

Curriculum vitae

Giorgio Mannina

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• EDUCATION

2006 PhD in Hydraulic Engineering, Università di Catania, Italy

2002 Master graduation (with distinction), Hydraulic Engineering, Palermo University, Italy

• CURRENT POSITIONS

2022 - Director and Founder of the Water Resource Recovery Facility, Palermo University, Italy

2021 - Full Professor of Sanitary and Environmental Engineering, Palermo University, Italy

2019 - Chair of the double degrees in Environmental and Civil Engineering at Palermo University with Tongji University (China), Gdansk University (Poland), and Tianjin Chengjian University (China)

• PREVIOUS POSITIONS

2023 - 24 Visiting Professor at Beijing Normal University, China

2019 - Visiting Professor at Tongji University, Shanghai, China

2019 - 24 Visiting Professor at Tianjin Chengjian University, China

2018 - Visiting Professor within Fulbright program at Columbia University, New York, USA

2015 - 21 Associate Professor of Sanitary and Environmental Engineering, Palermo University, Italy

2012 - Visiting Professor - Teaching mobility Lifelong learning program, Girona University, Spain

2011 - 14 Assistant Professor, Palermo University, Italy

2008 - 10 Assistant Professor of Sanitary Engineering, Università Kore, Italy

2010 - Visiting Researcher at Université Laval, Canada

2007 - 08 Assistant Professor of Sanitary and Environmental Engineering, Palermo University, Italy

2005 - Visiting Researcher at Katholieke Universiteit Leuven, Belgium

2004 - 05 Visiting Researcher at Norwegian University NTNU, Norway

• FELLOWSHIPS AND AWARDS

2024 Water Europe Innovation Award, Winner category “Water Technology & Infrastructures”, Brussels

2024 International Water Association Fellow, Toronto, Canada

2023 Innovation Prize 2023, Water Reuse Europe, finalist, Brussels

2022 Biennial Medal 2022 for Exceptional Research Contributions to Environmental Modeling and Software Society (iEMSs), Brussels

2022 World’s Top 2% Scientists of Stanford University

2018 Fulbright Research Fellow - Columbia University, New York, USA

2015 Recipient of the Enrico Marchi Lecture, Genova, Italy

2012 Early Career Research Excellence Award, iEMSs, Leipzig, Germany

2010 Recipient of the Torricelli prize, Palermo, Italy

2004 Abroad Scholarship Research Council of Norway, Trondheim, Norway

• SUPERVISION OF GRADUATE STUDENTS; PHD POSTDOC STUDENTS

2003 - 25 Supervisor of 130 BS, MS, PhD students of Sanitary and Environmental Engineering, Palermo University, Italy

• TEACHING ACTIVITIES

2008 - Professor of Sanitary and Environmental Engineering, Mathematical Modelling in Sanitary and Environmental Engineering and Advanced Processes in Sanitary and Environmental Engineering.

• RESEARCH PROJECTS

2025 - 26 Sustainable Water Engineering and Management: Excellence in Education and Training for the Next Generation of Experts in Sustainable Urban Wastewater Treatment and Management – funded by the European Union through the Erasmus+ programme Erasmus Mundus Design Measures (ID: 101241113).

- 2022 - 26 Innovative Membrane Technologies for Advanced and Sustainable Wastewater Treatment – funded by a grant of the Italian Ministry of University and Research (MUR) through the Research project of national interest PRIN 2022 PNRR (D.D. n. 1409 del 14 September 2022) CUP B53D23027250001.
- 2022 - 24 Integrated technology for nitrogen and phosphorus removal and recovery in municipal wastewater treatment plants - funded by Norway Grants 2014-2021 via the National Centre for Research and Development under the grant number NOR/SGS/INPORR/0074/2020-00.
- 2020 - 24 Achieving Wider Uptake of Water-Smart Solutions – Grant European Commission (Brussels), PI for Palermo University, European Commission, Grant No. 869283.
- 2007 - 13 National Operational Programme for Research and Competitiveness (2007 to 2013). Project STI-TAM (Sviluppo di Tecnologie Innovative per il trattamento di rifiuti liquidi della navigazione finalizzate alla Tutela dell’Ambiente Marino) – PON 02_00153_2849085 – CUP B61C12000840005; Italian Ministry of Education, University and Research and Ministry of Economic Development.
- 2012 - 15 Energy consumption and climate change gases in sewage plants: a decision support system for sizing and management. Ministry of Education, Universities and Research (Italy), GRANT_NUMBER: 2012PTZAMC
- 2012 - 15 Energy Consumption and Climate Change Gases in WWTPs – Italian Ministry of Education, Grant No. 2012PTZAMC.
- 2018 Greenhouse Gases Emissions from Membrane Bioreactors for Wastewater Treatment – Council for International Exchange of Scholars, Grant No. 657ba3806b971094314bccbd647e51a2.
- 2004 Development of an integrated model to control the rivers pollution”, The Research Council of Norway (Norway), Grant No. 164124.

- **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2024 [Chair, 7th IWA Regional Membrane Technology Conference – IWA-RMTC 2024, 18-21 June 2024, Palermo, Italy – supported by International Water Association \(IWA\).](#)
- 2024 [Chair, International Conference on Wider-Uptake of Water Resource Recovery from Wastewater Treatment – ICWRR 2024, 18-21 June 2024, Palermo, Italy - supported by IWA.](#)
- 2018 [Chair, 11th International Conference on Urban drainage modelling, 23-26 Sep, 2018, Palermo, Italy - supported by IWA, EWRI - ASCE, IAHR, iEMSs](#)
- 2017 [Chair, Frontiers International conference on wastewater treatment, 21-24 May, 2017, Palermo, Italy - supported by IWA, iEMSs](#)
- 2019 Workshop Organizer: MBR Modelling and Control for Wastewater Treatment, 10th IWA Symposium on Modelling and Integrated Assessment 1 – 4 September 2019, Copenhagen, Denmark Special Session Organizer: MBR Modelling and Control for Wastewater Treatment, 9th IWA Membrane Technology Conference & Exhibition for Water and Wastewater Treatment and Reuse, 23-27 June, 2019, Toulouse, France.
- 2018 Workshop Organizer: IWA Task Group on MBR Modelling and Control, IWA 11th UDM modelling conference, 24 Sept., 2018, Palermo, Italy.
- 2015-18 Chair of 4 Editions of Advanced course on Innovative Wastewater Treatment and Mathematical Modelling (supported by the International Water Association), Palermo, Italy.
- 2010-25 Members of over 40 Scientific Advisory Committees of international Conferences.
- 2010 Special Session Organizer: XXXII edition of the Italian National Conference of Hydraulics and Hydraulics Constructions, Sept. 2010, Palermo, Italy.

- **INSTITUTIONAL RESPONSIBILITIES**

- 2019 - Rector’s Delegate for international affairs at Palermo University, Italy
- 2016 - 18 Member of the Department of Research Quality Assurance
- 2015 - 18 Member of the Scientific Committee at Palermo University, Italy
- 2014 - 16 Member of the Departmental Committee for Quality Departmental Assurance

- **REVIEWING AND EDITORIAL ACTIVITIES**

Reviewer and Editor for top-tier journals including Water Research, Bioresource Technology, Environmental Science & Technology and Chemical Engineering Journal. Reviewer of research grant proposals for the Italian University and Research Ministry (MUR), European Research Council (ERC – ADG) and the International Czech Science Foundation.

2020-25 Editor of (5) books published by Elsevier “Current Developments in Biotechnology and Bioengineering”

2015 - Editor Water Science and Technology, IWA

2018 - Editorial board of Bioresource and Technology, Elsevier

2018 Guest-Editor and Editorial board member of Journal of Bioresource Technology – 5 Special Issues

2018 Guest Editor Environmental Science and Pollution Research (Springer); Environmental Management Journal: Frontiers in Urban Drainage Management; Journal Hydrology: special issue on Urban Drainage Modelling; Urban Water Journal: special issue on Rainwater harvesting

2016-19 Associate Editor Journal of Hydrology, Elsevier

2016 Guest-Editor Journal of Environmental Engineering, ASCE - Special issue

2015-18 Associate Editor Water Supply, International Water Association

2015-18 Editor Cogent Engineer Journal (Taylor & Francis)

2014-15 Editor of the Open Hydrology Journal

• MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Chair of the IWA - Working Group on Mathematical modeling of Membrane Bioreactors

Member of Management Committee of IWA Specialist Group on Membrane Technology, 2016-25

Member of Board of Directors - International Environmental Modelling and Software Society, 2014-2021

Member of The Specialist Group “Urban Water Pollution” - The European Water Platform, 2012-25

International Environmental Modelling and Software Society, 2008-25

Member of Working Group on Data and Models - International Water Association, 2006-18