

Giulia Righetti earned her MSc in Mechanical Engineering with the highest distinction of 110/110 cum laude from the University of Padova in 2012. Subsequently, on April 14th, 2016, she obtained her PhD in Industrial Engineering, specializing in Energy Engineering, from the same institution. From January 1st, 2016, to December 31st, 2017, Giulia Righetti served as a Research Fellow (Legge 240/10, Art. 22) at the University of Padova. Following this, from February 12th, 2018, until June 30th, 2023, she held the position of Assistant Professor (Legge 240/2010 art.24, c. 3, lett. A and B) at the University of Padova. As of July 1st, 2023, Giulia Righetti has assumed the role of Associate Professor at the University of Padova, focusing her research primarily on applied thermodynamics, thermo-fluid-dynamics, and heat transfer.

Currently, Giulia Righetti is actively engaged in research within the Heat Transfer and Nano-fluid Labs at the University of Padova, Department of Management and Engineering. Her research endeavors predominantly revolve around energetic optimization, with a particular emphasis on two-phase heat transfer and thermodynamics.

Over the years, her research has spanned various themes, including theoretical and experimental analyses of two-phase heat transfer, sustainability in refrigeration, utilization of nanofluids, innovative boiling enhancement techniques, thermal management in aircraft, energy conservation in food preservation, and more. Additionally, she has conducted extensive numerical and experimental investigations, encompassing the study of PCM utilization, improvement of thermal conductivity, and detection of flammable gas leakage.

Giulia Righetti has amassed a substantial volume of experimental data, comprising over 5000 data points on two-phase heat transfer and pressure drop in plain and microfin tubes, as well as 1000 data points on plate heat exchangers. Her research activities have also involved experiments on pool boiling, heat recovery capabilities, heat transfer performance in various heat exchangers, and foodstuff cooling and freezing processes. Notably, she has been instrumental in the design and testing of experimental setups for nanofluid pool boiling and the investigation of PCMs for latent heat thermal accumulations.

Her professional contributions extend to participation in numerous European and national research projects, where she has served as a scientific leader on two occasions. Giulia

Righetti has authored and co-authored 88 publications listed by Scopus, including articles in peer-reviewed international journals and presentations at international and national conferences. Noteworthy among her achievements is the receipt of the "Best Presentation of Young Scholars" award at the 13th International Conference on "Two-Phase Systems for Space and Ground Applications" held in Xi'an, China, in October 2018.

Furthermore, Giulia Righetti maintains active collaborations with various Italian and international researchers, research groups, and companies, enhancing the scope and impact of her work within the scientific community.