



# Silvia Bolognesi

PhD student at University of Pavia | Environmental engineer | Research field: Microbial

Electrochemical Technologies (MET) | Current projects: Microbial Fuel Cells for landfill

leachate treatment & MFC-PBR with microalgae for dairy wastewater treatment and

resource recovery

## EDUCATION

Oct 2017 - present

### PHD STUDENT – University of Pavia, Italy

- + PhD course in Design, Modeling and Simulation in Engineering (XXXIII Cycle).
- + LabTA2 staff member (Laboratory of Advanced Water Treatment Technologies)
- + Research field: Microbial Electrochemical Technologies; knowledge and experience concerning Microbial Fuel Cells for wastewater treatment and biocathodes for nitrate removal (as Microbial Electrolysis Cells - MEC - or Controlled Biocathodic Denitrification systems - CBDs). Resource recovery from algal biomass.

Dec 2014 – Apr 2017

### MASTER'S DEGREE IN ENVIRONMENTAL ENGINEERING –

University of Pavia, Italy

- + Thesis: Influence of hydrodynamics in Microbial Fuel Cells performance  
Advisor: Prof. Andrea G. Capodaglio, PhD  
Co-advisors: Daniele Molognoni, PhD; Daniele Ceconet, CEng
- + Marks: 103/110

Oct 2011 – Dec 2014

### BACHELOR'S DEGREE IN CIVIL AND ENVIRONMENTAL ENGINEERING –

University of Pavia, Italy

- + Thesis: The problem of arsenic in drinking water: monitoring of a GFO pilot filter to upgrade a drinking water supply chain (PV)  
Advisor: Prof. Maria Cristina Collivignarelli
- + Marks: 93/110

## EMPLOYMENT

Jun 2017 – Sep 2017

### TECHNICAL SECTOR EMPLOYEE – Labandisys S.r.L, Casanova Lonati (PV)

- + Waste analysis certificates emission, assignment of hazard class and category and indication for waste disposal
- + Customer and laboratory staff relations (phone, email) and technical support

## TEACHING

2018  
AY 2017 - 2018

**TEACHING ACTIVITY** Sanitary Engineering and Environmental Surveys (2 CFU)

**ACADEMIC TUTOR** Thermal-fluid sciences

## PUBLICATIONS

### International Journals

#### **PUBLISHED**

- + Ceconet D, S Bolognesi, S Daneshgar, A Callegari, and A G Capodaglio. (2018). "Improved Process Understanding and Optimization by Multivariate Statistical Analysis of Microbial Fuel Cells Operation." *International Journal of Hydrogen Energy* 43 (34). Elsevier Ltd:16719–27. <https://doi.org/10.1016/j.ijhydene.2018.07.056>.

#### **UNPUBLISHED (SUBMITTED, UNDER REVIEW)**

- + D. Ceconet, S. Bolognesi, D. Molognoni, A. Callegari and A.G. Capodaglio. Influence of reactor's hydrodynamics on the performance of Microbial Fuel Cells. (Journal of Water Process Engineering).
- + D. Ceconet, S. Bolognesi, A. Callegari, A.G. Capodaglio. Controlled sequential biocathodic denitrification for contaminated groundwater bioremediation. (Science of Total Environment).
- + A.G. Capodaglio, S. Bolognesi, D. Ceconet, A. Callegari. A novel 2-stage bioelectrochemical system for efficient groundwater denitrification. (H2Open).

### Book Chapters

#### **UNPUBLISHED (ACCEPTED)**

- + Andrea G. Capodaglio and Silvia Bolognesi. Elsevier. Advances in Eco-fuels for Sustainable Development. *Chapter 2: Eco-fuel feedstock and their prospects*. (Expected release date: November 1<sup>st</sup>, 2018).
- + Andrea G. Capodaglio and Silvia Bolognesi. Microbial Electrochemical Technologies. Chapter 14: Comparative bioelectricity production from various wastewaters. (Expected release date: March, 2019).

## EXTRA

### Oct 2009 – Apr 2010

#### **CONTEST "IL TEMPO DELLA STORIA"**

- + Winner of the contest travel-prize in edition 2010 (Weimar, Berlin and Nurnberg).
- + Tutor for edition 2014 (Normandy).
- + Participation to further travels as former winner in editions 2011, 2012, 2013 e 2018.

### Jun 2018 - present

#### **EXECUTIVE COUNCIL MEMBER OF "TESTIMONI & PROTAGONISTI" ASSOCIATION**

- + Subscription to the former winners of "Il Tempo della Storia"contest association since 2011.
- + Association T&P social media manager since 2018.