

Prof. Eng. Antonio Ficarella

Full professor Systems for Energy and Environment at University of Salento (Italy); Former Director of the Department of Engineering for Innovation at University of Salento. President of the ITS (High Technical Institute) Aerospace Foundation; former Dean of the Faculty of Industrial Engineering.

Member of the Advisory Council for Aeronautics Research in Europe (ACARE) - Italian Branch, and of the Technical Committee of CTNA - Italian Aerospace Technological Cluster. Former Member of the Board of Directors of the Aerospace Technological Cluster (DTA), Inter-university Consortium of Apulian Region (CIRP), Inter-university Consortium for Research on Sustainable Development (CIRPS).

Scientific coordinator of the Project of National Interest (PRIN) Cycle-Resolved Emissions Control of Internal Combustion Engines by Means of an Innovative Optical Sensor (2005), of the project of network of laboratories "GREEN ENGINE", regarding the technologies of the combustion and of high temperatures, of research unit in the European Project Renewable energy and forest management (European Project INTERREG 2005), and of the project PON MALET - Development of technologies for propulsion at high altitude and long range of uninhabited aircraft (2011). The project partners are: DTA (Aerospace Technological Cluster), ALENIA, AVIO, CMD, CIRA, University of Salento, Polytechnic of Bari.

The scientific activities were developed in the fields of unsteady and two-phase fluid-dynamic inside machines and apparatus, thermo and fluid dynamic applied to industrial processes, Diesel engines, sensor development, industrial energy applications and related environmental subjects, energy recovery from biomass, wastes, industrial processes, active control of flows (for external profiles or inside the turbo-machinery) and of cryogenic fuels, with particular regard to the cavitation effects and the spray and combustion behavior.