Pilot-scale study of per/polyfluoroalkyls (PFASs), organic matters, chromium, and color removal from tannery wastewaters
(2023) Journal of Water Process Engineering, 55, art. no. 104165, .
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85168597474&doi=10.1016%2fj.jwpe.2023.104165&partnerID=40&md5=a0f35e4f0c2966e9d8d70651672143b5

DOI: 10.1016/j.jwpe.2023.104165
DOCUMENT TYPE: Article
SOURCE: Scopus

Gottardo, M., Zanatta, S., Modesti, M., Lorini, L., Pavan, P., Valentino, F.
Oxygen limitation in aerobic polyhydroxyalkanoates production from sewage sludge anaerobic fermentation liquids under low and medium organic loading rate
(2023) Chemosphere, 338, art. no. 139468, .
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85165038599&doi=10.1016%2fj.chemosphere.2023.139468&partnerID=40&md5=3d91ebb399c06346f0c9c5f9a705e7b0

DOI: 10.1016/j.chemosphere.2023.139468
DOCUMENT TYPE: Article
SOURCE: Scopus

Gottardo, M., Dosta, J., Cavinato, C., Crognale, S., Tonanzi, B., Rossetti, S., Bolzonella, D., Pavan, P., Valentino, F.
Boosting butyrate and hydrogen production in acidogenic fermentation of food waste and sewage sludge mixture: a pilot scale demonstration
(2023) Journal of Cleaner Production, 404, art. no. 136919, . Cited 3 times.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85151057291&doi=10.1016%2fj.jclepro.2023.136919&partnerID=40&md5=90fd88c1ff8a2cd009887fcaa875d8a8

DOI: 10.1016/j.jclepro.2023.136919
DOCUMENT TYPE: Article
SOURCE: Scopus

Gottardo, M., Tuci, G.A., Valentino, F., Pavan, P.
Exploiting Tannery Sludge as Renewable Resource for Biogas and Short-chain Fatty (SCFAs) Acids Production
(2023) Chemical Engineering Transactions, 99, pp. 25-30.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85163442512&doi=10.3303%2fCET2399005&partnerID=40&md5=19b7440e5f7656a75edb90bb5670f73c

DOI: 10.3303/CET2399005
DOCUMENT TYPE: Article
SOURCE: Scopus

Tuci, G.A., Valentino, F., Bonato, E., Pavan, P., Gottardo, M.
Microwave-Hydrogen Peroxide Assisted Anaerobic Treatment as an Effective Method for Short-Chain Fatty Acids Production from Tannery Sludge
(2022) Processes, 10 (11), art. no. 2167, . Cited 3 times.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85141834028&doi=10.3390%2fpr10112167&partnerID=40&md5=7da8abfb4d5c66b97301d46b1fb09028

DOI: 10.3390/pr10112167
DOCUMENT TYPE: Article
SOURCE: Scopus

Gottardo, M., Bolzonella, D., Adele Tuci, G., Valentino, F., Majone, M., Pavan, P., Battista, F.
Producing volatile fatty acids and polyhydroxyalkanoates from foods by-products and waste: A review
(2022) Bioresource Technology, 361, art. no. 127716, . Cited 14 times.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135417696&doi=10.1016%2fj.biortech.2022.127716&partnerID=40&md5=57f83eddb441dfdba4970b22325643ad

DOI: 10.1016/j.biortech.2022.127716
DOCUMENT TYPE: Review
SOURCE: Scopus

Battista, F., Strazzera, G., Valentino, F., Gottardo, M., Villano, M., Matos, M., Silva, F., M. Reis, M.A., Mata-Alvarez, J., Astals, S., Dosta, J., Jones, R.J., Massanet-Nicolau, J., Guwy, A., Pavan, P., Bolzonella, D., Majone, M.

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, 10 (5), art. no. 108319, . Cited 20 times.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135394334&doi=10.1016%2fj.jece.2022.108319&partnerID=40&md5=426428e7f1501088e357f4b881507909

DOI: 10.1016/j.jece.2022.108319
DOCUMENT TYPE: Article
SOURCE: Scopus

Lorini, L., Munarin, G., Salvatori, G., Alfano, S., Pavan, P., Majone, M., Valentino, F.
Sewage sludge as carbon source for polyhydroxyalkanoates: a holistic approach at pilot scale level
(2022) Journal of Cleaner Production, 354, art. no. 131728, . Cited 11 times.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128403668&doi=10.1016%2fj.jclepro.2022.131728&partnerID=40&md5=3870392e1dc6b2c8c42dc959a35f6941

DOI: 10.1016/j.jclepro.2022.131728
DOCUMENT TYPE: Article
SOURCE: Scopus

Valentino, F., Parmar, A.C., Micolucci, F., Dosta, J., Pavan, P., Gottardo, M.
Valuable Routes for Sewage Sludge Utilization: Effect of Temperature and Hydraulic Retention Time in the Acidogenic Fermentation Process
(2022) Chemical Engineering Transactions, 93, pp. 193-198. Cited 1 time.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134413252&doi=10.3303%2fCET2293033&partnerID=40&md5=5fe946fbe48711360dd0bc2f63e85e34

DOI: 10.3303/CET2293033
DOCUMENT TYPE: Article
SOURCE: Scopus

Valentino, F., Munarin, G., Biasiolo, M., Cavinato, C., Bolzonella, D., Pavan, P.
Enhancing volatile fatty acids (VFA) production from food waste in a two-phases pilot-scale anaerobic digestion process
(2021) Journal of Environmental Chemical Engineering, 9 (5), art. no. 106062,

DOI: 10.1016/j.jece.2021.106062
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Pascale, E., Franchitti, E., Caredda, C., Fornasero, S., Carletto, G., Pietrangeli, B., Valentino, F., Pavan, P., Gilli, G., Anedda, E., Traversi, D.
Bioaerosol emissions during organic waste treatment for biopolymer production: A case study
(2021) Atmosphere, 12 (8), art. no. 1069, .
https://www.scopus.com/inward/record.uri?eid=2-s2.0-

DOI: 10.3390/atmos12081069
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Gold, Green
SOURCE: Scopus

Valentino, F., Pavan, P., Dosta, J.
Editorial: Biofuels and Bioproducts From Anaerobic Processes: Anaerobic Membrane Bioreactors (AnMBRs)
(2021) Frontiers in Bioengineering and Biotechnology, 9, art. no. 694484, .

DOI: 10.3389/fbioe.2021.694484
DOCUMENT TYPE: Editorial
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Gold, Green
SOURCE: Scopus

Lorini, L., Martinelli, A., Pavan, P., Majone, M., Valentino, F.
Downstream processing and characterization of polyhydroxyalkanoates (PHAs) produced by mixed microbial culture (MMC) and organic urban waste as substrate
(2021) Biomass Conversion and Biorefinery, 11 (2), pp. 693-703.

DOI: 10.1007/s13399-020-00788-w
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Hybrid Gold, Green
SOURCE: Scopus

Lauri, R., Tayou, L.N., Pavan, P., Majone, M., Pietrangeli, B., Valentino, F.
Acidogenic fermentation of urban organic waste: Effect of operating parameters on process performance and safety
(2021) Chemical Engineering Transactions, 86, pp. 55-60. Cited 1 time.

DOI: 10.3303/CET2186010
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Valentino, F., Lorini, L., Pavan, P., Majone, M.
Development of a biorefinery platform for urban waste valorisation into biogas and added-value products
(2021) Chemical Engineering Transactions, 86, pp. 13-18.

DOI: 10.3303/CET2186003
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Micolucci, F., Gottardo, M., Bolzonella, D., Pavan, P., Majone, M., Valentino, F.
Pilot-scale multi-purposes approach for volatile fatty acid production, hydrogen and methane from an automatic controlled anaerobic process
(2020) Journal of Cleaner Production, 277, art. no. 124297,

DOI: 10.1016/j.jclepro.2020.124297
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Valentino, F., Lorini, L., Gottardo, M., Pavan, P., Majone, M.
Effect of the temperature in a mixed culture pilot scale aerobic process for food waste and sewage sludge conversion into polyhydroxyalkanoates
(2020) Journal of Biotechnology, 323, pp. 54-61.

DOI: 10.1016/j.jbiotec.2020.07.022
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

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

DOI: 10.1007/s12649-018-00569-7
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Moretto, G., Russo, I., Bolzonella, D., Pavan, P., Majone, M., Valentino, F.
An urban biorefinery for food waste and biological sludge conversion into polyhydroxyalkanoates and biogas
(2020) Water Research, 170, art. no. 115371

DOI: 10.1016/j.watres.2019.115371
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Green
SOURCE: Scopus

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.

Food wastes and sewage sludge as feedstock for an urban biorefinery producing biofuels and added-value bioproducts
(2020) Journal of Chemical Technology and Biotechnology, 95 (2), pp. 328-338.

DOI: 10.1002/jctb.6096
DOCUMENT TYPE: Review
PUBLICATION STAGE: Final
SOURCE: Scopus

Moretto, G., Lorini, L., Pavan, P., Crognale, S., Tonanzi, B., Rossetti, S., Majone, M., Valentino, F.
Biopolymers from urban organic waste: Influence of the solid retention time to cycle length ratio in the enrichment of a Mixed Microbial Culture (MMC)
(2020) ACS Sustainable Chemistry and Engineering, 8 (38)

DOI: 10.1021/acssuschemeng.0c04980
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Busato, C.J., Da Ros, C., Pellay, R., Barbierato, P., Pavan, P.
Anaerobic membrane reactor: Biomethane from chicken manure and high-quality effluent
(2020) Renewable Energy, 145, pp. 1647-1657.

DOI: 10.1016/j.renene.2019.07.088
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Green
SOURCE: Scopus

Valentino, F., Moretto, G., Lorini, L., Bolzonella, D., Pavan, P., Majone, M.
Pilot-Scale Polyhydroxyalkanoate Production from Combined Treatment of Organic Fraction of Municipal Solid Waste and Sewage Sludge
(2019) Industrial and Engineering Chemistry Research, 58 (27), pp. 12149-12158.

DOI: 10.1021/acs.iecr.9b01831
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Bronze, Green
SOURCE: Scopus

Moretto, G., Valentino, F., Pavan, P., Majone, M., Bolzonella, D.
Optimization of urban waste fermentation for volatile fatty acids production
(2019) Waste Management, 92, pp. 21-29.

DOI: 10.1016/j.wasman.2019.05.010
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Green
SOURCE: Scopus

Valentino, F., Moretto, G., Gottardo, M., Pavan, P., Bolzonella, D., Majone, M.
Novel routes for urban bio-waste management: A combined acidic fermentation and anaerobic digestion process for platform chemicals and biogas production
(2019) Journal of Cleaner Production, 220, pp. 368-375.

DOI: 10.1016/j.jclepro.2019.02.102
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
OPEN ACCESS: All Open Access, Green
SOURCE: Scopus

Valentino, F., Lorini, L., Pavan, P., Bolzonella, D., Majone, M.
Organic fraction of municipal solid waste conversion into polyhydroxyalkanoates (PHA) in a pilot scale anaerobic/aerobic process
(2019) Chemical Engineering Transactions, 74, pp. 265-270.

DOI: 10.3303/CET1974045
DOCUMENT TYPE: Article

PUBLICATION STAGE: Final
SOURCE: Scopus

Valentino, F., Gottardo, M., Micolucci, F., Pavan, P., Bolzonella, D., Rossetti, S., Majone, M.
Organic Fraction of Municipal Solid Waste Recovery by Conversion into Added-Value Polyhydroxyalkanoates and Biogas
(2018) ACS Sustainable Chemistry and Engineering, 6 (12), pp. 16375-16385.

DOI: 10.1021/acssuschemeng.8b03454
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

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

DOI: 10.1016/j.biortech.2018.02.092
DOCUMENT TYPE: Review
PUBLICATION STAGE: Final
SOURCE: Scopus

Leite, W.R.M., Belli Filho, P., Gottardo, M., Pavan, P., Bolzonella, D.
Monitoring and Control Improvement of Single and Two Stage Thermophilic Sludge Digestion Through Multivariate Analysis
(2018) Waste and Biomass Valorization, 9 (6), pp. 985-994.

DOI: 10.1007/s12649-016-9758-z
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus

Micolucci, F., Gottardo, M., Pavan, P., Cavinato, C., Bolzonella, D.
Pilot scale comparison of single and double-stage thermophilic anaerobic digestion of food waste
(2018) Journal of Cleaner Production, 171, pp. 1376-1385.

DOI: 10.1016/j.jclepro.2017.10.080
DOCUMENT TYPE: Article
PUBLICATION STAGE: Final
SOURCE: Scopus