

Prof. Romano Borchiellini - Short CV



Romano Borchiellini was born in Turin, Italy, in 1958. He graduated in Mechanical Engineering in 1983 at Polytechnic of Turin, Italy. Since February 2001, Romano Borchiellini is Full Professor at the Department of Energy of the Polytechnic of Turin. He is charged of teaching thermodynamics, heat and mass transfer, and HVAC system in undergraduate and graduate degree courses. In 2010 he taught a PhD course (30h) in “Ventilation and fire safety in tunnel” at the National

Technical University of Mendoza (Argentina).

Among his publications there are more than 150 papers published in journals and international and national conferences. Most of these papers refer to the analysis and modelling of thermal systems; he is reviewer for international journal and conferences.

He coordinated the research program “Transient thermo-fluid dynamic study of the Mont Blanc Tunnel in case of fire”. For the results obtained in this program, he was charged by the Italian Ministry of Infrastructures and Transportations with a technical advice in the legal action carried by the Italian Lawyers in relation to the accident occurred on March 24 1999 in the Mont Blanc Tunnel.

He was the coordinator of the research unit of the Polytechnic of Turin for:

- “Use of two-layer zone model for the thermo-fluid-dynamic analysis of underground complex systems in case of fire, with particular reference to long road tunnels” in the frame of the co-financed PRIN (Research program of national interest) 2004 “Prediction of thermofluiddynamic and structural effects of fires in underground constructions”
- “Control strategy for the automatic management of long tunnel ventilation in case of fire” in the frame of the co-financed PRIN 2006 ” Prediction of thermo-fluid-dynamic and structural effects of tunnel fires, for risk analysis and emergency management”.

Since 2012, he is vice-president of the Italian Committee for Tunnel Management of the World Road Association (PIARC); since 2009 he is one of the two Italian delegates appointed by Ministry of Infrastructures and Transportations in the Technical Committee “Road Tunnel Operation” of PIARC.

In October 2014 he was appointed as “Expert” in the Tunnel Standing Committee of the “Consiglio Superiore dei Lavori Pubblici” (Supreme Council responsible for overseeing public works).

Since 2016, he is member of the “Commissione Sicurezza Gallerie Ferroviarie” (Committee for railway tunnel safety).

In November 2016 he was appointed as a member of the “Consiglio Superiore dei Lavori Pubblici” (Supreme Council responsible for overseeing public works) by the Italian Ministry of Infrastructures and Transport (2016-2019).

Moreover, he was the national coordinator of PRIN 2008 “Biomass-to-Energy: Experimental Analysis and Demonstration of the Biogas Utilization in Solid Oxide Fuel Cells” and he was the Italian coordinator of the Joint Research Projects “Development of an efficient Parallel code for large-scale Radiation modelling (PARAD)” in the framework of the Executive Programme of Scientific and Technological Co-operation (2008-2010).

Between 2004 and 2010 he was Italian member in the Implementation-Liaison Committee Codes and Standards of the International Partnership for Hydrogen Economy (IPHE), appointed by the Italian Ministry of Environment and Territory Protection. He was also member of the Italian Hydrogen and Fuel Cells Technology Platform and from 2004 to 2010 he chaired the Hydrogen Committee of CTI-UNI (National Organisation for Standards) that is the Italian mirror of ISO TC 197 Hydrogen Technologies.

Since July 2014 he is the President of SiTI (Higher Institute on Territorial Systems for Innovation), a non-profit association set up in 2002 between the Polytechnic of Turin and the *Compagnia di San Paolo* (founded in Turin in 1563 as a charitable brotherhood and is one of Europe’s most important private foundations of banking origin), to carry out research and training activities oriented towards innovation and socio-economic growth. Since December

2014, he has been chairing the Advisory Board of the Energy Center in Turin, a joint initiative of Piedmont Region, City of Turin, Polytechnic of Turin and *Compagnia di San Paolo*.

Service and Position within Current Employment

2000-2010	Member of the Board for PhD in Energetics;
2003-2005	Supervisor Liaison with the Student Affairs and Academic Registry of the I School of Engineering of the Polytechnic of Turin;
2005-2007	Vice-Rector for Information Flow and Organisational Processes;
2007-2013	Elected Member of the Board of Governors of the Polytechnic of Turin; Member of the Board for Building and Maintenance Planning.
2009-2011	Vice Rector for Facility Management
2011-2016	Member of the Board of <i>Alta Scuola Politecnica</i> (ASP)
2012-2015	Vice Rector for Organization
2015-2018	Vice Rector for Organization and Infrastructure
2012-2018	Rector's Delegate for labor relations
2012-today	Member of the Board of Alumni Association of the Polytechnic of Turin
2014-today	Member of Quality Assurance Board of the Polytechnic of Turin