



Dr. Marco J. Castaldi

Professor

Chemical Engineering Department

Director, Earth Engineering Center|CCNY

Director, WTER-T-US

Director, Earth System Science & Environmental Engineering

The City College (CCNY) of New York, City University of New York (CUNY)

Marco Castaldi was born in New York City and received his B.S. ChE (Magna cum Laude) from Manhattan College. His Ph.D. is in Chemical Engineering from UCLA and he has minors in Advanced Theoretical Physics and Astrophysics. Prior to joining CCNY he was Associate Professor at Columbia University's Earth & Environmental Engineering Department. Professor Castaldi has approximately 90 peer-reviewed research articles, 40 peer-reviewed conference papers, 3 book chapters and 11 patents in the fields of catalysis, combustion and gasification. Some of his research findings have been covered by The New York Times, The Observer, CNN, and other trade publications. In addition, he was the Editor of the North American Waste to Energy Conference (NAWTEC) Series (ISBN: 978-0-7918-4393-2), Co-Editor of the Waste to Energy text published by Woodhead Publishing, Editorial Board Member of *Waste and Biomass Valorization* published through Springer (ISSN: 1877-2641) and *Catalysts* (ISSN 2073-4344). Prior to his academic career in Professor Castaldi worked first as Manager of Fuel Processor Component Development for Precision Combustion Inc. in New Haven, CT overseeing projects totaling \$5 MM. Professor Castaldi is Past Chair of the Materials and Energy Recovery Division of ASME, Past Chair of the Research and New Technology Council of AIChE and recent Past-Chair of the North American Catalysis Society's New York Metropolitan Section. He is a consultant to several companies including WasteManagement and AECOM. Recent professional activities and awards include:

2016	Fulbright Fellow, Global Award
2015	National Academies' Intelligence Science and Technology Expert Group (ISTEG)
2014	National Research Council, Panel Member Appointment
2012 – 2015	Chair, Research and New Technology Council (RANTC) for the American Institute of Chemical Engineers (AIChE)
2007 – 2012	Sustainability Steward of the Research and New Technology Council (RANTC)
2010 – 2011	Chairman, North American Catalysis Society's New York Metropolitan Section
2011 – present	Executive Committee: American Mechanical Engineering Soc. (ASME) Material & Energy Recovery Division
2012	National Academy of Engineering Fellow, Frontiers of Engineering Education
2010	American Chemical Soc. Environmental Division Best Paper Presentation
2010	Columbia University Presidential List of 100 Prestigious Faculty
2009	National Science Foundation CAREER Award
2009	International Precious Metal Institute Student Advisor Award
2007	Chinese "111" Program of Overseas Academic Backbone University Introduction
2006	Columbia University, SEAS Distinguished Faculty Teaching Award
2005	ASME, Gas Turbine Award
2004	ASME, Best Applications Paper Award

2002

Manhattan College, Top 10 Engineering Professors

Dr. Castaldi is the Director of the Waste-to-Energy Research and Technology Council (WERT) in the United States, an international organization that supports several students and post doctoral researchers; also, his group is recognized by the American Society of Mechanical Engineers as the foremost research group on chemical kinetics of converting wastes to energy. Dr. Castaldi's research will lead to the development of advanced waste-to-energy processes and in particular the high-efficiency recovery of energy from biomass processes using catalysis. Understanding the fundamental reaction sequences and their associated kinetic parameters is the sure way to provide the requisite capability to explore and develop new technologies while improving existing ones for converting "waste" resources into renewable energy. Currently Dr. Castaldi has established the Earth Engineering Center at City College, City University of New York. The goal of EEC|CCNY is to bring to bear rigorous engineering solutions that enable responsible use of energy and materials for the advancement of society. Through industry collaborations and research sponsorship EEC|CCNY develops novel solutions to some of the world's most pressing problems. EEC|CCNY routinely engages students with industry professionals enabling a holistic approach to creative realistic, forward-looking applications. The reach of EEC|CCNY is international in scope with many projects connecting international students and companies with a global presence.