Curriculum vitae

Giuseppe Campo

Personal Details

Name	Giuseppe
Surname	Campo
Place of birth	
Date of birth	
Nationality	Italian
Academic Position	Assistant Professor in Sanitary and Environmental Engineering
Ph.D.	Civil and Environmental Engineering
M.Sc.	Environmental and Land Engineering

Contacts

Phone (1)	+
Phone (2)	
Mail (1)	
Mail (2)	
PEC	
Social (1)	
Social (2)	
web page (1)	
web page (2)	

Main research interests

Giuseppe Campo is currently interested in developing, modelling and engineering innovative biotechnologies for energy, resources recovery from wastewater, waste treatment technologies and bioleaching of tailing and WEEE's waste to recovery REESs.

He has dealt with innovative treatments of urban and industrial waste water purification, sewage sludge treatments, waste treatments and biosolids managements. In the last ten years, his research has been focused on chemical, physical and hybrid pre-treatments to increase sludge and food-industries by-products anaerobic biodegradability; methods and models to evaluate and estimate anaerobic degradability; P2G -hydrogenotrophic methanogenesis processes, Membrane Aerated biofilm reactors

(MABRs), water and wastewater plants optimizations. He was involved in several research projects and consultancy funded by: Smat (Società Metropolitana Acque Torino), Regione Piemonte, FCA S.p.A., Ferrero SpA, Lavazza S.p.A, Eni S.p.A, Esso Italiana S.r.l., Edison-Fenice S.p.A., Gancia SpA and other companies.

Academic Position

Giuseppe Campo is Assistant Professor (RTDb, L.240) for the Scientific Disciplinary Sector ICAR/03 – Sanitary- Environmental Engineering at the Department of Environment, Land and Infrastructure Engineering at Politecnico di Torino, Torino (Italy) since 16.04 2024.

31st May 2021 - Giuseppe Campo holds the "Italian National Scientific Qualification as Associate Professor" in Sanitary and Environmental Engineering (ICAR 03)

Previous Positions

Giuseppe Campo has joined the Sanitary-Environmental Engineering group from Politecnico di Torino inSeptember 2013.

- 08-09.2023 Visitor Researcher Instituto Tecnológico de Canarias (ITC), Las Palmas de Gran Canaria (Spain), in the framework of the project MSCA RISE – "REMIND", Renewable Energies for Water Treatment and Reuse in Mining Industries.
- 08-09.2022 Visitor Researcher Universidad de Antofagasta, Antofagasta (Chile), in the framework of the project MSCA RISE – "REMIND", Renewable Energies for Water Treatment and Reuse in Mining Industries.
- 08-09.2019 Visitor Researcher Universidad Adolfo Ibañez, Santiago de Chile (Chile), in the framework of the project MSCA RISE – "REMIND", Renewable Energies for Water Treatment and Reuse in Mining Industries.
- From 16.12.2019 to 30.09.2021 Post- doctoral research fellow – Sanitary-Environmental Engineering research group at the Department of Environment, Land and Infrastructure Engineering at Politecnico di Torino, Torino (Italy)
- From 01.11.2018 to 31.10.2019. Sanitary-Environmental Engineering research group at the Department of Environment, Land and Infrastructure Engineering at Politecnico di Torino, Torino (Italy)
- 01.11.2015 – 31.10.2018, PhD candidate, Department of Environment, Land and Infrastructure Engineering at Politecnico di Torino, Torino (Italy)
- 01.09.2013 to 31.10.2015, Research fellow - Sanitary-Environmental Engineering research group at the Department of Environment, Land and Infrastructure Engineering at Politecnico di Torino, Torino (Italy)

Higher Education

- 14.06.2019, PhD in Civil and Environmental Engineering, Politecnico di Torino, Italy
- 17.07. 2013, M.Sc. in Environmental and Land Engineering, Politecnico di Torino, Italy
- 23.03. 2010, B.Sc. in Environmental and Land Engineering, Univesità degli Studi di Palermo, Italy

Bibliometric Indexes (2023, July, 10th)

- Publications: 26
- Citations: 566
- H-index: 12

Editor and Reviewer

- Author and co-author of over 50 papers, published in journals and proceeding of national andinternational conferences;
- Guest Editor of Special Issue "Sewage Sludge Treatment and Reuse", closed (30 September 2020),Water an Open Access Journal by MDPI; Topical Advisory Panel Member of "Water" an Open Access Journal by MDPI;
- Reviewer of the following scientific journals: Chemosphere, Science of Total Environmental, Bioresource technologies, Infrastructures, Water, Fermentation Energies; Molecules, Bio-energies-

Teaching

(PhD = PhD courses, LM = Master's degree, L = bachelor's degree)

- *From 2017 -present, Co-instructor "Low environmental and energy impact wastewater treatment plants" (PhD);*
- *From 2022- present Co-instructor "Waste and Biomasses Energy valorization" (PhD);*
- *From 2018 - present , Co-instructor "Design for Environment and Land" (LM);*
- *From2022 -present, Co-instructor "Fundamentals of Environmental Engineering" (LM);*
- *From 2021 – present, Co -instructor "Environmental Solutions for Production Sites"(L);*
- *In 2017 Co -instructor "Water Plants Optimizations" (Specializing Master);*
- *In 2021 Instructor "Water and Wastewater Treatments Principles and Technologies" - MAIA -TAQA Mobilizing new Areas of Investments And Together Aiming to increase Quality of life for All - 2014-2020 ENI CBC. Assignment by Utilitalia;*
- *In 2022 Instructor: Training course for 8 new engineers of the contracting authority on design methods with particular reference to process-related aspects of the plant. Engineering services related to the design of a water lifting and treatment plant with a capacity of not less than 200,000 cubic meters per day at the end of the main northeast sewer line in Al Khansaa - Baghdad - Iraq. Client: Steci Srl - Engineering Company;*
- *From 2015 Co-supervisor of more than 20 Master 's Degree Thesis.*

Scientific/Technical committees and affiliation

- 2021 – Member of the Scientific Secretariat of the International Symposium of Sanitary and Environmental Engineering SIDISA21, Turin (IT), 29 June – 2 July 2021
- From 2020 Member of "Environment Commission" of Ordine degli Ingegneri della Provincia diTorino".
- . From 2021 Member of "Collegio del Corso di Studio in Ingegneria per l'Ambiente ed il Territorio", Politecnico di Torino.
- . From 2022 Member of " Collegio del Corso di Studio in Ingegneria Chimica e dei Materiali" Politecnico di Torino.

Research activities

Giuseppe Campo has collaborated in the following research and consultancy contracts:

- Optimization of water management at the FIAT plant in Verrone (2014-2015);
- Asbestos, sludge treatment, receptor body, ferrate, models, membranes, algae, aeration (2015-2017);
- Characterization of biomass and evaluation of the methane potential (2017-2017);
- New materials for the daily coverage of landfill waste (2018-2018);
- Characterization of biomass and evaluation of the methane potential (2018-2018);
- Optimization of water and waste management at the Zoom biopark - Cumiana (2019-2019);
- WWTP: sludge management, modeling and struvite production (2018-2020);
- Production / energy improvement activities and pre-industrial studies / concepts on CO_2 bio-fixation andmicroalgal growth activities (2019-2020);
- Evaluation of methods for the management of urban waste water purification sludge produced in thePiedmont Region. (2019-2020);
- Evaluation of greenhouse gas emissions of SMAT plants / offices (2020-2022);
- Optimization of the biological treatment section and related modeling of the plant located at the Azzurraplatform (formerly Lafumet) of Villastellone (2020-2022);
- WWTP: sludge management, MABR, hydrogen production and methanation, annamox modeling (2020-2023).

Main Publications

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1	2023	Campo G., Cerutti A., Scibilia G., De Ceglia M., Zanetti M. Ruffino B., (2023) A modelling approach for the assessment of energy recovery and impact on the water line of sludge pre-treatments *Energy,274*, 127355
2	2023	Campo, G., Ruffino, B., Reyes, A., & Zanetti, M. (2023). Water-Energy Nexus in the Antofagasta Mining District: Options for Municipal Wastewater Reuse from a Nearly Energy-Neutral WWTP. *Water*, *15*(6), 1221.
3	2020	Ruffino, B., Campo, G., Cerutti, A.,Lorenzi, E. Zanetti, M. (2020) Comparative analysis between a conventional and a temperature-phased anaerobic digestion system: Monitoring of the process, resources transformation and energy BALANCE ENERGY CONVERSION AND MANAGEMENT, 2020, 223, 113463
4	2020	Panepinto D.,Riggio V.,Ruffino B., Campo G.,Cerutti A.,Borzooei S.,Ravina M.,Bianco I.,Zanetti M.C. Optimization of the wastewater treatment plant: From energy saving to environmental impact mitigation ADVANCES IN SCIENCE, TECHNOLOGY AND INNOVATION Pages 231 – 2332020 10.1007/978-3-030-13068-8_57
5	2020	Borzooei, Sina, Campo, Giuseppe, Cerutti, Alberto, Meucci, Lorenza, Panepinto, Deborah, Ravina, Marco, Riggio, Vincenzo, Ruffino, Barbara, Scibilia, Gerardo, Zanetti, Mariachiara (2020). Feasibility analysis for reduction of carbon footprint in a wastewater treatment plant. JOURNAL OF CLEANER PRODUCTION, vol. 271, ISSN: 0959-6526, doi: 10.1016/j.jclepro.2020.122526
6	2020	Campo G., Cerutti A., Ravina M., Panepinto D., Riggio V. A., Zanetti M. (2020). Evaluation of green coffee-roasting biogas with modeling valorization of possible solutions. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, vol. 17, p. 1-14, ISSN: 1661-7827, doi: 10.3390/ijerph17196947
7	2020	Ruffino B., Cerutti A., Campo G., Scibilia G., Lorenzi E., Zanetti M. (2020). Thermophilic vs. mesophilic anaerobic digestion of waste activated sludge: Modelling and energy balance for its applicability at a full scale WWTP. RENEWABLE ENERGY, vol. 156, p. 235-248, ISSN: 0960-1481, doi: 10.1016/j.renene.2020.04.068

8	2020	Ruffino B., Campo G., Cerutti A., Scibilia G., Lorenzi E., Zanetti M. (2020). Comparative analysis between a conventional and a temperature-phased anaerobic digestion system: Monitoring of the process, resources transformationand energy balance. ENERGY CONVERSION AND MANAGEMENT,vol. 223, ISSN: 0196-8904, doi: 10.1016/j.enconman.2020.113463
9	2019	Borzooei S., Campo G., Cerutti A., Meucci L., Panepinto D., Ravina M., RiggioV., Ruffino B., Scibilia G., Zanetti M. (2019). Optimization of the wastewater treatment plant: From energy saving to environmental impact mitigation. SCIENCE OF THE TOTAL ENVIRONMENT, vol. 691, p. 1182-1189, ISSN: 0048-9697, doi: 10.1016/j.scitotenv.2019.07.241
10	2019	Ruffino, Barbara, Cerutti, Alberto, Campo, Giuseppe, Scibilia, Gerardo, Lorenzi, Eugenio, Zanetti, Mariachiara (2019). Improvement of energy recovery from the digestion of waste activated sludge (WAS) through intermediate treatments: The effect of the hydraulic retention time (HRT) of the first-stage digestion. APPLIED ENERGY, vol. 240, p. 191-204, ISSN: 0306-2619, doi: 10.1016/j.apenergy.2019.02.061
11	2018	RIGGIO, VINCENZO ANDREA, RUFFINO, BARBARA, CAMPO,GIUSEPPE, COMINO,ELENA, COMOGLIO, Claudio, ZANETTI, Mariachiara (2018). Constructed wetlands for the reuse of industrial wastewater:a case-study. JOURNAL OF CLEANER PRODUCTION, vol. 171, p. 723-732, ISSN: 0959-6526, doi: 10.1016/j.jclepro.2017.10.081
12	2018	CAMPO, GIUSEPPE, CERUTTI, ALBERTO, ZANETTI, Mariachiara, Scibilia, Gerardo, Lorenzi, Eugenio, RUFFINO, BARBARA (2018). Enhancement of waste activated sludge (WAS) anaerobic digestion by means of pre- and intermediate treatments. Technical and economic analysis at a full-scale WWTP.JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol. 216, p. 372-382, ISSN: 0301-4797, doi: 10.1016/j.jenvman.2017.05.025

Torino

07/05/2024

Giuseppe Campo