Name and position:

Marco Scarella
Technical Director, CARPI TECH

Residence (business):	c/o CARPI TECH SA Via Passeggiata 1 6828 Balerna (Switzerland)
Born:	Sanremo (Italy), March 29, 1977
Years of professional carrier:	Since 2004 (21 years)
Years of experience at CARPI TECH:	Since 2015 (10 years)
Education:	Hydraulic Engineer M.Sc., Professional Engineer
Languages:	Italian: mother language English: excellent, written and oral Spanish: good, written and oral French: basic, oral

Summary of experiences and qualifications

Marco Scarella earned a Degree in Civil Engineering with a specialization in Hydraulic Engineering from the University of Genoa (Italy) in 2003. Throughout his professional career, he has worked as a civil and hydraulic engineer, managing projects and overseeing site works for the construction of major infrastructure, including large dams, hydropower plants, outlet works, flood control channels, and navigation dams.

From 2005 to 2015, Marco Scarella was employed at SC SEMBENELLI CONSULTING Srl as a hydraulic designer. Under the mentorship of Piero Sembenelli, he developed expertise in a wide range of disciplines, including geotechnics, hydraulics, hydrology, hydrogeology, and geosynthetics.

Among major projects at SC SEMBENELLI:

- Nam Ou VI dam (Laos), 88 m high rockfill dam with exposed geomembrane facing
- Zarema dam (Ethiopia), 150 m high rockfill dam with asphalt core + covered geomembrane facing.
- Kuraz weir (Ethiopia), concrete weir and rockfill dam with concrete cut-off
- Third Set of Locks of Panama Canal (Panama), cofferdams and canal expansion excavation
- Navigation dams over the Po river (Italy), 4 radial gates weirs and navigation locks

- Badana dam (Italy), 56 m high concrete-masonry dam
- Lago Lungo dam (Italy), 47 m high concrete-masonry dam
- Chaparral dam (San Salvador), 90 m high RCC dam
- Kerrada dam (Algeria), 86 m high clay core dam.

In 2015, Marco Scarella joined CARPI TECH, a private Italian/Swiss group specializing in geosynthetics, as Technical Director and leader of the Technical Department. CARPI TECH offers turnkey solutions, encompassing the design, supply, and installation of waterproofing liners for hydraulic structures (dams, canals, hydraulic tunnels) and environmental protection structures (landfills and retention ponds), both in dry and underwater conditions.

Since joining CARPI TECH, Marco Scarella has been involved in applying geosynthetics for the waterproofing and protection of hydraulic and civil structures, contributing to both the design and construction phases, as well as participating in research projects focused on the development of innovative application techniques.

Among major projects at CARPI ETCH:

- Amphilochia PSP (Greece), 100,000 m2 of geomembrane lining of the upper reservoir.
- Chitravathi PSP (India), 200,000 m2 of geomembrane lining for the upper reservoir.
- Pinnapuram PSP (India), 600,000 m^2 of geomembrane lining for the upper and lower reservoirs.
- Abdelmoumen PSP (Morocco), 200,000 m^2 of geomembrane lining for the upper and lower reservoirs.
- Pico da Urze PSP (Calheta, Portugal), 100,000 m^2 of geomembrane lining for the upper reservoir.
- Gandhi Sagar PSP (India), 350,000 m^2 of geomembrane lining for the upper reservoir.
- Site C Project (Canada), 200,000 m^2 of geomembrane lining for the approach channel and RCC dam.
- Edevu dam (Papua New Guinea), 90 m high rockfill dam with exposed geomembrane facing.
- Kokhav Hayarden PSP (Israel) 200,000 m^2 of geomembrane lining for the upper and lower reservoirs.
- Rogun dam (Tajikistan), 80 m high rockfill cofferdam with covered geomembrane.
- Helms pressure tunnel (California), rehabilitation with exposed geomembrane (> 80 bar);
- El Quimbo dam (Colombia), waterproofing of concrete facing slab joints with geomembrane waterstop.
- Gilboa PSP (Israel), waterproofing of the pressure shaft and tunnel with exposed geomembrane (> 50 bar).
- Gilboa PSP (Israel), waterproofing of upper reservoir MSE wall.
- Tunjita pressure shaft (Colombia), waterproofing of a pressure shaft with exposed geomembrane (> 20 bar).
- Bajoli Holi pressure tunnel (India)
- Runcu dam (Romania), 83 m high rockfill dam with exposed geomembrane.
- Las Bambas tailings dam (Peru), 185 m high rockfill dam with exposed geomembrane.

<u>Papers and presentations:</u>

Since the beginning of his professional carrier, Marco Scarella participated as Author and Speaker to specialised Congresses, Seminars and Conferences worldwide, among which:

- ICOLD 2015 Stavanger, Speaker
- ICOLD 2016 Johannesburg, Speaker
- ICOLD 2017 Prague, Speaker
- ICOLD 2018 Wien, Speaker
- ICOLD 2019 Ottawa, Speaker
- DRIP II Seminar (India), Invited Speaker
- ICOLD 2022 Marseille, Speaker
- ICOLD 2023 Gothenburg, Speaker
- ICOLD 2024 New Delhi, Speaker
- CWC Seminar (India), Invited Speaker

Since 2017, Marco Scarella has been active member of the ICOLD Technical Committed on Cemented Materials dams.