

Curriculum Vitae

Aristeidis Voliotis

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Nationality	Hellenic	Tel. no.	+44 07722 048283

Research Interests: Aerosol physical and chemical characterization, secondary organic aerosol formation, photochemical chamber experiments, aerosol source apportionment, aerosol impacts on human health.

Education

2017-present	PhD Atmospheric Sciences The University of Manchester School of Earth and Environmental Sciences Supervised by Prof. G. McFiggans and Dr. R. Alfarra Thesis title: Physical and chemical influences on the volatility of secondary organic aerosols using photochemical chamber experiments (Funded by NERC DTP programme)
2014-2017	MSc Environmental Chemistry and Pollution Control Aristotle University of Thessaloniki Department of Chemistry Supervised by Prof. C. Samara Modules studied include: Advanced environmental chemistry and pollution control, methods for environmental analysis, quality control and chemometrics Dissertation title: Humic-like substances in wintertime aerosols from central and southern Europe: size-resolved chemical characterization and optical properties
2007-2013	BSc Environmental Science University of the Aegean Department of Environmental Science Supervised by Prof. G. Biskos Modules studied include: Atmospheric chemistry and physics, environmental engineering, environmental chemistry, solid waste and wastewater treatment and renewable energy sources Graduation project title: Nanoparticle emissions from traditional pottery manufacturing

Research Experience

Mar- Jun 2017	Intern (Erasmus Internship Programme) The Cyprus Institute Novel Technologies Laboratory Supervised by Prof. G. Biskos
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Description: Characterization of a custom-made corona discharge system installed on a custom-made Scanning Mobility Particle Sizer (SMPS) capable of measuring aerosol particles in the sub-10 nm range.

Feb 2015 -
Nov 2016 **Environmental Scientist**
Aristotle University of Thessaloniki
Department of Chemistry
Supervised by Prof. C. Samara

Description: Aerosol sample chemical analysis for Polycyclic Aromatic Hydrocarbon's (PAH's) and water-soluble inorganic ions derived from diesel engines using different mixtures of biofuels (The measurements conducted for the Laboratory of Applied Thermodynamics, Aristotle University of Thessaloniki and funded by CONCAWE).

Feb-Dec 2015 **MSc Student (Contributory Scholarship)**
Aristotle University of Thessaloniki
Department of Chemistry

Description: Performance control of aerosol Low-Volume Samplers, according to ISO:17025:2005 and more specifically to accreditation standards EN12341:1998 & EN14907:2005 (Standard gravimetric measurement method for the determination of the PM₁₀ & PM_{2.5} respectively, mass fraction of suspended particulate matter).

Jun-Aug 2014 **Environmental Scientist**
Mediterranean SOS Network; Terra Nova Ltd.

Description: Participation in the LIFE AMMOS project (Integrated information campaign for the reduction of smoking related litter on beaches funded by LIFE+ programme; LIFE12 INF/GR/000985).

Jul-Aug 2013 **Intern (Undergraduate Student)**
Navarino Environmental Observatory
Supervised by Prof. V. Gerasopoulos

Description: Atmospheric aerosol data analysis for ARGON field campaign using Matlab software.

Publications

- Besis A., Latsios I., Papakosta E., Simeonidis T., Kouras A., **Voliotis A.**, Samara C. Spatiotemporal variation of odor-active VOCs in Thessaloniki, Greece: implications for impacts from industrial activities. *Environmental Science and Pollution Research* (published online)
- Wang Y., Chen Y., Wu Z., Shang D., Bian Y., Du Z., Schmitt J. H., Su R., Gkatzelis G. I., Schlag P., Hohaus T., **Voliotis A.**, Lu K., Zeng L., Zhao C., Alfara R. M., McFiggans G., Wiedensohler A., Kiendler-Scharr A., Zhang Y., Hu M. Mutual promotion between aerosol particle liquid water and particulate nitrate enhancement leads to severe nitrate-dominated particulate matter pollution and low visibility. *Atmospheric Chemistry and Physics*, 20, 2161–2175
- Kitanovski Z., Shahpoury P., Samara C., **Voliotis A.** and Lammel G., 2020. Composition and mass size distribution of nitrated and oxygenated aromatic compounds in ambient particulate

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matter from southern and central Europe – implications for origin. *Atmospheric Chemistry and Physics*, 20, 2471–2487

- **Voliotis A.** and Samara C., 2018. Submicron particle number doses in the human respiratory tract: implications for urban traffic and background environments. *Environmental Science and Pollution Research*, 25:33724–33735.
 - **Voliotis A.**, Prokes R., Lammel G. and Samara C., 2017b. New insights on humic-like substances associated with wintertime urban aerosols from central and southern Europe: Size-resolved chemical characterization and optical properties. *Atmospheric Environment*, 166: 286-299.
 - **Voliotis A.**, Karali I., Kouras A. and Samara, C., 2017a. Fine and ultrafine particle doses in the respiratory tract from digital printing operations. *Environmental Science and Pollution Research*, 24(3): 3027-3037.
 - Argyropoulos G., Samara C., Voutsas D., Kouras A., Manoli E., **Voliotis A.**, Tsakis A., Chasapidis L., Konstandopoulos A. and Eleftheriadis K., 2016. Concentration levels and source apportionment of ultrafine particles in road microenvironments. *Atmospheric Environment*, 129: 68-78.
 - **Voliotis A.**, Bezantakos S., Giamarelou M., Valenti M., Kumar P. and Biskos G., 2014. Nanoparticle emissions from traditional pottery manufacturing. *Environmental Science-Processes & Impacts*, 16(6): 1489-1494.
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Conferences

- **Voliotis A.**, Stark H., Mehra A., Wang Y., Shao Y., Du M., Bannan T., Alfarra R. M., McFiggans G. Application of mass spectrometric voltage scanning to iodide FIGAERO-CIMS data derived from Photochemical Chamber experiments. *Annual ToF users meeting* (May 2020).
 - **Voliotis A.**, Wang Y., Shao Y., Du M., Bannan T., Alfarra R. M., McFiggans G. An investigation of the influences governing secondary organic aerosol volatility upon mixtures of biogenic and anthropogenic precursors. *European Aerosol Conference* (Sept 2019)
 - **Voliotis A.**, Bezantakos S., Shao Y., Yu C., Samara C. Seasonal and spatial variations of particle mass doses of organic chemical species in the human respiratory tract. *European Aerosol Conference* (Sept 2019)
 - **Voliotis A.**, Bezantakos S., Besis A, Shao Y, Yu C., Samara C. Seasonal and spatial variations of particle mass dose of organic chemical species in the human respiratory tract: risk assessment and health implications. *International Conference of Chemistry and the Environment* (Jun 2019).
 - **Voliotis A.**, Wang Y., Shao Y., Alfarra R., McFiggans G. Exploring the volatility of secondary organic aerosol from biogenic precursors. *School of Earth and Environmental Sciences annual conference* (Dec 2018; poster presentation).
 - **Voliotis A.**, Wang Y., Shao Y., Alfarra R., McFiggans G. Unravelling the particle wall-loss correction methods in atmospheric simulation chambers. *Earth Oceans Atmosphere Doctoral Training Program Annual Conference* (Jul 2018; poster presentation)
 - **Voliotis A.** and Samara C. Submicron particle number doses in the human respiratory tract of different population age groups in urban environments: assessing the importance of particles' hygroscopic properties in the estimated doses. *School of Earth and Environmental Sciences annual conference* (Dec 2017; poster presentation).
 - **Voliotis A.**, Bezantakos S., Giamarelou M., Valenti M., Kumar P. and Biskos G., Nanoparticle emissions from traditional pottery manufacturing. *European Aerosol Conference* (Sep 2013; poster presentation)
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Skills and other experience

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IT skills	Matlab, Igor Pro, LaTeX, Rstudio, HTML, CSS, ArcGIS, Adobe Illustrator, Photoshop
Teaching	<ul style="list-style-type: none">• Teaching Assistant in Scientific Problem Solving (undergraduate level; terms 1 and 2), 2018/19 and 2019/20• Teaching Assistant in Atmospheric Lab Techniques (postgraduate level; terms 1 and 2), 2018/19• Teaching Assistant in Measuring and Predicting (MSc level; term 1), 2018/19 and 2019/20.• Co-supervision in the graduation project of I. Karali (Project title: Ultrafine particle emissions from digital printing, 2016) and E. Zagouridou (Project title: Physical and chemical characterization of submicron aerosol particles in Thessaloniki, 2017)• Oral presentations and project assignment at Plomari's (Lesvos Island, Greece) Community Center and at the 3rd grade regarding "LIFE AMMOS" project as well as recycling of municipal solid waste (2014).
Awards	<ul style="list-style-type: none">• President's Doctoral Scholar Award, The University of Manchester (2017-2021)• Outstanding Contribution in Reviewing, Environmental Pollution, Elsevier (Jan 2018)