

Alessandro Ferrari achieved his PhD in Energetics at the Politecnico di Torino (Italy) in 2004 and is currently Full Professor of Thermal and Hydraulic Machines in the Energy Department at the same university.

The themes of his numerical and experimental research concern fuel injection systems for diesel and gasoline internal combustion engines, thermodynamic and chemical combustion process modeling, engine testing, strategies for the reduction of pollutant emissions in combustion engines, the design of rapid prototyping systems for the innovative control of internal combustion systems, the numerical and experimental analysis of fluid power systems, theoretical fluid dynamics for compressible flows with the disclosure of new exact solutions, and computational fluid dynamics applications to fluid machines.

Prof. Ferrari is a World's Top 2% Scientist 2023 (Scopus data). He is the author of more than 100 scientific papers, most of which have been published in prestigious international journals, and is also the inventor of important patented systems used by the industry. He has also published a research book on "Injection technologies and Mixture Formation Strategies for Spark Ignited and Dual Fuel Engines" (SAE International Editor) and a teaching book of "Fundamentals of Thermo Fluid Dynamics for Machines" (De Agostini Editor). Furthermore, he has participated in several national and international conferences, where he has also served as a Session Chair or as a member of the Organizing Committee, and received international awards and acknowledgments by international societies of engineers and industry. He is in the Editorial Board of prestigious international journals, where he has also served as an Associate Editor; since 2021 he has been appointed Distinguished Associate of the ASME Internal Combustion Engine Division.

During his career, Prof. Ferrari has cooperated with important automotive companies and research centers as well as with prestigious technical universities. He has taken part in many research projects (European national and regional projects, subjected to peer-review processes as well as projects commissioned by companies), where he has often been the Principal Investigator, for a total financial amount around 3 Millions of Euros.