

# MARIANNA VILLANO

## Curriculum Vitae

### GENERAL INFORMATION

**Full Name:** Marianna Villano

**Citizenship:** Italian

**E-mail:** marianna.villano@uniroma1.it

**Current Position:** Researcher in Industrial Chemical Processes (Tenure-track position RTD-B, SSD: ING-IND 25)

**Affiliation:** Department of Chemistry-Sapienza University of Rome (Italy)

**Spoken Languages:** Italian, English

### EDUCATION

**May 2011:** PhD in Industrial Chemical Processes- Sapienza University of Rome

**May 2007:** Master of Science (5-year degree) in Industrial Chemistry- Sapienza University of Rome (110/110 cum laude). Thesis title: "Influenza del pH sulla bioproduzione di polioidrossialcanoati da acidi organici in processi con alimentazione periodica" (Supervisor: Prof. Mario Beccari)

### PROFESSIONAL EXPERIENCES

**June 2012- May 2017:** Assistant Professor (RTD-A, fixed term position) in Industrial Chemical Processes (SSD: ING-IND 25) at Sapienza University of Rome- Department of Chemistry

**February 2011- January 2012:** Post-doctoral Fellowship in Industrial Chemical Processes (SSD: ING-IND 25) at Sapienza University of Rome- Research Center for Applied Sciences to the safeguard of Environmental and Cultural Heritage (CIABC)

**January 2010- June 2010:** Visiting PhD student (6-months) at Cornell University (Ithaca, NY, USA)- Department of Biological and Environmental Engineering in the laboratory of Prof. Largus T. Angenent

**November 2007- October 2010:** PhD Scholarship at Sapienza University of Rome- Department of Chemistry. Thesis title: "Microbially catalyzed production of hydrogen and methane in bioelectrochemical systems" (Advisor: Prof. Mauro Majone)

**July 2007- October 2007:** Pre-doctoral Scholarship at Sapienza University of Rome- Department of Chemistry. Research topic: "Olive oil mill wastewater as renewable source for polyhydroxyalkanoates production by mixed microbial cultures" (Supervisor: Prof. Mario Beccari)

### TEACHING EXPERIENCE

**2018/2019; 2019/2020:** Lecturer of the course "Biological Industrial Processes" (in Italian- 6 CFU, SSD: ING-IND 25), Bachelor degree in Agro-Industrial Biotechnology- Sapienza University of Rome

**2019/2020:** Lecturer of the course “Chemical Plants” (in Italian- 3 CFU, SSD: ING-IND 25), Bachelor degree in Environmental and Workplace Prevention Techniques- Sapienza University of Rome

**2013/2014; 2014/2015; 2015/2016; 2016/2017:** Lecturer of the course “Chemical Processes and Plants II” (in Italian- 3 CFU, SSD: ING-IND 25), Bachelor degree in Industrial Chemistry- Sapienza University of Rome

**2013/2014; 2014/2015; 2015/2016; 2016/2017:** Lecturer of the course “Treatment Processes of waste and wastewater with material and energy recovery” (in Italian- 3 CFU, SSD: ING-IND 25), Master degree in Industrial Chemistry- Sapienza University of Rome

## **OTHER TEACHING ACTIVITIES**

**November 2019 - present:** Advisor of a PhD student in Chemical Processes for the Industry and the Environment

**2014 - present:** Tutor and supervisor of undergraduate students for Bachelor and Master thesis in Industrial Chemistry, Agro-Industrial Biotechnology and Genomic, Industrial and Environmental Biotechnology

## **OTHER UNIVERSITY ACTIVITIES**

**2019-present:** Member of the PhD board of the PhD School in Chemical Processes for the Industry and the Environment- Sapienza University of Rome

**2019-present:** Member of the Commission “Research and Third Mission” of the Department of Chemistry- Sapienza University of Rome

**2012-present:** Member of the evaluation board for Bachelor and Master thesis in Chemistry, Industrial Chemistry, Agro-Industrial Biotechnology and Genomic, Industrial and Environmental Biotechnology

**2012-present:** Member of Commission of the exams of the following courses (SSD: ING-IND 25): “Biological Industrial Processes”, “Chemical Plants”, “Chemical Processes and Plants I”, “Chemical Processes and Plants II”, “Treatment Processes of waste and wastewater with material and energy recovery”- Bachelor and Master degrees in Industrial Chemistry and Biotechnology

**2017:** External Reviewer of the PhD thesis entitled “Microbial electrochemical systems for nitrate removal from diluted streams”- School of Chemical Engineering of the University of Queensland (Australia)

**2016:** External Reviewer of the PhD thesis entitled “Bioelectrochemical transformation of carbon dioxide to target compounds through microbial electrosynthesis”- Doctoral School of University of Girona (Spain)

## **SOCIETY MEMBERSHIPS, AWARDS AND HONORS**

**2020:** Member of the Scientific Committee of the International Conference “5<sup>th</sup> European Meeting of the International Society for Microbial Electrochemistry and Technology (EU-ISMET 2020)” - Girona (Spain), 13-15 September 2021

(<https://www.euismet2020.eu/index.php/committees/scientific-committee>)

**2019:** Member of the Technical Committee of the Conference “Convegno Giovani Ricercatori 2019”, Department of Chemistry- Sapienza University of Rome (Italy), 25-26 June 2019

**2017:** Scientific National Habilitation as associate professor in Industrial Chemical Processes (ING-IND 25 – 09/D3)

**2017:** Guest Co-Editor of the Special Issue “Recent advances in microbial electrochemical technologies (Topical Issue EU-ISMET 2016)”, Fuel Cells-From Fundamentals to Systems Vol.17(5) (IF= 2.33, Wiley)

**2017:** Guest Co-Editor of the Special Issue “Biopolymers EU Symposium”, New Biotechnology Vol.37-PartA (IF= 3.739, Elsevier)

**2016:** Member of the Scientific Committee of the International Conference “The 3<sup>rd</sup> European Meeting of the International Society for Microbial Electrochemistry and Technology (EU-ISMET 2016)” - Rome (Italy), 26-28 September 2016

**2016:** Member of the Organizing Committee of the Conference “Settimo Convegno Giovani: Le frontiere della chimica nel nuovo millennio”, Department of Chemistry- Sapienza University of Rome (Italy), 14-15 June 2016

**2016:** Invited keynote presentation at the International Conference “The 3<sup>rd</sup> European Meeting of the International Society for Microbial Electrochemistry and Technology (EU-ISMET 2016)”. Title of the presentation: “Microbial electrochemical technologies meet anaerobic digestion: from biogas purification and nutrient recovery to electro-fermentation”- Rome (Italy), 26-28 September 2016

**2015:** Member of the Organizing Committee of the International Conference “8<sup>th</sup> European Symposium on Biopolymers (ESBP2015)” - Rome (Italy), 15-18 September 2015

**2013:** Invited keynote presentation at the International Conference “European Symposium on Biopolymers (ESBP2013)”. Title of the presentation: “Olive oil mill wastewater as renewable source in a multi-stage process from phenol recovery to polyhydroxyalkanoates production”- Lisbon (Portugal), 07-09 October 2013

**2010-present:** Reviewer for several International Journals, including: “Bioresource Technology; Bioelectrochemistry; Journal of Chemical Technology and Biotechnology; Journal of Power Sources; Microbial Biotechnology; New Biotechnology; Trends in Biotechnology; Waste Management; Water Research”

**2010:** Award of the Italian Chemical Society (SCI) for the best poster presentation at the Conference “Quarto convegno giovani: la chimica nelle nanoscienze e nelle nanotecnologie” Department of Chemistry- Sapienza University of Rome (Italy), 16-17 June 2010

**2008:** Invited keynote presentation at the International Conference “4<sup>th</sup> European Bioremediation Conference”. Title of the presentation: “Exploiting olive oil mill effluents as a renewable resource for production of biodegradable polymers through an anaerobic-aerobic process” - Chania (Greece), 03-06 September 2008

**2008:** Award of “Ordine dei Chimici di Lazio, Umbria, Abruzzo, Molise (LUAM)” for the best poster presentation at the Conference “Terzo convegno giovani: la chimica sostenibile” Department of Chemistry- Sapienza University of Rome (Italy), 18-19 June 2008

## RESEARCH PROJECTS

**2019-present:** Principal Investigator of the Research Project “Sviluppo di un processo biotecnologico avanzato in scala di laboratorio per la produzione di poliidrossialcanoati con colture microbiche miste: dalla selezione microbica all'estrazione ed applicazione del polimero prodotto” – Sapienza University of Rome

**2017-present:** Investigator in the following European H2020 Research Projects: “USABLE Packaging” (Unlocking the potential of Sustainable Biodegradable Packaging, BBI JU-Project ID: 836884); “NoAW” (Innovative approaches to turn agricultural waste into ecological and economic assets, Project ID: 688338) “SMART-Plant” (Scale-up of low carbon footprint MATERIAL Recovery Techniques for upgrading existing wastewater treatment Plants, Project ID: 690323); “RES URBIS” (RESources from URban Blo-waSte, Project ID: 730349)

**2016-2020:** Investigator in the European FP7 ERANETMED Research Projects “WE-MET” (Sustainable wastewater treatment coupled to energy recovery with microbial electrochemical technologies, Project ID: 14-035)

**2011-2016:** Investigator in the following European FP7 Research Projects: “EcoBioCAP” (Ecoefficient Biodegradable Composite Advanced Packaging, G.A. n°: 265669); “ROUTES” (Novel processing routes for effective sewage sludge management, G.A. n°: 265156); “WATER4CROPS” (Integrating biotreated wastewater reuse and valorization with enhanced water use efficiency to support the Green Economy in EU and India, G.A. n°: 311933)

## SUMMARY OF SCIENTIFIC ACHIEVEMENTS

Author of 34 papers in peer-reviewed International Journals, 3 Book Chapters and over 50 conference papers. H-Index: 19; Citations: 1665 (Source: SCOPUS; May 2020)

MAY 2020