



Isabella Nova

Isabella Nova is Executive Vice Rector at Politecnico di Milano, with a specific focus on the Strategic Plan, since January 2023.

She is full Professor of Chemical Reaction Engineering at the Department of Energy and she teaches Industrial Chemistry for the Degree Program Board of Chemical Engineering.

She has been Deputy Dean of the School of Industrial and Information Engineering (2019-2022) and coordinator of the Degree Program Board of Chemical Engineering (Bachelor and Master) and Engineering for Prevention and Safety for Process Industry (Master) at Politecnico di Milano (2018-2022).

She got a Master Degree in Chemical Engineering from Politecnico di Milano (1996) and a P.h.D. in Industrial Chemistry from University of Milano (1999).

She is currently recognized as an international leader in catalysis, covering kinetic analysis, catalyst modelling and mechanistic studies, reaction engineering, experimental work, controls development and application. The focus is on the aftertreatment of gases produced by combustion processes (Selective Catalytic Reduction of NO_x by NH₃ for both stationary and mobile applications, Ammonia Slip Catalysts for the control of ammonia, Passive NO_x Adsorber catalysts for cold start applications) and on new processes for the production of clean energy, such as photocatalytic water splitting.

Since 2002 she has been leading industrial projects with Daimler AG (DE), MTU (DE), FPT (I), Johnson Matthey (UK), Corning (USA), Haldor Topsoe (DK), Cummins (USA), and participating to several EU-FP7 and EU-H2020 projects.

She is co-author of more than 170 papers, inventor of 3 international patents, co-editor of 6 volumes of Catalysis Today (Elsevier), 1 volume of Industrial and Engineering Chemistry Research (American Chemical Society), and one Springer book (Urea-SCR Technology for deNO_x After Treatment of Diesel Exhaust) as well as co-author of more than 300 communications to conferences. She gave more than 20 invited talks, and more than 10 keynote or plenary lectures.

She is a member of the Editorial Board of "Applied Catalysis B: Environmental" (Elsevier) and of "Emission Control Science and Technology" (Springer).

From 2020 to 2023 she was a member of the Management Board of Fondazione Fratelli Confalonieri. She has been included in the Top Italian Women Experts in STEM (www.100esperte.it), in the Top Italian Scientists (www.topitalianscientists.org), and in the Inspiring Fifty 2018 Italy list (<https://italy.inspiringfifty.org/>).