

**CURRICULUM VITAE
OF
ANDREA MAFFINI**

Family name: Maffini

First names: Andrea

Nationality: Italian

Education: Full five years academic master degree

Details of education:

Institution	Main Degree(s) or Diploma(s) obtained:
Open University - Milton Keynes (UK) - 2005	Diploma in Pollution Control (Academic diploma recognized by CIWEM – The Chartered Institution of Water and Environmental Management- UK)
Technical University of Milano (Italy) – 2001 and 2015	Post-graduated Courses for “Design and Operation of Biological Wastewater Treatment Plants and of “Design and Operation of Industrial Wastewater Treatment Plants”;
Open University - Milton Keynes (UK) - 1998	Academic Course “Accounting for Managers” for specialization in cost control and accounting
University of Genova (Italy) - From 1977 to 1982	Full five years Master degree in Chemical Engineering cum laude

Spoken languages:

Italian (mother tongue), English, French, German, Spanish

Membership of professional bodies:

- Member of AIDIC (Italian Federation of Chemical Engineering, associated to European Federation of Chemical Engineering);
- Member of DWA (ex ATV-DVWK), German Association for Water, Wastewater and Waste, associated to EWA (European Water Association);
- Member of Italian Board of Engineers;

Present position:

- Independent Professional as Senior Environmental and Chemical Engineer, working in the fields of Environment Engineering and of Resources and Energy Efficiency, specialized as Water and Wastewater Treatment Expert, and with wide experience as Team Leader in International Bids and Contracts;

Professional experience:

Date from - Date to	Company	Position	Description
2005 to today	Self-employed	Professional in Environmental and Chemical Engineering	Independent Professional as Senior Environmental and Chemical Engineer, with specialization as Water and Wastewater Expert as well as Waste, Resources and Energy Efficiency Expert.
1995 to 2005	TME- Termomeccanica Ecologia	Proposal and Process Manager for Water and Wastewater Plants	Proposal and Process Manager for projects of municipal and industrial water and wastewater treatment plants. Contacts with universities and institutions.
1991 to 1995	Sulzer Italia (later VA-Tech Italy)	Department Manager	Manager of Process and Environmental plants Department.
1988 to 1991	Maire Tecnimont SpA	Proposal and Project Manager	Team leader for coordination of large size proposals or projects concerning industrial water treatment, petrochemical and power plants.
1986 to 1988	Techint SpA	Process and Project Engineer	Process design and coordination of project teams for water treatment and utilities of steel plants, of chemical plants and of various manufacturing plants.
1984 to 1985	Ansaldo SpA	Process and Project Engineer	Process design and coordination of project teams for hydraulic networks of nuclear power plants
1983 to 1984	Desmet Ballestra SpA	Process Engineer	Process design of fine chemicals production plants

Most recent projects:

- Turkey - Technical assistance as Chemical and Environmental Expert for Resource Efficiency Audit and Economic Assessment of a new technology based on green materials for Epoxy Resin production financed by the European Bank for Reconstruction and Development (EBRD), on behalf of Company RINA Consulting, Genoa, Italy;
- Kazakhstan - Technical assistance as Water and Wastewater Efficiency Expert for “Energy and Resource Efficiency Audits” at a fat and oil production plant financed by the World Bank, on behalf of Company RINA Consulting, Genoa, Italy;
- Turkmenistan - Technical assistance as Water, Waste and Energy Efficiency Expert for “Energy and Resource Efficiency Audits” at a brewery in Turkmenistan, financed by the European Bank for Reconstruction and Development (EBRD), on behalf of Company RINA Consulting, Genoa, Italy;
- Burkina Faso – Waste, Biomass and Energy Efficiency Expert for the feasibility assessment of Energy generation from biomass at dried mango and cashew nuts production plants, financed by the African Development Bank (AfDB), on behalf of Company RINA Consulting (RINA group), Genoa, Italy;
- Italy - Design and cost estimate review of a municipal wastewater treatment plant for 110,000 p.e., on behalf of WISE engineering firm, Varese, Italy;
- Saudi Arabia - Study for optimization of resources (waste, water, energy) in the Saipem Temporary Construction Facilities of Berri and Marjan 10, on behalf of Company RINA Consulting (RINA group), Genoa, Italy;

- Vietnam - Chief Design Manager for the Basic Design of the Drinking Water Treatment Plant, distribution networks and pumping stations of the Ham Thuan Bac area within the Binh Thuan District, financed by the Fund for Cooperation to Development of the Italian Foreign Ministry, on behalf of SMIA engineering firm, Milano, Italy;
- Ukraine - Waste, Biomass and Energy Efficiency Expert for assessment of the feasibility of Biogas and Fertilizers Production Plants at various chicken farms, financed by the European Bank for Reconstruction and Development (EBRD), on behalf of Company RINA Consulting (RINA group), Genoa, Italy;
- Vietnam - Team Design Manager for the Detail Engineering of the Wastewater Treatment Plant and the Urban Solid Waste Collection Equipment of the Nui Than town within the Quang Nam Province, financed by the Fund for Cooperation to Development of the Italian Foreign Ministry, on behalf of company D'Appolonia (RINA group), Genoa, Italy;

Most recent Seminars and courses:

- Webinar Course – *Modelling of wastewater treatment plants (using Biowin software)* - FAST/University of Milano with HR Wallingford Italy/Canada – September/October 2022
- Webinar Course – *Bemessung von einstufigen Belebungsanlagen/Software Belebungs-expert (Web Seminar“ - (transl.: Sizing of one-stage activated sludge with software Belebungs-expert) – DWA (German Water Association) - September 2022*
- Webinar – *Upgrading wastewater treatment with MABR Technology* – Fluence South Africa – May 2022
- Webinar – *New Pollutants in Drinking Water* – Working Group for Operation of WWTPs/University of Brescia – Brescia – March 2021
- Webinar – *Management of critical issues in water supply pipelines* – System group – Rome – January 2021
- Webinar - *Process automation for wastewater treatment plants – Innovation technologies* – FAST/University of Milano – December 2020
- Webinar – *MABR (Membrane Aerated Biofilm Reactor) / Wastewater Treatment for Small Communities* - Fluence Corporation (USA) – May 2020
- Webinar - *Decentralized and Distributed Water and Wastewater Treatment* – Fluence Corporation (USA) – May 2020
- Webinar - *Anaerobic Digestion: Green Solutions for Food & Beverage Industry* – Fluence Corporation (USA) – May 2020
- Seminar – *Thermo-chemical processes for recovery of energy from residual biomass* - Board of Italian Engineers – Genova – December 2019
- Seminar – *Removal of PFAS from wastewater and waste: regulations and technologies* – FAST/University of Milano – Milano – December 2019
- Seminar – *Biochemical processes for recovery of energy from residual biomass* - Board of Italian Engineers – Genova – October 2019;
- Seminar – *Wastewater treatment through granular biomasses* – FAST/University of Milano – Milano – September 2019
- Seminar – *Plants for energy from biomass – Anaerobic and aerobic digestion* - Board of Italian Engineers – Genova – July 2019;
- Course – *Geothermal energy as a renewable source* - Board of Italian Engineers – Genova – June 2019
- Course – *Biomasses and energy* - Board of Italian Engineers – Genova – May 2019
- Course - *The European Union law for the renewable energy sources* – Board of Italian Engineers – Genova – May 2019;
- Course – *The management of construction contracts during the execution phase* – Board of Italian Engineers – Genova – January 2019;
- Seminar – *Innovations in wastewater treatment plants through biofilms and membranes* – FAST/University of Milano – Milano – October 2018
- Seminar - *Wastewater treatment plants and sewage systems* – Board of Italian Engineers – Genova – July 2018;
- Conference – *18th European Water, Wastewater, Waste, Energy Symposium* - IFAT – Munich (D) – May 2018;
- Seminar – *Biomethane from wastewater treatment plants* – FAST/University of Milano – Milano – October 2017
- Seminar – *Drinking water: Safety and optimization for plants and networks* – FAST/University of Milano – Milano – May 2017;

Teaching activities:

- University of Genova – Master degree in Environmental Engineering – Contract professor for the water and wastewater treatment module within the “Environmental Safety Techniques and Plants” course – Academic Years 2019/20, 2020/21 and 2021/22;
- University of Genova – Superior School of Engineering (ISSUGE) – Author and Lecturer of the Conference “The activity of Engineers in the new Environmental Scenarios” - 2015;
- University of Genova – Master degree in Chemical Engineering courses – Modules of exercises for sizing of Wastewater Treatment Units – Academic Year 2011/12;
- University of Genova – Master degree in Chemical Engineering courses - Contract professor for the course of “Equipment sizing for Environmental and Wastewater Treatment Plants” – All Academic Years from 2005/06 to 2010/11;
- Teacher of Water and Wastewater Treatment courses for the Education Board of Industry Association (Genova – Italy) in 1999;
- University of Genova – B. Sc. In Environmental Engineering courses – Modules of exercises for the course of wastewater treatment – 1997 and 1998;
- University of Genova – Master degree in Chemical Engineering courses – Modules of exercises for the courses of chemical plants design and wastewater treatment plants design – 1994 and 1995;

Recent Publications

- AIDIC (Italian Association of Chemical Engineering) – *CISAP 10 - 10th International Conference on Safety and Environment in Process and Power Industry* - Florence 2022 - Presentation of the poster “*A Framework towards Resource Integration and Energy Efficiency Auditing with Zero Hazardous Discharge Program*”;
- AIDIC (Italian Association of Chemical Engineering) – *Icheap15 – 15th International Conference on Chemical and Process Engineering* -Naples 2021 - Presentation of the poster “*A Decade International Experience into Effective Resources and Energy Efficiency Auditing*”;
- EWA (European Water Association) – *17th European Water, Wastewater, Waste, Energy Symposium in Munich IFAT fair* – Munich - 2014 – Presentation of the poster “*Environmental aspects in planning wastewater networks and treatment plants*”;