



Curriculum vitae

Personal Information

Surname /Name **Martina Trinchillo**



Presentation

In January 2025 I obtained a Master's Degree in "Biotechnology and Genomics for Industry and the Environment" at Sapienza University of Rome . Engaged in my studies, I have not gained work experience, but I have carried out very significant internships at CNR-IRSA - Water Research Institute - in Rome - Montelibretti and at the Federico II University of Naples.

Currently laboratory analyst technician at Group Alis Rome- Italy

Instruction

Date **January 2025**

Educational qualification **Master's Degree in Biotechnology and Genomics for Industry and the Environment" LM8 (106/110)**

Topic of the experimental thesis: "Anaerobic biodegradation of toluene under sulfate-reduction conditions: influence of electrically conductive materials."

Internal Supervisor: Prof. Daniela Uccelletti

External Speaker: Dr. Federico Aulenta

Education or training institution **Sapienza University of Rome**

Date **December 2022**

Educational qualification **Bachelor's Degree in Molecular and Industrial Biotechnology (L-2)**

Topic of the experimental thesis: "Identification and characterization of the pathogenic pear fungus, *Alternaria alternata*, for biotechnological applications."

Internal Supervisor: Prof. Rachele Isticato

Education or training institution **Federico II University of Naples**

Date **September 2019**

Educational qualification Scientific High School Diploma

Education or training institution Elio Vittorini Scientific High School Naples

Training courses

Date **March 2025**

Description Winter school on Environmental Impact Assessment (EIA): Surface Water and Excavated Earth and Rocks

Education or training institution **ISPRA (Higher Institute for Environmental Protection and Research)**

Date **November 2019**

Description Compulsory specific training course on safety in the workplace for workers particularly exposed to risk, pursuant to the combined of Article 37 - paragraph 1 letter b) - of Legislative Decree 81/2008 and point 4 of the State-Region Agreement of 21/12/2011.

Education or training institution Department of Chemical Sciences - Federico II University of Naples

Conference proceedings

Date **May 2024**

Description **Conference presentations** – Oral “Prompting DIET with electrically conductive particles to enhance the anaerobic degradation of aromatic hydrocarbons under sulfate-reducing conditions” Section “Bioelectrocatalytic systems for synthesis and bioremediation” Resitano,Marco; Peña-Álvarez Verónica ; Trinchillo Martina ; Cruz Viggì Carolina; Peláez Ana Isabel; Aulenta Federico presented at XXVIII International Symposium on Bioelectrochemistry and Bioenergetics of the Bioelectrochemical Society- Alcalà de Henares (Madrid) Spagna

Date June 2024

Description **Conference presentations** – Oral: “Enhancing the Anaerobic Degradation of Aromatic Hydrocarbons under Sulfate-Reducing Conditions with Electrically Conductive Particles” Marco Resitano, Matteo Tucci, Verónica Peña-Álvarez, Martina Trinchillo, Carolina Cruz Viggì, Ana Isabel Peláez, Federico Aulenta presented at Second Symposium of young Chemists - Sapienza University of Rome

Work Experience

Date	February 2025 – Today
Role	Laboratory Analyst Technician (Apprenticeship Contract)
Name and type of education or training institution	Alis Group Rome
Description	<p>The activity consists of:</p> <ul style="list-style-type: none"> -Drinking water analysis -Performing Plate Bacterial Counts (CFU) on Agar Media to -Assess Bioburden -Perform microbiological analysis on air, surface, and food samples <p>Coordination of laboratory activities and operational management: daily supervision of activities, resource planning, task assignment, and performance monitoring.</p>

Educational experiences

Date	October 2023 – September 2024
Role	Trainee, Master's Degree curriculum
Name and type of education or training institution	CNR-IRSA (National Research Council of Italy - Water Research Institute - Rome - Montelibretti) - Bioprocesses Laboratory
Description	900-hour training internship

The activity of this thesis concerned the deepening of the DIET mechanism and the possible cooperative metabolisms among the microorganisms present in enriched microbial cultures and the applicability in bioremediation processes.

Different conductive materials, such as iron oxides (e.g., magnetite) and carbonaceous materials (e.g., graphene), were tested on electro-bioremediation processes of soils and groundwater containing toluene as a model pollutant.

Analytical Techniques

Gas Chromatography (GC-FID, GC-MS, GC-TCD): Quantification of TPHs, BTEX, PAHs, chlorinated solvents and hydrocarbons (e.g., TCE, chloroform, toluene)

Instrument maintenance: column replacement,

Calibration curve preparation and analytical standard dilution

Ion Chromatography (IC): Determination of anions and cations in environmental samples UV-Vis

Spectrophotometry and colorimetric kits: Detection of selected inorganic compounds in aqueous matrices

Extraction techniques: Liquid-liquid extraction ,esterification

Experimental Setup and Reactor Operation :Anaerobic microcosm samples

Design and operation of lab-scale bioelectrochemical reactors
 Assembly and polarization of electrodes (e.g., graphite rods, carbon brush) **Electrochemical Techniques**
 Cyclic Voltammetry (CV)
 Chronoamperometry (CA)
Environmental Microbiology: Enrichment of Selection and maintenance of syntrophic microbial communities
 Study of microbial activity in presence of conductive particles (biochar, magnetite)
 Preparation of magnetite particles
 Development and characterization of electroactive biofilms on electrode surfaces
Data Analysis and Process Evaluation Mass and electron balance calculations including stoichiometric and redox assessments.
 Determination of contaminant removal efficiencies, coulombic efficiency, and process yields kinetics.

Date	September 2022 – November 2022						
Role	Trainee, Bachelor's Degree curriculum						
Name and type of education or training institution	Federico II University of Naples – Microbiology Laboratory						
Description	200-hour internship The activity of this thesis concerned the identification and characterization of the pathogenic pear fungus, <i>Alternaria alternata</i> , for its enzymatic activities and for the mycotoxins produced by the following activities: <ul style="list-style-type: none"> • Mushroom DNA extraction • PCR • Plate Assays • Pear sample assay 						
Mother tongue	Italian						
Other language(s)	<i>English – Ascentis ESOL B2 Certification</i>						
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- EIPASS Certification 7 User Modules
- EIPASS Standard Certification (Certification recognized by Accredia in line with *Digital Competence Framework for Citizens – Dig Comp 2.2*)

Digital skills

Interpersonal skills and competencies

Excellent knowledge of Microsoft Office
Excellent communication and interpersonal skills. Strong aptitude for teamwork gained through team working experiences in the context of research activities carried out in collaboration with Italian bodies and institutions. Excellent ability to fit into multicultural environments.

Organizational skills and competencies

- Work Planning
- Ability to prioritize tasks
- Delegation Capabilities
- Time management
- Detail orientation
- Ability to focus on goals
- Multitasking

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