

PERSONAL INFORMATION

Giuseppe Mascolo



📍 CNR – Istituto di Ricerca Sulle Acque
Sede Secondaria di Bari
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70132 Bari

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male | Date of birth 27/05/1963 | Nationality italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☒ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ 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

2024 **Director ad interim of CNR - IRSA (Istituto di Ricerca Sulle Acque)**
2021 - 2023 **Research director at CNR-IRPI**

Sede Secondaria di Bari

October 2019 – December 2020 **Director of CNR - IRSA (Istituto di Ricerca Sulle Acque)**

1988 - 2019 **Researcher at CNR - IRSA**

(From 2001 First Researcher, from 2020 Research Director)

Sede Secondaria di Bari

EDUCATION AND TRAINING

1982 – 1987 **Master's Degree in "Chemistry"**

110/110 with honors

University of Bari "ALDO MORO", Department of Chemistry, Via Orabona 4, 70126 Bari, Italy

- Organic chemistry
- Analytical chemistry
- Environmental chemistry

WORK ACTIVITIES

Editorial activity

Referee of international journals such as: Industrial and Engineering Chemistry Research, Journal of the Air & Waste Management Association, and Combustion Flame, Chemosphere, Water Research, Environmental Science & Technology, J. Hazardous Materials, Journal of Advanced Oxidation Technologies, Desalination, Catalysis Today, Journal of Environmental Management, International Journal of Environmental Analytical Chemistry, Royal Society of Chemistry, Applied Catalysis B: Environmental

International mobility

Institute of Environmental Technology - Department of Water Quality Control of Technical University of Berlin
Environmental Sciences and Engineering Laboratory of the University of Dayton, USA
Water Research Centre (WRc) - Medmenham (UK)
Polymer Institute of Polytechnic of Zurich (E.T.H.), Zurich, Switzerland

Grants Scientific responsible of the CNR-IRSA activities within the project FONTANAPULIA - Fotocatalizzatori NanosTrutturati e RADiazioNe UV per un'Acqua più PULItA, competitive call INNONETWORK 2017 (01/07/2018 - 31/12/2019).
Scientific responsible of the WP4 (Trattamenti intensivi per la rimozione di inquinanti prioritari ed emergenti da siti contaminati) of the research project "Tecnologie e processi per l'Abbattimento di inquinanti e la bonifica di siti contaminati con Recupero di mAterie prime e produzioNe di energia TOTally green (TARANTO)", funded within the "Avviso per la presentazione di Progetti di ricerca industriale e lo Sviluppo sperimentale nelle 12 aree di specializzazione individuate nel PNR 2015-2020" (22/11/2018-21/06/2021).
Scientific responsible of the project "Degradation of recalcitrant pharmaceuticals in wastewater by biological and advanced oxidation processes", bilateral cooperation CNR - Fundação para a Ciência e a Tecnologia (FCT), Portugal (01/01/2015 - 31/12/2016)

Evaluation of Research Project Fonds de la Recherche Scientifique – FNRS, Belgium
Deutsche Forschungsgemeinschaft (DFG), Germany
JSC "National Centre of Science and Technology Evaluation", Kazakhstan
National Science Centre (Narodowe Centrum Nauki), Poland
GACR - Czech Science Foundation, Czech Republic
Italian Ministry of Education and Research
Puglia Region

Scientific expertise Water and wastewater treatment processes;
Degradation of organic pollutants by advanced oxidation processes;
Mechanisms of by-products formation during organic pollutants degradation;
Liquid chromatography-mass spectrometry (LC-MS);
Determination of organic pollutants in wastewater, sludge and soils;
Thermal decomposition of hazardous materials for high temperature incineration;
Understanding formation of products of incomplete combustion (PICs) during incineration;
Process modifications for sewage sludge incineration to minimize PICs emissions.

ADDITIONAL INFORMATION

Publications	total number of publications in peer-review journals: 145 total number of citations: 5900 H-index: 43 Scopus ID: 56653630800 https://orcid.org/0000-0002-7858-2114
Scientific international papers of the last 5 years	S. Murgolo, O. De Giglio, C. De Ceglie, F. Triggiano, F. Apollonio, C. Calia, C. Pousis, A. Marzella, F. Fasano, M. E. Giordano, M. G. Lionetto, D. Santoro, O. Santoro, S. Mancini, C. Di Iaconi, M. De Sanctis, M. T. Montagna, G. Mascolo Multi-target assessment of advanced oxidation processes-based strategies for indirect potable reuse of tertiary wastewater: fate of compounds of emerging concerns, microbial and ecotoxicological parameters Environmental Research, 2024, 241, 117661 L. Fortunato, L. Al Fuhaid, S. Murgolo, C. De Ceglie, G. Mascolo, L. Falivene, J.S. Vrouwenvelder, G.J. Witkamp, A. Farinha Removal of polyfluoroalkyl substances (PFAS) from water using hydrophobic natural deep eutectic solvents (NADES): A proof of concept study Journal of Water Process Engineering, 2023, 104401 F. De Mastro, G. Brunetti, G. De Mastro, C. Ruta, D. Stea, S. Murgolo, C. De Ceglie, G. Mascolo, F. Sannino, C. Coccozza, A. Traversa Uptake of different pharmaceuticals in soil and mycorrhizal artichokes from wastewater Environmental Science and Pollution Research, 2023, 30, 33349–33362 B. Notarnicola, G. Tassielli, P.A. Renzulli, R. Di Capua, F. Astuto, G. Mascolo, S. Murgolo, C. De Ceglie, M. L. Curri, R. Comparelli, M. Dell'Edera

	Life Cycle Assessment of UV-C based treatment systems for the removal of compounds of emerging concern from urban wastewater Science of the Total Environment, 2023, 857, 159309 C. Coccozza, C. Di Iaconi, S. Murgolo, A. Traversa, F. De Mastro, M. De Sanctis, V.G. Altieri, C. Cacace, G. Brunetti, G. Mascolo Use of constructed wetlands to prevent overloading of wastewater treatment plants Chemosphere, 2023, 311, 137126 Luigi Viganò, Licia Guzzella; Laura Marziali; Giuseppe Mascolo; Giuseppe Bagnuolo; Ruggero Ciannarella; Claudio Roscioli The last 50 years of organic chemical contamination from the most anthropized tributary of the Po River (Italy) Journal of Environmental Management, 2023, 326, 116665 F. Piras, G. Nakhla, S. Murgolo, C. De Ceglie, G. Mascolo, K. Bell, T. Jeanne, G. Mele, D.Santoro Optimal integration of vacuum UV with granular biofiltration for advanced wastewater treatment: Impact of process sequence on CECs removal and microbial ecology Water Research, 2022, 220, 118638. O. De Giglio, F. Triggiano, F. Apollonio, C. Pousis, C. Calia, G. Diella, F. Bagordo, S. Murgolo, T. Grassi, C. De Ceglie, S. Brigida, G. La Rosa, P. Mancini, G. Bonanno Ferraro, A. De Donno, G. Mascolo, M.C. Caputo, M.T. Montagna The Geological Characteristics of the Vadose Zone Influence the Impact of Treated Wastewater on the Groundwater Quality Pathogens, 2022, 11(6), 677. Moreira, I.S., Murgolo, S., Mascolo, G., Castro, P.M.L. Biodegradation and Metabolic Pathway of 17β-Estradiol by Rhodococcus sp. ED55 International Journal of Molecular Sciences, 2022, 23(11), 6181 M. De Sanctis, S. Murgolo, V.G. Altieri, L. De Gennaro, M. Amodio, G. Mascolo, C. Di Iaconi An innovative biofilter technology for reducing environmental spreading of emerging pollutants and odour emissions during municipal sewage treatment Science of The Total Environment, 2022, 803, 149966 De Ceglie, C., Pal, S., Murgolo, S., Licciulli, A., Mascolo, G. Investigation of photocatalysis by mesoporous titanium dioxide supported on glass fibers as an integrated technology for water remediation Catalysts, 2022, 12(1), 41. D. Sgherza, S. Pentassuglia, V.G. Altieri, G. Mascolo, M. De Sanctis, C. Di Iaconi Integrating biodegradation and ozone-catalysed oxidation for treatment and reuse of biomass gasification wastewater Journal of Water Process Engineering, 2021, 43, 102297 G. Lofrano, M. Faiella, M. Carotenuto, S. Murgolo, G. Mascolo, L. Pucci, L. Rizzo Thirty contaminants of emerging concern identified in secondary treated hospital wastewater and their removal by solar Fenton (like) and sulphate radicals-based advanced oxidation processes Journal of Environmental Chemical Engineering, 2021, 9, 6, 106614 B. Schulze, D. van Herwerden, I.Allan, L. Bijlsma, N. Etxebarria, M. Hansen, S. Merel, B. Vrana, R. Aalizadeh, B. Bajema, F. Dubocq, G. Coppola, A. Fildier, P. Fialová, E. Frøkjær, R. Grabic, P. Gago-Ferrero, T. Gravert, J. Hollender, N. Huynh, G. Jacobs, T. Jonkers, S. Kaserzon, M. Lamoree, J. Le Roux, T. Mairinger, C. Margoum, G. Mascolo, E. Mebold, F.
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	Menger, C.Miège, J. Meijer, R. Moilleron, S. Murgolo, M. Peruzzo, M. Pijnappels, M. Reid, C. Roscioli, C. Soulier, S. Valsecchi, N. Thomaidis, E. Vulliet, R. Young, S.Samanipour Inter-laboratory mass spectrometry dataset based on passive sampling of drinking water for non-target analysis Scientific Data, 2021, 8, 223 S. Murgolo, C. De Ceglie, C. Di Iaconi, G. Mascolo Novel TiO₂-based catalysts employed in photocatalysis and photoelectrocatalysis for effective degradation of contaminants of emerging concern in water: a short review Current Opinion in Green and Sustainable Chemistry, 2021, 30, 100473 F. Cotecchia, C. Vitone, F. Sollecito, M. Mali, D. Miccoli, R. Petti, D. Milella, G. Ruggieri, O. Bottiglieri, F. Santaloia, P. De Bellis, F. Cafaro, M. Notarnicola, F. Todaro, F. Adamo, A. Di Nisio, A. M. L. Lanzolla, M. Spadavecchia, M. Moretti, G. Agrosi, F. De Giosa, P. Fago, M. Lacalamita, S. Lisco, P. Manzari, E. Mesto, G. Romano, G. Scardino, E. Schingaro, A. Siniscalchi, G. Tempesta, E. Valenzano, G. Mastronuzzi, N. Cardellicchio, A. Di Leo, L. Spada, S. Giandomenico, M. Calò, V. F. Uricchio, G. Mascolo, G. Bagnuolo, R. Ciannarella, A. Tursi, G. Cipriano, P. Cotugno, L. Sion, R. Carlucci, G. Capasso, G. De Chiara, G. Pisciotta, R. Velardo, V. Corbelli A geo chemo mechanical study of a highly polluted marine system (Taranto, Italy) for the enhancement of the conceptual site model. Scientific Reports, 2021, 11, 4017. S. Franz, E. Falletta, H. Arab, S. Murgolo, M. Bestetti, G. Mascolo Degradation of carbamazepine by photo(Electro)catalysis on nanostructured TiO₂ meshes: Transformation products and reaction pathways Catalysts, 2020, 10(2),169 M. Di Lenola, A. Barra Caracciolo, V. Ancona, V.A. Laudicina, G.L. Garbini, G. Mascolo, P. Grenni Combined effects of compost and medicago sativa in recovery a PCB contaminated soil Water, 2020, 12(3), 860. L. Viganò, N. Casatta, A. Farkas, G. Mascolo, C. Roscioli, F. Stefani, M. Vitelli, F. Olivo, L. Clerici, P. Robles, P. Dellavedova Embryo/larval toxicity and transcriptional effects in zebrafish (Danio rerio) exposed to endocrine active riverbed sediments Environmental Science and Pollution Research, 2020, 27(10), 10729-10747 G. Siciliano, M. Corricelli, R.M. Iacobazzi, F. Canepa, D. Comegna, E. Fanizza, A. Del Gatto, M. Saviano, V. Laquintana, R. Comparelli, G. Mascolo, S. Murgolo, M. Striccoli, A. Agostiano, N. Denora, L. Zaccaro, M.L. Curri, N. Depalo Gold-Speckled SPION@SiO₂ Nanoparticles Decorated with Thiocarbohydrates for ASGPR1 Targeting: Towards HCC Dual Mode Imaging Potential Applications Chemistry-A European Journal, 2020, 26, 48, 11048-11059. M.T. Montagna, O. De Giglio, C. Calia, C. Pousis, F. Triggiano, S. Murgolo, C. De Ceglie, F. Bagordo, F. Apollonio, G. Diella, M. Narracci, M.I. Acquaviva, G. Bonanno Ferraro, P. Mancini, C. Veneri, S. Brigida, T. Grassi, A. De Donno, C. Di Iaconi, M.C. Caputo, R.A. Cavallo, G. La Rosa, G. Mascolo Microbiological and Chemical Assessment of Wastewater Discharged by Infiltration Trenches in Fractured and Karstified Limestone (SCA.Re.S. Project 2019–2020) Pathogens 2020, 9(12),1010, 1-20 B. Matturro, G. Mascolo, S. Rossetti Microbiome changes and oxidative capability of an anaerobic PCB dechlorinating enrichment culture after oxygen exposition New Biotechnology, 2020, 56, 96-102
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	G. Maniakova, K. Kowalska, S. Murgolo, G. Mascolo, G. Libralato, G. Lofrano, O. Sacco, M. Guida, L. Rizzo Comparison between heterogeneous and homogeneous solar driven advanced oxidation processes for urban wastewater treatment: Pharmaceuticals removal and toxicity Separation and Purification Technology 2020, 236, 116249, 1-9
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Curriculum Vitae in formato europeo di ciascuna risorsa impegnata nell'attuazione del programma di ricerca e innovazione dell'Ecosistema dell'innovazione, redatto in lingua inglese e contenente l'autorizzazione al trattamento dei dati personali (According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV)

Giuseppe Mascolo