Franco Belosi

Institute of Atmospheric Sciences and Climate (ISAC) National Research Council, Via Gobetti 101, 40129 Bologna, Italy. Phone +390516399562 e-mail: f.belosi@isac.cnr.it

Education

1977: Secondary School Diploma in Electronic Engineering

1981: Master degree in Physics, Dept. of Physics, Univ. of Bologna, Italy, 23/12/1981. Thesis: Characterization of Alpha-emitters aerosols. Supervisor: prof. Vittorio Prodi. 1981-1982: Grant from the European Research Center of Karlsruhe (EURATOM) to characterize Plutonium aerosol size distribution.

Employment

1984-1990: responsible of the Research &Development Department of Lavoro&Ambiente (SME, Bologna, Italy) where he developed automatic high temperature samplers for sodium aerosol characterization to be used in fast breeder reactors. He collaborated with ENEL-CRTN to study ultrafine aerosols from DeSOx and DeNOx techniques. From 1999 to 2001 he participated at the European Project CT98-2234 for the development of personal samplers for workers exposure monitoring.

1990-2000: Free lance consultant in the Industrial Hygiene and Safety in the workplaces.

2000-2005: Senior Technician at the Institute of Atmospheric Sciences and Climate (ISAC-CNR, Lecce) of the National Research Council.

2005-2014: Senior Technician at ISAC-CNR (Bologna).

2014 - Present: Senior Researcher at ISAC-CNR (Bologna).

Grants

2001-2005: Responsible for the air quality research activities in the Salentum region in cooperation with the local administration (Provincia di Lecce).

2004-2007: Research project "Physico-chemical characterization of antarctic aerosol and its fate" (2004/6.7, PI Prof. Franco Prodi).

2004-2006: Research project "Scientific Research and Safeguarding of Venice" (CORILA) for the characterisation of the aerosol in the Venice lagoon area.

2005-2014: Supervisor for the air quality monitoring of the environmental impacts due to the gates construction work at the Venice lagoon entrances (MOSE).

2007-2008: ISAC coordinator of a research project funded by Capitaneria di Porto (Venezia) to study the atmospheric emissions of large ships.

2007-2009: Scientific responsible of the ISAC-CNR partecipation in the Emilia-Romagna Regional project for the environmental impact of the municipal waste plants (MONITER).

2008-2009: Scientific responsible of the BATNAN research project funded by Ministero della Difesa for the development of filters with nanoparticle capture capabilities.

2009-2012: Coordinator of the project "Nanofibrills filters for environmental nanoparticles: Development of innovative protection against Nano-pollution" (funded by Norvigian CNR and PFI - Paper and Fibre Research Institute, Trondheim).

2010-2011: Responsible of a research unit of the project "Ice mass balance and precipitation characterization in Antarctica " (PEA 2009/A3.06). Participation to the XVII National Scientific Expedition in Antarctica.

2012-2015: Participation in the European project SMILEY (NMP4-SL-2012-310637) for the development of natural polymeric, nanomaterial based, materials to capture air suspended nanoparticulate matter.

2015: Participation at the Fifth Ice Nucleation Workshop (FIN-2) at Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany.

2015-2017: Participation in "Air-Sea Lab: Climate-air pollution interaction in coastal environment" project (ISAC-CNR).

2020-2023: Participation in the European project ASINA (H2020-NMBP-TO-IND-2018-2020). Anticipating Safety Issues at the Design Stage of NAno Product Development

Areas of Research interests

From an initial dominant interest in innovative aerosol instrumentation for Industrial Hygiene and Air Quality, has progressively moved to more fundamental aerosol physics, after the transit from Lecce to Bologna in 2005. In fact, the research activity has since then carried out within Cloud and Precipitation Group of ISAC. Themes of processes in the removal of aerosol particles from the atmosphere (scavenging), role of phoretic forces in it and ice phase nucleation in clouds have been added.

Authors of more than 237 in between peer-reviewed papers and presentations.

Dr. Franco Belosi Franco Belosi