**Elena Barbera** is Research Associate (RTDa) at the Department of Industrial Engineering, University of Padova. After her graduation in Chemical and Process Engineering, she earned a PhD in Industrial engineering focusing on optimization of microalgae production for industrial applications. Her research interests focus on process simulation and techno-economic analysis of chemical and biochemical processes, including microalgae production, anaerobic digestion for biogas and biomethane, production of bio-based products, carbon capture and storage, hydrogen production.