
CURRICULUM VITÆ MARINA CAMPOLO
DEPT. ENGINEERING & ARCHITECTURE (DPIA)
University of Udine, 33100, Udine, Italy
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Education

1999 : PhD in Chemical Engineering (Chemical technologies & new materials), University of Udine, Italy;
1995 : BS - MS, Industrial Engineering, University of Udine, Italy,
University of Udine, Italy.

Current and past Academic Position and Qualification

2013 - Associate Professor of Chemical Engineering, ING-IND/25, University of Udine;
2010 - National Scientific Qualification to Associate Professor of Chemical Engineering, ING-IND/25, University of Udine;
2004 - Technical staff, University of Udine;
2002 - 2004: Post Doc, Universidad Complutense de Madrid;
1998 - 2003: Contract teacher, University of Udine;
1999 - 2002: Post Doc researcher, University of Udine;
1995 - 1998: PhD student, University of Udine;
1995 : Fellow, Consorzio Pisa Ricerche, Pisa.

Awards

- ASME: 2007 Robert T. Knapp Award for the best paper on analytical, numerical or laboratory research. Titolo dell'articolo: Strategies for dispersion control by jet in crossflow (FEDSM2006-98245), by M. Campolo, A. Cremese, A. Soldati
- University of Udine: 2003 Business Plan Competition Award for innovative ideas. Project title: Advanced strategies for measuring, modeling and controlling odor emissions, M. Campolo, S. Colussi and S. Rivilli.

Research interests

1. OPTIMIZATION OF INDUSTRIAL PROCESSES
Study of transport and dispersion mechanisms in chemical processes/equipment: stirred reactors, injection systems (cross-flow jets) and abatement systems.
2. INNOVATIVE METHODS FOR THE ENVIRONMENTAL MANAGEMENT OF INDUSTRIAL IMPACTS
Use of state of the art methodologies developed by chemical engineers to model the dynamics of transport/transformation of pollutants in the environment: neural models for flowrate prediction, numerical models for water quality evaluation and optimization.
3. ANALYSIS OF BIOLOGICAL/BIOMEDICAL SYSTEMS
Study of the mechanisms of transport and dispersion of fluids/chemical species in bio-reactors and bio-medical devices.
4. ANALYSIS OF POLLUTANT FATE AND TRANSPORT IN THE ENVIRONMENT
Study of mechanisms of transport and dispersion of chemical species in the environment for impact assessment; analysis of environmental pressure in industrial areas.

Scientific Referee per Riviste Scientifiche Internazionali

1. Atmospheric Environment;
2. Acta Mechanica;
3. Advances in Water Resources;
4. AIChE Journal;
5. Carbohydrate Polymers;
6. Chemical Engineering Communications;
7. Chemical Engineering Research and Design;
8. Chemical Engineering Journal;
9. Chemical Engineering Science;
10. Computers and fluids;
11. HESS (Hydrology and Earth System Sciences);
12. Hydrological Processes;
13. IEEE Computational Intelligence Magazine;
14. International Journal of Multiphase Flow;
15. Journal of Aerosol Science;
16. Journal of Hydrology;
17. Journal of Hydrological Sciences;
18. Natural Hazards;
19. SERRA (Stochastic Environmental Research & Risk Assessment).
20. Water Resources Research;

Teaching activities

1. Elements of Modeling and Process Simulation, B.Sc. in Industrial Engineering for Environmental Sustainability, University of Udine, a.a. 2021-2022.
2. Tools for the Evaluation of Environmental Impacts, M.Sc. in Management Engineering, University of Udine, a.a. 2020-2022.
3. Industrial processing plants, B.Sc. in Industrial Engineering for Environmental Sustainability, University of Udine, a.a. 2021-2022.
4. Design of Industrial Plants - Dynamics and modeling of pollutants, M.Sc. in Environmental and Energy Engineering, University of Udine, a.a. 2013-2019.
5. Environmental Chemical Engineering, M.Sc. in Environmental and Resources Engineering, University of Udine, a.a. 2010-2011.
6. Chemical plants, M.Sc. in Management Engineering, University of Udine, a.a. 2000-2003.
7. Fluid mechanics, B.Sc. in Mechanical Engineering, University of Udine, a.a. 1998-2000.

Industrial research activities

- Evaluation of the pollutant dispersion from industrial settlements (VIA, AIA procedures);
- Environmental studies on complex industrial areas;
- Analysis and verification of fume extraction systems;
- Analysis and modeling of industrial processes/equipment.