



Cristina Italiano received the M.S. degree in “Industrial Chemistry” at the University of Messina in 2008 and the Ph.D. degree in “Chemical Technologies and Innovative Processes” at the University of Messina in 2013. After graduating, she started her collaboration as Research Fellow with the National Research Council - Institute of Advanced Technologies for Energy (CNR-ITAE, Messina), focusing on catalysts development for energetic applications. She is a Researcher at CNR-ITAE since 2018.

Her research activity is focused on heterogeneous catalysis applied to the development of structured catalytic nanomaterials (monoliths, foams, POCS) and reactors for the intensification of hydrogen production (reforming of fossil and renewable fuels) and chemical storage of renewable energy (e-fuels or energy carriers) processes. Her skills are mainly based on i) physico-chemical and catalytic characterization of nanomaterials and structured materials; ii) simulation of chemical processes through the use of dedicated software; iii) design of reactors and prototypes for hydrogen production processes and chemical energy storage. Currently, the main research projects concern: i) reforming processes for hydrogen production; ii) methanation reactions for synthetic natural gas production; iii) ammonia synthesis and decomposition for hydrogen storage.

She is Author and co-Author of: 50 Publications in International Scientific Journals; 3 Book Chapters; 44 Proceedings on volumes with ISBN; 40 Technical-Scientific Reports relating to Contractual Activities; more than 70 Communications at National and International Congresses. She is scientific manager of the following research projects: POR H2 (PNRR 2021-2026), NAUSICA (PON R&I 2014-2020), AMBHER (Horizon Europe 2021-2027), ANDREAH (Horizon Europe 2021-2027), HAMMER-3D (Contract of Research 2022-2023), NEST (PNRR 2021-2026).