

FEDERICO PEROTTI graduated in Civil Engineering, (Structural Engineering section) at Politecnico di Milano in 1981. In 1985 he received a “Master of Science in Civil Engineering” from University of California-Berkeley. He became Associate Professor at the Department of Civil Engineering of University of Brescia in 1992. In 1995 he moved to Politecnico di Milano, where he is presently Full Professor at the Department of Civil and Environmental Engineering.

Research

His research activity has been mainly in the fields of Structural Dynamics, Wind Engineering and Earthquake Engineering. His research work in the Structural Dynamics and Wind Engineering fields concerned the response of linear systems to non stationary random seismic excitation, the treatment of non-classically damped linear systems, the numerical performance of frequency domain analysis and the response of linear and non-linear systems under aerodynamic (wind) and hydrodynamic (seawaves) excitation. In the field of Earthquake Engineering he performed studies about the non-linear seismic response of steel structural systems, the seismic behaviour of r.c. bridges and the fragility of structural and equipment components in nuclear power plants. He has been a member of the Task Force ANIMP (Associazione Nazionale di Impiantistica Industriale) - ECI (European Construction Institute) on modularization of industrial plants. He cooperates with the researchers and engineers working at the Boundary Layer Wind Tunnel of Politecnico di Milano on the development of structural design criteria based on experimental tests.

He is presently the Scientific Director of the Testing Lab for Materials, Buildings and Civil Structures of Politecnico di Milano.

He is author of about one hundred papers on refereed journals or conference proceedings.

Teaching

He has been professor of Structural Dynamics at the Faculty of Engineering of University of Brescia from 1987 to 1994, where he also taught the course of Earthquake Engineering Analysis and Design from 1992 to 1994. He is professor of Structural Dynamics (for Civil Engineering students) at Politecnico di Milano since 1995; since 2010 he is also in charge of the course of Theory of Structures for Mechanical

Engineering students. Starting from Academic Year 2012-13 he has been also contributing to the “Wind Engineering” course, teaching a series of lessons on the structural analysis and design of tall buildings under wind excitation.

He has been the Dean of the School of Civil and Environmental Engineering in the years 2011 and 2012.

Consulting and professional activity

Federico Perotti is *Qing* Certified Engineer at level 2 in the field of structures, with the following specialisation “Consulting, studies and analyses for supporting the design of industrial structures”.

His professional and consulting activity has been mainly focused on applications in Seismic Engineering and vibration problems in Civil Engineering. Among these we can quote the following.

- Seismic analysis of structural and equipment components in nuclear power plants.
- Design input and general criteria for the seismic analysis of the Messina Strait crossing.
- Dynamic analysis of large submerged structures under hydrodynamic and seismic excitation.
- Structural analysis and design of:
 - supporting structures for large turbine generators;
 - supporting structures for large printing systems;
 - foundations and supporting structures for other machines;
 - r.c. buildings in seismic areas;
 - long span beams and decks under dynamic loading;
 - wind effects on industrial plants,
 - mitigation of seismic and wind dynamic response.