

# Antonio Donateo

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ORCID: [orcid.org/0000-0002-9214-1067](https://orcid.org/0000-0002-9214-1067)

Scopus ID: 57042520100

**Position:** Research Scientist at Institute of Atmospheric Sciences and Climate (ISAC)  
National Research Council (CNR)

## EDUCATION

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### January 2005

Ph.D in Environmental Sciences - University of Urbino

Main Subject: Turbulent vertical fluxes of fine particulate (PM<sub>2.5</sub>) and gas in surface boundary layer

### April 2000

Master Degree in Physics - University of Lecce

Main Subject: Quantum efficiency and characteristics of electron beam generated from niobium by superficial and volumetric photoemission

## MAIN RESEARCH INTERESTS

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Research activity in the Institute of Atmosphere and Climate Science (ISAC - CNR) is on micrometeorology and characterisation of composition of atmosphere with specific focus on atmospheric aerosol and its dynamics in the boundary-layer as well as in identification and characterisation of aerosol sources. Research work is focused, principally, on these topics:

- Study of vertical turbulent fluxes for fine and ultrafine particles (in number and mass), in atmospheric surface layer to investigate the dispersive characteristics of atmosphere, with a particular focus on emission, diffusion, transport and deposition processes.
- Study of the aerosols exchange processes (both in finest fraction and accumulation and coarse size ranges) between atmosphere and cryosphere to tackle future challenges in the dynamics of particles and nanoparticles in polar environments (Arctic).
- Identification and characterisation of atmospheric aerosol sources using both high temporal resolution measurements and statistical receptor models based on aerosol composition.
- Investigation of atmospheric aerosol optical properties and their relation to other aerosol chemical-physical properties, as key factors to understanding their influence on the climate change and air quality.
- Observations from remote sensing, in particular using a DOAS (Differential Optical

Absorption Spectroscopy) to obtain a vertical profile of atmospheric gases concentration for climate change studies.

## **RESEARCH PROJECTS**

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**2021. ALFA (Aerosol Fluxes in Arctic).** Artic field grant funded by RCN (Research council of Norway). Role: Principal Investigator.

**2019-2024. Joint Research Center ENI CNR – Artico – Aldo Pontremoli.** Role: WP Leader.

**2019-2020. PAPER (Paper Analyser for Particulate Exposure Risk).** Role: Participant Scientist

**2018-2019. ECOMOBILITY (ECOlogical supporting for traffic Management in cOastal areas By using an InteLLigenT sYstem).** Role: Participant Scientist. Member of the Steering Committee.

**2017-2018. CITY TREE SCALER.** EIT Climate-KIC. Role: Coordinator of Research Unit.

**2015-2018. AIR SEA LAB: Climate Air Pollution Interaction in Coastal Environment.** Role: Field Campaign Leader at Mace Head.

**2014–2015. POSEIDON (Pollution Monitoring of Ship Emissions: an Integrated Approach for Harbours of the Adriatic Basin).** Field Campaign Leader.

**2012–2014. PROMETEOS (Prodotti, Metodologie e Tecnologie Originali e Sostenibili per la Diagnostica e la Conservazione dell’Edilizia Storica).** Participant Scientist.

**2012–2015. PON I-AMICA (Infrastruttura di Alta Tecnologia per il Monitoraggio Integrato Climatico Ambientale).** Role: Field Campaign Leader.

**2012–2014. CESAPO (Contribution of Emission Sources on the Air quality of the POrt-cities in Greece and Italy).** Role: Field Campaign Leader.

**2010–2013. ABLCLIMAT (Arctic and Antarctic: the influence of the Atmospheric Boundary Layer on CLIMATE).** Role: Participant Scientist.

**2010–2012. A.I.Te.C.H. (Applied Innovation Technologies for Diagnosis and Conservation of Built Heritage).** Role: Participant Scientist.

**2008-2009. MONITER (Monitoraggio degli Inceneritori nel Territorio dell’Emilia Romagna).** Role: Coordinator of Research Unit.

**2006-2008. ERESIA (Environment Remote Sensing Interregional Agency).** Role: Participant Scientist.

**2004-2006.** Antartide: caratterizzazione chimico-fisica dell'aerosol antartico e processi di rimozione. Role: Participant Scientist.

## **TEACHING AND SUPERVISOR**

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2021. Supervisor for a Master Thesis in Scienze e Tecnologie Ambientali. UniSalento. Candidate: [REDACTED].  
Title: Caratterizzazione dell'isola di calore urbana nella città di Lecce.

2019-now. Supervisor for a Research Fellow. Candidate: dr. [REDACTED].  
Title: Caratterizzazione chimico/fisica degli aerosol e studio dei processi di emissione, trasporto e rimozione tra Criosfera ed Atmosfera nella regione Artica.

2014-2016. Supervisor for a Ph.D. Thesis. Candidate: dr. [REDACTED].  
Title: Assessment of air pollutants contribution of harbour activities in Venice and Brindisi areas. Dottorato in Scienze Ambientali - Università Ca Foscari di Venezia- XXIX ciclo.

2017. Supervisor for a Master Thesis in Ingegneria Energetica e Nucleare. Università degli Studi di Palermo. Candidate: [REDACTED].  
Title: Messa a punto e validazione di un modello per la valutazione della velocità di deposizione secca su aree urbane e suburbane.

2012-2017. Supervisor for a scholarship. Candidate: dr. [REDACTED].  
Title: Caratterizzazione sperimentale dell'impatto del traffico marittimo dell'inquinamento atmosferico delle città portuali.

## **INSTITUTIONAL RESPONSABILITIES**

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2016-2019. Elected Member of Institute Council (ISAC-CNR).

2018 - now. Scientific Responsible of the Research Agreement between ISAC-CNR and DEIM (University of Palermo)

2016 - now. Referent of Staff Training in ISAC

2014 - now. Scientific Responsible of the Urban Meteorological Station.

## **ASSOCIATIONS AND WORKING GROUP**

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2020 - now. Member of the Associazione italiana per la Meteorologia (AISAM)

2008 - now. Member of the Italian Aerosol Society (IAS)

2018 - Member of the Best Poster Award Commission for PM2018

2013 - now. Member of the Italian Physics Society (SIF).

## **EDITORIAL ACTIVITY**

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Member of Editorial Board for Journal of Advances in Meteorology (Hindawi)

Guest Editor for a Special Issue for the Journal Atmosphere (MDPI). Title "Recent Advances in Air Pollution in Italy"

Guest Editor for a Special Issue for the Journal Atmosphere (MDPI). Title “Microplastic Particles (MPs) in the Air”

Reviewer for Scientific Journals: Atmosphere (MDPI); International Journal of Environment and Pollution (InderScience); International Journal of Sustainable Transportation (Taylor & Francis); Environmental Science and Pollution Research (Springer); Environmental Science & Ecology (JSciMed); Measurement (Elsevier); Heliyon (Elsevier); Atmospheric Pollution Research (Elsevier); Transportation Research Part D: Transport and Environment (Elsevier)

## **PUBLICATIONS**

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Donateo co-authored 56 publications on international scientific Journals. He is co-author of 4 contributions to books and co-author of 53 proceedings relative to international conferences and 41 to national conferences. Donateo is co-author of 54 project technical reports.

Total publications: 56 (ISI-WoS)

H-Index: 21 (ISI-WoS)

Total number of citation: 1294 (ISI-WoS)

Total number of citation (excluding self-citation): 1156 (ISI-WoS)



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