

SEMINAR "ADVANCING HEALTH THROUGH DIGITALIZATION AND OPTIMIZATION: EXPLORING RESEARCH IMPACT IN DIVERSE APPLICATIONS."

When: Thursday 27/07, h. 9.00

Where: Aula Magna, Rectorate, Politecnico di Milano Online: WEBEX

Agenda:

- 9.00 9.20: Welcome reception and coffee
- 9.20 9.40: Maria Papathanasiou (Department of Chemical Engineering, Imperial College London) "Process Systems Engineering tools for (bio-)pharmaceutical process design and product distribution"
- 9.40 10.00: Beatrice Cantoni (Department of Civil and Environmental Engineering, Politecnico di Milano): *"Risk-based approaches to control emerging contaminants in the Water-Food Nexus"*
- 10.00 10.30: Open and interactive discussion among participants
- 10.30 11.00: Refreshment

Speakers Short Bio:

Maria Papathanasiou (Imperial College London)



Maria is a Lecturer (Assistant Professor) at the Department of Chemical Engineering, Imperial College London. She holds a PhD degree in Process Systems Engineering from the Department of Chemical Engineering at Imperial College London and an MSc from the same department. She completed her undergraduate studies at the School of Chemical Engineering, National Technical University of Athens and she conducted her Diploma Thesis in Food Process Engineering at the Technical University of Berlin.

Maria's research focuses on the development of Process Systems Engineering tools (modelling, optimisation and control) with application to Life Science and Energy Systems. Her research outputs to date have been acknowledged through over 40 peer reviewed and conference publications, 30 oral presentations at international conferences and four international awards, including IChemE's Junior Sargent Medal (2023).

Beatrice Cantoni (Politecnico di Milano)



Junior-Assistant Professor (RTD-A) at the Department of Civil and Environmental Engineering of Politecnico di Milano. She holds a PhD degree in Environmental and Infrastructure Engineering from the Department of Civil and Environmental Engineering of Politecnico di Milano and an MSc from the same department.

In her research, she combines emerging contaminants fate modelling with Quantitative Chemical Risk Assessment to include uncertainties in human health and environmental risk assessment in several applications in the Water-Food Nexus. Moreover, she focuses on the performance assessment, modeling and optimization of several technologies for emerging contaminants removal in drinking and wastewater combining lab-scale experiments, full-scale monitoring and advanced big-data analyses. Involved in several International research projects, she was recognized with four national and international awards, including the AXA Research Fund Individual Grant (2022).