PERSONAL INFORMATION

Marco Merlo



Affiliation
Politecnico di Milano
Department of Energy
Via Lambruschini 4, 20156 Milano

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

Since October 2016

Associate Professor

Politecnico di Milano - Energy Department, Milano, Italy

Chair of:

- Planning and Operation of Distribution Grids (8 CPU, since AA 2017/2018), course for MSc Degree in Electrical Engineering
- Principi di Sistemi Elettrici (10 CFU, since AA 2008/2009), course for BSc Dregree in Energy Engineering

Sector ING-IND/33, Electric Power Systems

Research activities in the field of:

• Electric power systems: transmission and distribution networks planning and operation, energy storage systems and renewables integration, market models, energy communities.

December 2008 - October 2016

Assistant Professor (Permanent Researcher)

Politecnico di Milano - Energy Department, Milano, Italy

March 2003 - December 2008

Post-Doc researcher

Politecnico di Milano - Electrical Department, Milano, Italy

EDUCATION AND TRAINING

March 2001 - March 2003

PhD in Electrical Engineering

PhD

Politecnico di Milano - Electrical Department, Milano, Italy

 Thesis on: Il Controllo delle Tensioni e delle Potenze Reattive nell'Esercizio di un Sistema Elettrico che evolve verso il Libero Mercato

September 1994 – July 1999

Master Degree in Electrical Engineering

97/100

Politecnico di Milano - Electrical Department, Milano, Italy

• Thesis on: Il rischio del collasso di tensione: un vincolo alla capacità di trasporto del sistema elettrico

WORK ACTIVITIES

Awards Best paper on Electric storage published in IEEE Transactions on Energy Conversion for the period

2019-2020: C. Brivio, V. Musolino, M. Merlo, and C. Ballif, "A Physically-Based Electrical Model for Lithium-Ion Cells," IEEE Trans. Energy Convers., vol. 34, no. 2, pp. 594–603, 2019, doi:

10.1109/TEC.2018.2869272

Editorial activity Member of the Scientific Committee for the International Renewable Energy Storage Conference

(since 2014)

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s) English (C1)

Job-related skills teamwork, problem solving, mediation skills.

Digital skills Microsoft Office™ suite, Mathworks MATLAB, Digsilient Power Factory.

Other skills Replace with other relevant skills not already mentioned linked to Spoke research topics

ADDITIONAL INFORMATION

Selected Publications

total number of publications in SCOPUS Journals, Books Chapters and Proceedings: 154 total number of citations = 1760 (Scopus on 18/07/2023) H index = 22 (Scopus on 18/07/2023)

Tutor for PhD and M.Sc. candidates

Graduated Ph.D. students

- Gabriele Monfredini, Politecnico di Milano, "Novel distribution network management with dispersed generation", 2010-2013
- Stefano Mandelli, Politecnico di Milano, "Strategies for access to energy in developing countries: methods and models for off-grid power systems design", 2012-2015
- Claudio Brivio, Politecnico di Milano, "Battery energy storage systems: modelling, applications and design criteria", 2014-2017
- Mirbagheri Mina, Politecnico di Milano, "Renewable Energies Integration on Distribution Grid", 2015-2018
- Matteo Moncecchi, Politecnico di Milano, "Renewable Energy Communities", 2017-2020
- Silvia Corigliano, Politecnico di Milano, "Geospatial based methodology for rural electrification planning", 2018-2021.

Supervision of M.Sc. thesis projects

 Between 2001 and 2020 served as supervisor or co-supervisor of more than 100 Master thesis projects at Politecnico di Milano (Energy Engineering and Electric Engineering).

Projects

H2020 InteGRIDy Project: 2017-2021, integrated Smart GRID Cross-Functional Solutions for Optimized Synergetic Energy Distribution, Utilization Storage Technologies. Role: Project leader for Politecnico di Milano. Total financed budget: 16 M€

Other Relevant Information

Director of the second level specializing Master in Smart Grids, arranged by Politecnico di Milano, Energy Department

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

Mar Mel 27/07/23