

## **Curriculum vitae Sapia MURGOLO**

### **PERSONAL INFORMATION**

MURGOLO, Sapia

#### **• EDUCATION**

- 2016            PhD in Chemistry, Università degli Studi di Bari, Italy
- 2012            Master's Degree in Industrial and Environmental Biotechnology  
Università degli Studi di Bari, Italy
- 2009            Bachelor's Degree in Biotechnology  
Università degli Studi di Bari, Italy

#### **• CURRENT POSITION(S)**

- 09/2020 – 05/2022    Researcher (Fixed Term)  
Istituto di Ricerca Sulle Acque del Consiglio Nazionale delle Ricerche (IRSA-CNR),  
Bari, Italy

#### **• PREVIOUS POSITIONS**

- 12/2016 – 08/2020    Post-doc researcher  
Istituto di Ricerca Sulle Acque del Consiglio Nazionale delle Ricerche (IRSA-  
CNR), Bari, Italy

#### **• FELLOWSHIPS**

- 05/2014 – 10/2014    McGill University, Montreal, Canada - Tutor: Prof. Viviane Yargeau
- 02/2016 – 04/2016    Short Term Scientific Mission (STSM) 2016-CONCEIVING WASTEWATER  
TREATMENT IN 2020 (Water\_2020)  
Technische Universität München, Germany - Prof. Dr. Brigitte Helmreich
- 07/2016                SFERA-user' of the DETOX Facility at "CIEMAT-PSA" within the framework  
of the EU-DG RTD's project: The European Solar Research Infrastructure for  
Concentrated Solar Power. Second Phase- SFERA II (contract n.312643)  
Plataforma Solar de Almería-CIEMAT, Almeria, Spagna

#### **• TEACHING ACTIVITIES**

- 2021            Invited seminar – "Inquinanti emergenti: fonti, determinazione analitica e trattamenti  
innovativi per la rimozione in matrici acquose", Dipartimento di Scienze del Suolo, della  
Pianta e degli Alimenti (DiSSPA) - Università degli Studi di Bari Aldo Moro, Italy
- 2020            Teaching unit in a Master course – "Land and Water Resources Management: Irrigated  
Agriculture", IAMB (Istituto Agronomico Mediterraneo), Bari, Italy

## • MAJOR COLLABORATIONS

Prof. Viviane Yargeau, Topics: Control of Environmental Contaminants, Protection of Water Resources, McGill University, Montreal, Canada.

Prof. Silvia Franz, Topics: are surface engineering and applied electrochemistry, including electrochemical synthesis of new catalysts and their application in photoelectrocatalysis, Politecnico di Milano, Milano, Italy.

Prof. Luigi Rizzo, Topics: Water and wastewater treatment by photo driven Advanced Oxidation Processes, Department of Civil Engineering, University of Salerno, Italy.

Dr. Domenico Santoro, Topics: water treatment, disinfection, sewage, Senior Research Scientist at Trojan Technologies, London, Canada.

Dr. Irina Sousa Moreira, Topics: Biodegradation, Environmental microbiology, Emerging contaminants, Fluoroaromatics, Aerobic Granular Sludge, Universidade Catolica Portuguesa Escola Superior de Biotecnologia: Porto, Porto.

## Ten years track-record

Sapia Murgolo holds a PhD in Chemistry at the University of Bari (Italy). During her PhD course, between May and October 2014, she worked at the Faculty of Engineering of the McGill University (Montreal, Canada), particularly focusing on water treatments and liquid chromatography interfaced to high-resolution mass spectrometry and toxicity test (Microtox test).

Since 2016 she has been working at the Italian Water Research Institute of the National Research Council (IRSA-CNR) in several research projects, mainly related to: (i) the analytical monitoring of contaminants of emerging concern in water resources through target, suspect and non-target workflows for the identification of unknown substances using high-resolution mass spectrometry in combination with data analysis, (ii) water treatment technologies with specific reference to advanced oxidative processes, i.e. photocatalysis employing novel supported nano-sized catalysts.

Within her research activity she spent periods abroad, i.e. Technische Universität München (Germany), Plataforma Solar de Almería-CIEMAT (Spain)) and she has been/is actively involved in several regional, national and European projects.

## Publications

<b>H-INDEX - SCOPUS</b>	<b>13</b>
<b>N. Journal papers - SCOPUS</b>	<b>21</b>
<b>Citations - SCOPUS</b>	<b>465</b>
<b>Average IF (of the publications below)</b>	<b>8.295</b>

1. **Sapia Murgolo**, Cristina De Ceglie, Claudio Di Iaconi, Giuseppe Mascolo, Novel TiO<sub>2</sub>-based catalysts employed in photocatalysis and photoelectrocatalysis for effective degradation of pharmaceuticals (PhACs) in water: A short review (2021) *Current Opinion in Green and Sustainable Chemistry*, <https://doi.org/10.1016/j.cogsc.2021.100473> - **IF: 6.457**.
2. Montagna, M.T., De Giglio, O., Calia, C., Pousis C., Triggiano F., **MurgoloS.**, ...La Rosa, G., Mascolo, G. Microbiological and Chemical Assessment of Wastewater Discharged by Infiltration Trenches in Fractured and Karstified Limestone (SCA.Re.S. Project 2019–2020) (2020) *Pathogens*, <https://doi.org/10.3390/pathogens9121010> - **IF: 3.492**.
3. Silvia Franz, Ermelinda Falletta, Hamed Arab, Sapia Murgolo, Massimiliano Bestetti and Giuseppe Mascolo. Degradation of Carbamazepine by Photo(electro)catalysis on Nanostructured TiO<sub>2</sub> Meshes: Transformation Products and Reaction Pathways (2020) *Catalysts*, doi:10.3390/catal10020169 - **IF: 4.146**.

4. 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 (2020) *Separation and Purification Technology*, <https://doi.org/10.1016/j.seppur.2019.116249> - **IF: 7.312**.
5. Giuseppe Mascolo, **Sapia Murgolo**, Fabrizio Stefani, Luigi Viganò. Target and suspect contaminants of emerging concern in the Po River Delta lagoons (2019) *Estuarine, Coastal and Shelf Science*, <https://doi.org/10.1016/j.ecss.2019.106424> - **IF: 2.929**.
6. **S. Murgolo**, S. Franz, H. Arab, M. Bestetti, E. Falletta, G. Mascolo. Degradation of emerging organic pollutants in wastewater effluents by electrochemical photocatalysis on nanostructured TiO<sub>2</sub> meshes (2019) *Water Research*, <https://doi.org/10.1016/j.watres.2019.114920> - **IF: 11.236**.
7. Vânia S. Bessa, Irina S. Moreira, **Sapia Murgolo**, Giuseppe Mascolo, Paula M.L. Castro. Carbamazepine is degraded by the bacterial strain *Labrys portucalensis* F11 (2019) *Science of the Total Environment*, <https://doi.org/10.1016/j.scitotenv.2019.06.461> - **IF: 7.963**.
8. A.B.Martínez-Piernas, S.Nahim-Granados, M.I.Polo-López, P.Fernández Ibáñez, S.Murgolo, G.Mascolo, A.Agüera. Identification of transformation products of carbamazepine in lettuce crops irrigated with Ultraviolet-C treated water (2019) *Environmental Pollution*, <https://doi.org/10.1016/j.envpol.2019.02.001> - **IF: 8.071**.
9. A. Truppi, F. Petronella, T. Placido, V. Margiotta, G. Lasorella, L. Giotta, C. Giannini, T. Sibillano, **S. Murgolo**, G. Mascolo, A. Agostiano, M.L. Curria, R. Comparelli. Gram-scale synthesis of UV-vis light active plasmonic photocatalytic nanocomposite based on TiO<sub>2</sub>/Au nanorods for degradation of pollutants in water (2019) *Applied Catalysis B-Environmental*, <https://doi.org/10.1016/j.apcatb.2018.11.002> - **IF: 19.503**.
10. Lidia Paredes, **Sapia Murgolo**, Hazlini Dzinun, Mohd Hafiz Dzarfan Othman, Ahmad Fauzi Ismail, Marta Carballa, Giuseppe Mascolo. Application of immobilized TiO<sub>2</sub> on PVDF dual layer hollow fibre membrane to improve the photocatalytic removal of pharmaceuticals in different water matrices (2019) *Applied Catalysis B-Environmental*, <https://doi.org/10.1016/j.apcatb.2018.08.067> - **IF: 19.503**.
11. **Sapia Murgolo**, Irina S. Moreira, Clara Piccirillo, Paula M.L. Castro, Gianrocco Ventrella, Claudio Coccozza, Giuseppe Mascolo. Photocatalytic Degradation of Diclofenac by Hydroxyapatite-TiO<sub>2</sub> Composite Material: Identification of Transformation Products and Assessment of Toxicity (2018) *Materials*, doi: 10.3390/ma11091779 - **IF: 3.623**.
12. Irina S. Moreira, Vânia S. Bessa, **Sapia Murgolo**, Clara Piccirillo, Giuseppe Mascolo, Paula M.L. Castro. Biodegradation of Diclofenac by the bacterial strain *Labrys portucalensis* Fl 1 (2018) *Ecotoxicology and environmental safety*, <https://doi.org/10.1016/j.ecoenv.2018.01.040> - **IF: 6.291**.
13. **S. Murgolo**, V. Yargeau, R. Gerbasi, F. Visentin, N. El Habra, G. Ricco, I. Lacchetti, M. Carere, M.L. Curri, G. Mascolo. A new supported TiO<sub>2</sub> film deposited on stainless steel for the photocatalytic degradation of contaminants of emerging concern (2017) *Chemical engineering journal*, <http://dx.doi.org/10.1016/j.cej.2016.05.125> - **IF: 13.273**.
14. Lydia Balest, **Sapia Murgolo**, Lucia Sciancalepore, Patrizia Montemurro, Pier Paolo Abis, Carlo Pastore, Giuseppe Mascolo. Ultra-trace levels analysis of microcystins and nodularin in surface water by on-line solid-phase extraction with high-performance liquid chromatography tandem mass spectrometry (2016) *Analytical and bioanalytical chemistry*, doi: 10.1007/s00216-016-9495-y - **IF: 3.863**.
15. **S. Murgolo**, F. Petronella, R. Ciannarella, R. Comparelli, A. Agostiano, M.L. Curri, G. Mascolo. UV and solar-based photocatalytic degradation of organic pollutants by nano-sized TiO<sub>2</sub> grown on carbon nanotubes (2015) *Catalysis Today*, <https://doi.org/10.1016/j.cattod.2014.04.021> - **IF: 6.766**.