# Experimental activities at ChAMBRe

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ChAMBRe (Chamber for Aerosol Modelling and Bio-aerosol Research) is an atmospheric simulation chamber (ASC) managed by the Genoa division of INFN at the Department of Physics of the University of Genoa. The ASC is characterized by a high versatility of applications, due to the wide range of instruments that can be connected. Several examples of these applications will be presented at the meeting in order to share the experimental activities performed in the ITINERIS project context. Among these applications, the most relevant are generation of standard soot particles and their use for different purposes (i.e., oxidative potential and toxicological assays), definition of a procedure to characterize carbonaceous aerosols and combustion emissions in general, aging of soot particles, investigation of the effects of air quality on bacteria viability, and study of the interaction between plant species and air pollutants. Experimental setups, methods, and highlights of obtained results will be the focus of the presentation. An overview of the activities related to the ITINERIS access program will also be included.

**Keywords: atmospheric simulation chamber, carbonaceous aerosol, bioaerosol, pollutants**