

Curriculum Vitae

Family Name, First Name:
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Profile

Born in 1979 in Sparti, Greece, chemist with MSc in Environmental Engineering and PhD in the field of Atmospheric Chemistry (2001, 2003 and 2007 respectively at the University of Crete, Greece). Associate Researcher at the National Observatory of Athens (NOA) during 2008-2021 and Senior Researcher since 2021. Responsible for the Atmospheric Chemistry Laboratory (ACL) during the period 2009-summer 2021 and Technical Manager–Main analyst in the Atmospheric Chemistry Laboratory (ACL) during 2009-2017. Responsible for the urban background ‘Thissio Air Monitoring Station’ (Athens, Greece) and the ‘Mobile Air Quality Monitoring Station’ of NOA since 2014 and 2016 respectively. El is systematically involved in air quality research with emphasis on the monitoring of atmospheric aerosols and more specifically the determination of their chemical composition, as well as the investigation of their optical properties. Her research interest also focuses on the non methane hydrocarbons and biomass burning tracers. EL has great experience on ground based field measurements (active and passive sampling; fixed point and with mobile pollution monitoring units housed in vehicles) and operation of aerosol and organic compounds samplers, air pollution analyzers and automatic chromatographs. Her laboratory skills concern chromatography and spectroscopy applications (IC, HPLC, GC, GFAAS, Uv-Vis). She has participated in more than 30 research projects (PI in two of them), published 44 articles in international peer-reviewed journals (h-index 21, more than 1300 citations) and also has more than 60 conference contributions (cf. lists below).

Education

- **PhD in Atmospheric Chemistry:** 2007, «Non Methane Hydrocarbons over the Eastern Mediterranean; Factors affecting their level and contribution to the oxidative capacity of the atmosphere»
Chemistry Department, University of Crete, Greece, Supervisor: Prof. Nikolaos Mihalopoulos
- **M.Sc. in Environmental Engineering:** 2003, «Aerosol optical properties at the area of the Eastern Mediterranean and correlation with their chemical composition»
Chemistry Department, University of Crete, Greece, Supervisor: Prof. Nikolaos Mihalopoulos
- **B.Sc. in Chemistry:** 2001, «Mass size distribution and seasonal variation of aerosol ionic composition at the area of the Eastern Mediterranean»
Chemistry Department, University of Crete, Greece, Supervisor: Prof. Nikolaos Mihalopoulos

Languages

- **English:** First Certificate in English (Level B2)
- **Spanish:** DELE B1 (Level B1)

Current Position

- **Senior Researcher:** March 2021-now, Institute of Environmental Research and Sustainable Development (IERSD), National Observatory of Athens (NOA), Greece.

Previous Positions

- **Associate Researcher:** 2009-March 2021, Institute of Environmental Research and Sustainable Development (IERSD), National Observatory of Athens (NOA), Greece
- **Scientific associate:** 2008, Institute of Environmental Research and Sustainable Development (IERSD), National Observatory of Athens (NOA), Greece
- **Scientific associate:** 2007-2008, University of Crete, Department of Chemistry, Environmental Chemical Processes Laboratory, Heraklion, Crete, Greece
- **Ph.D. student:** 2003-2007, University of Crete, Department of Chemistry, Environmental Chemical Processes Laboratory, Heraklion, Crete, Greece.

Research Projects – Role

1. Oxidative Capacity of the Atmosphere in the Eastern Mediterranean, PENED 2001 Grant / General Secretariat for Research and Technology, (2002-2005, P.I.: prof. N. Mihalopoulos, University of Crete).
2. Characterization of the physical and chemical parameters that determine the climatic role of particulate matter in the atmosphere of the eastern Mediterranean (2005, P.I.: prof. E. Stephanou, University of Crete).
3. European supersites for Atmospheric Aerosol Research EUSAAR-Co 026140 (2006-2008, P.I.: prof. N. Mihalopoulos, University of Crete)
4. OOMPH - Organics over the Ocean Modifying Particles in both Hemispheres, FP6 (2007, P.I.: Dr. J. Williams Max Plank Institute for Chemistry)
5. The water resources of Greece under conditions of climate change (2008, P.I.: prof. H. Vardavas, University of Crete)
6. DOMINO - Diel Oxidant Mechanisms In relation to Nitrogen Oxides, Max Planck Institute for Chemistry, Max Plank Institute project (2008, P.I.: Dr. M. Martinez MPI Chemistry)
7. Investigation of air quality and noise in Eastern Attica, Prefectural Administration of Eastern Attica (2008, P.I.: Dr. M. Petrakis Director of IERSD/NOA).
8. ACL/NOA - Upgrade of the Atmospheric Chemistry Laboratory of the National Observatory of Athens for the provision of chemical analyses and air pollutants measurement services, with emphasis on hazardous for public health chemical compounds (I), 3rd Community Support Framework, Operational Program "Competitiveness", Greek Ministry of Development (2007-2013, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
9. ACL/NOA - Upgrade of the Atmospheric Chemistry Laboratory of the National Observatory of Athens for the provision of chemical analyses and air pollutants measurement services, with emphasis on hazardous for public health chemical compounds (II), Greek Ministry of Development (2012-2013, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
10. THERMOPOLIS 2009 Campaign, European Space Agency (2009-2010, Coordinator: Democritus University of Thrace)
11. ACEMED - Evaluation of CALIPSO's aerosol classification scheme over Eastern Mediterranean, EUFAR Transnational Access Project (2011, P.I.: Dr. V. Amiridis, National Observatory of Athens)
12. Measurements of particulate pollutants in the area of Patras, Region of Western Greece (2011, P.I.: Dr. M. Petrakis Director of IERSD/NOA)
13. NEO - Navarino Environmental Observatory, Private funds (TEMES S.A.) (2010-2014, P.I. for IERSD: Dr. E. Gerasopoulos, National Observatory of Athens)
14. XENIOS - Climate change impacts on the touristic development of sensitive areas in the Greek territory. Case study: Messinia – Integrated Tourism Development Areas, Co-operation, Strategic Reference Framework, Hellenic Ministry of Economy, Competitiveness and Shipping (2011-2013, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
15. THESPIA: Development of synergistic and integrated methodologies and tools for the observation, managements and forecast of environmental parameters and pressures, KRIPIS: National Strategic Reference Framework NSRF 2007 - 2013, GSRT (2013-2015, P.I.: prof. N. Mihalopoulos, National Observatory of Athens)

16. Implementation of measurements and analyses of environmental indices for "atmospheric quality" along the Egnatia Highway (N. Greece), Egnatia S.A. (2015-2016, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
17. Excellence Research Program GSRT- Siemens ARISTOTELIS (2015-2017, P.I.: prof. N. Mihalopoulos, National Observatory of Athens)
18. ACTRIS II - Aerosols, Clouds, and Trace gases Research InfraStructure Network, Horizon 2020, (2015–2018, P.I.: prof. N. Mihalopoulos, National Observatory of Athens)
19. ACTRIS PPP - Aerosols, Clouds, and Trace gases Research InfraStructure Preparatory Phase Project, Horizon 2020, (2017 – 2019, P.I.: prof. N. Mihalopoulos, National Observatory of Athens)
20. PiraeusAQ - Specialized air quality measurements in the Port of Pireaus - Source identification, Funded by the Region of Attica (2017-2020, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
21. THESPIA II: Development of synergistic and integrated methodologies and tools for the observation, managements and forecast of environmental parameters and pressures, KRIPIIS: National Strategic Reference Framework NSRF 2014 - 2020, GSRT, (2017-2020, P.I.: prof. N. Mihalopoulos, National Observatory of Athens).
22. EKAD3 project - Creating in NOA a national center for collection, analysis and dissemination of satellite data for monitoring land, air and sea, Stavros Niarchos Foundation (2017–2020, P.I.: Dr. V. Amiridis, National Observatory of Athens)
23. Smart cities "The SMURBS" – exploiting EO for SMart URBan Solutions in AQ, ERA-PLANET The European network for observing our changing planet, Horizon 2020, ERA-NET, (2017-2020, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
24. EMMISION – Environmental monitoring integrated system using an IoT network, NSRF, Research-Create-Innovate 2014-2020 (2018-2020, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens)
25. PANACEA- Panhellenic infrastructure for atmospheric composition and climate change, NSRF Research-Create-Innovate 2014-2020 (2018-2021, P.I. for NOA: Dr. E. Gerasopoulos, National Observatory of Athens)
26. «The role of Organic Aerosols in Earth' climate system and human MortAlity», 1rst call for Post-Doctoral researcher by the Hellenic Foundation for Research and Innovation General Secretariat for Research and Technology, (2019-2021, P.I.: Dr Alexandra Tsimpidi)
27. SERVICE CONTRACT No ECMWF/COPERNICUS/2019/CAMS_21a_CNRS-IGE/SC1, Centre National de la Reserche Scientifique, CNRS, France, (2019-2021, P.I. for NOA: prof. N. Mihalopoulos, **P.I. for NOA: Dr. E. Liakakou**, Budget for NOA: 20.000,00€)
28. “VOCURBAN - Sources and Impacts of Volatile Organic Compounds (VOCs) in two Contrasted Urban Sites in the Greater Athene Area”, National Observatory of Athens, Internal grant, (2019-2021, **P.I.: Dr. E. Liakakou**, Budget: 8.000,00€)
29. Acidic gas-phase pollutants and their contribution to the atmospheric oxidative capacity and acidity in Athens, Ministry of Development and Investments, (2020-2022, **P.I.: Dr. E. Liakakou**, Budget: 45.545,50€)
30. InfraStress - Improving resilience of sensitive industrial plants & infrastructures exposed to cyber-physical threats, by means of an open testbed stress-testing system, H2020-SU-INFRA-2018-2019-2020 - Topic: SU-INFRA-01-2018 ‘Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe’ - Focus: Sensitive Industrial Plants and Sites (2019-2020, P.I. for NOA: V. Karastathis GI/NOA)
31. CLIMPACT – National Network for Climate Change, General Secretariat for Research and Technology of the Ministry of Development and Investment (2020-2021, P.I.: prof. N. Mihalopoulos)
32. ATMO-ACCESS - Solutions for Sustainable Access to Atmospheric Research Facilities, European Union’s Horizon 2020 Integrating and opening existing national and regional research infrastructures of European interest under grant agreement 101008004, (2021-2025, P.I. for NOA: prof. N. Mihalopoulos)
33. RI - URBANS - Research Infrastructures Services Reinforcing Air Quality Monitoring Capacities in European Urban & Industrial Areas, European Union's Horizon 2020 research and innovation programme under grant agreement No 101036245, (2021-2025, P.I. for NOA: prof. N. Mihalopoulos)

Technical Reports

1. Gerasopoulos E., **Liakakou E.**, Psiloglou B., Lianou M., Mihalopoulos N., Solomos S., Marinou E., Amiridis V., Kontoes C., "Airborne concentrations of gas and particle pollutants over the greater Athens area after the fire accident at the recycle factory of Aspropyrgos", Environmental Impact Assessment Report prepared by NOA on behalf of the Region of Attica, Directorate of Environment, PART 1 "In situ measurements", June 2015.
2. Gerasopoulos E., Solomos S., **Liakakou E.**, Psiloglou B., Lianou M., Mihalopoulos N., Marinou E., Amiridis V., Kontoes C., "Airborne concentrations of gas and particle pollutants over the greater Athens area after the fire accident at the recycle factory of Aspropyrgos", Environmental Impact Assessment Report prepared by NOA on behalf of the Region of Attica, Directorate of Environment, PART 2 "Chemical analysis and numerical modeling", July 2015..
3. Mihalopoulos, N., Gerasopoulos, E., **Liakakou E.**, Stavroulas I., Grivas G., Bougiatioti A., "Results of atmospheric air measurements in Mati, in the frame of the assessment of the environmental impact arising from the fire in Mati Eastern Attica on July 2018", Region of Attica, Directorate of Environment and Climate Change, October 2018.

Cooperation with Universities & Research Organizations

- University of Crete, Department of Chemistry, Environmental Chemical Processes Laboratory, Heraklion, Crete, Greece
- University of Ioannina, Department of Physics, Laboratory of Meteorology
- Municipality of Keratsini-Drapetsona, Attica, Greece
- The Cyprus Institute, Energy Environment and Water Research Center, Nicosia, Cyprus
- LSCE, Laboratoire des Sciences du Climat et de l'Environnement, Unité mixte CNRS-CEA-UVSQ, France
- IMT Lille Douai, Université de Lille, SAGE - Département Sciences de l'Atmosphère et Génie de l'Environnement, Lille, France

Participation on research groups and nets - Responsibilities

- 2021: Member of the Hellenic Group on Earth Observations, Team of [Climate Change Impact on Cultural and Natural Heritage Group](#)
- 2020: Member of the European Geosciences Union ([EGU](#)), ID: 253680
- 2020 : Member of the CEN TC 264/WG13 (Air quality/ Ambient air - Ozone precursors and benzene)
- 2019 - 2020: Expert of ELOT in the frame of the CEN TC 264/WG13
- 2019 - 2020: Member of the [YPATIA](#) Operational Unit of NOA
- 2016 - 2020: In charge of the [Mobile Air Quality Monitoring Station](#) of IERSD/NOA
- 2015 - 2020: Member of the [Hellenic Association for Aerosol Research \(HAAR\)](#)
- 2014 - 2020: In charge of the [Thissio Air Monitoring Station](#)
- 2011 - 2020: Member of the [Atmospheric Chemistry and Physics Group](#) of IERSD/NOA
- 2011 - 2012: Member of the [EUFAR / European Facility for Airborne Research](#)
- 2009 - 2021: Responsible for the [Atmospheric Chemistry Laboratory \(ACL\)](#) of IERSD/NOA
- 2009 - 2017 : Technical manager & Main analyst at ACL/NOA
- 2008 – 2013: Member of the Aerosol Monitoring Station of IERSD/NOA at P.Penteli
- 2008: Participation in field measurements in co-operation with the group [ORSUM](#) (Organic Reactive Species Understanding & Measurement) of the Max Plank Institute for Chemistry ([DOMINO](#) Diel Oxidant Mechanisms in relation to Nitrogen Oxides, El Arenosillo station, Doñana National Park, SW of Spain)
- 2007: Participation in field measurements in co-operation with the group [ORSUM](#) (Organic Reactive Species Understanding & Measurement) of the Max Plank Institute for Chemistry. ([OOMPH](#) - Organics over the Ocean Modifying Particles in both Hemispheres, French Oceanographic Ship Marian Dufresne, South Hemisphere)
- 2002 – 2008: Member of the [Finokalia Station](#) of the Environmental Chemical Processes Laboratory/University of Crete

***Publications in peer review scientific journals* (h-index 21, >1300 citations, Scopus, June2022)**

1. Bardouki H., ***Liakakou H.***, Economou C., Smolík J., Ždímal V., Eleftheriadis K., Lazaridis M., Dye, C., Mihalopoulos N., Chemical composition of size resolved atmospheric aerosols in the Eastern Mediterranean during summer and winter, *Atmospheric Environment*, 37, 195-208, [doi.org/10.1016/S1352-2310\(02\)00859-2](https://doi.org/10.1016/S1352-2310(02)00859-2), 2003.
2. Vrekoussis M., ***Liakakou E.***, Koçak M., Kubilay N., Oikonomou K., Sciare J., Mihalopoulos N., Seasonal variability of optical properties of aerosols in the Eastern Mediterranean, *Atmospheric Environment*, 39, 7083-7094, doi.org/10.1016/j.atmosenv.2005.08.011, 2005.
3. Vrekoussis M., ***Liakakou E.***, Mihalopoulos N., Kanakidou M., Crutzen P. J., Lelieveld J., Formation of HNO_3 and NO_3^- in the anthropogenically-influenced Eastern Mediterranean marine boundary layer, *Geophysical Research Letters*, 33, L05811, doi.org/10.1029/2005GL025069, 2006.
4. ***Liakakou E.***, Vrekoussis M., Bonsang B., Donousis Ch., Kanakidou M., Mihalopoulos N., Isoprene above the Eastern Mediterranean: Seasonal variation and contribution to the oxidation capacity of the atmosphere, *Atmospheric Environment*, 41, 1002-1010, doi.org/10.1016/j.atmosenv.2006.09.034, 2007.
5. Sciare J., Oikonomou K., Favez O., ***Liakakou E.***, Markaki Z., Cachier H., Mihalopoulos N., Long-term measurements of carbonaceous aerosols in the Eastern Mediterranean: evidence of long-range transport of biomass burning, *Atmospheric Chemistry and Physics*, 8, 5551-5563, doi.org/10.5194/acp-8-5551-2008, 2008.
6. ***Liakakou E.***, Bonsang B., Williams J., Kalivitis N., Kanakidou M., Mihalopoulos N., C2-C8 NMHCs over the Eastern Mediterranean: Seasonal variation and impact on regional oxidation chemistry, *Atmospheric Environment*, 43, 5611-5621, [doi:10.1016/j.atmosenv.2009.07.067](https://doi.org/10.1016/j.atmosenv.2009.07.067), 2009.
7. Gerasopoulos E., Kokkalis P., Amiridis V., ***Liakakou E.***, Perez C., Haustein K., Eleftheratos K., Andreae M. O., Andreae T.W., Zerefos C. S., Dust specific extinction cross-sections over the Eastern Mediterranean using the BSC-DREAM model and sun photometer data: the case of urban environments, *Annales Geophysicae*, 27, 2903-2912, doi.org/10.5194/angeo-27-2903-2009, 2009.
8. Gerasopoulos E., Kazadzis S., Vrekoussis M., Kouvarakis G., ***Liakakou E.***, Kouremeti N., Giannadaki D., Kanakidou M., Bohn B., Mihalopoulos N., Factors affecting O_3 and NO_2 photolysis frequencies measured in the eastern Mediterranean during the five-year period 2002–2006, *Journal of Geophysical Research*, 117, D22305, doi.org/10.1029/2012JD017622, 2012.
9. Paraskevopoulou D., ***Liakakou E.***, Gerasopoulos E., Theodosi C., Mihalopoulos N., Long-term characterization of organic and elemental carbon in the $\text{PM}_{2.5}$ fraction: the case of Athens Greece, *Atmospheric Chemistry and Physics*, 14, 13313-13325, doi.org/10.5194/acp-14-13313-2014, 2014.
10. Paraskevopoulou D., ***Liakakou E.***, Gerasopoulos E., Mihalopoulos N., Sources of atmospheric aerosol from long-term measurements (5 years) of chemical composition in Athens, Greece, *Science of the Total Environment*, 527–528, 165–178, doi.org/10.1016/j.scitotenv.2015.04.022, 2015.
11. Fourtziou L., ***Liakakou E.***, Stavroulas I., Theodosi C., Zarmpas P., Psiloglou B., Sciare J., Maggos T., Bairachtari K., Bougiatioti A., Gerasopoulos E., Sarda-Estève R., Bonnaire N., Mihalopoulos N., Multi-tracer approach to characterize domestic wood burning in Athens (Greece) during wintertime, *Atmospheric Environment*, 148, 89–101, doi.org/10.1016/j.atmosenv.2016.10.011, 2017. (***Corresponding author: Liakakou E.***)
12. Gratsea M., ***Liakakou E.***, Mihalopoulos N., Adamopoulos A., Tsilibari E., Gerasopoulos E., The combined effect of reduced fossil fuel consumption and increasing biomass combustion on Athen's air quality, as inferred from long term CO measurements, *Science of Total Environment*, 592, 115-123, <https://doi.org/10.1016/j.scitotenv.2017.03.045>, 2017.
13. Tsekeri, A. Amiridis, V., Lopatin, A., Marinou, E., Giannakaki, E., Pikridas, M., Sciare, J., ***Liakakou, E.***, Gerasopoulos, E., Duesing, S., Corbin, J.C., Gysel, M., Bukowiecki, N., Baars, H., Engelmann, R., Wehner, B., Kottas, M., Mamali, D., Kokkalis, P., Raptis, P.I., Stavroulas, I., Keleshis, C., Müller, D., Solomos, S., Binietoglou, I., Mihalopoulos, N., Papayannis, A., Stachlewska, I.S., Aerosol absorption profiling from the synergy of lidar and sun-photometry: The ACTRIS-2 campaigns in Germany, Greece and Cyprus, EPJ Web of Conferences 176, 08005, 28th International Laser Radar Conference ILRC 28, <https://doi.org/10.1051/epjconf/201817608005>, 2018.
14. Kalogridis A.C., Vratolis S., ***Liakakou E.***, Gerasopoulos E., Mihalopoulos N., Eleftheriadis K., Assessment of wood burning versus fossil fuel contribution to wintertime black carbon and carbon monoxide concentrations in Athens, Greece, *Atmospheric Chemistry and Physics*, 18, 10219-10236, doi.org/10.5194/acp-18-10219-2018, 2018.
15. Theodosi C., Tsagkaraki M., Zarmpas P., Grivas G., ***Liakakou E.***, Paraskevopoulou D., Lianou M., Gerasopoulos E., Mihalopoulos N., Multi-year chemical composition of the fine-aerosol fraction in

- Athens, Greece, with emphasis on the contribution of residential heating in wintertime, Atmospheric Chemistry and Physics, 18, 14371-14391, doi.org/10.5194/acp-18-14371-2018, 2018.
16. Panopoulou A., *Liakakou E.*, Gros V., Sauvage S., Locoge N., Bonsang B., Psiloglou B.E., Gerasopoulos E., Mihalopoulos N., Non-methane hydrocarbon variability in Athens during wintertime: the role of traffic and heating, Atmospheric Chemistry and Physics, 18, 16139-16154, doi.org/10.5194/acp-18-16139-2018, 2018 (*Corresponding author: Liakakou E.*).
 17. Katsanos, D., Bougiatioti, A., *Liakakou, E.*, Kaskaoutis, D.G., Stavroulas, I., Paraskevopoulou, D., Lianou, M., Psiloglou, B.E., Gerasopoulos, E., Pilinis, C., Mihalopoulos, N., Optical Properties of Near-Surface Urban Aerosols and their Chemical Tracing in a Mediterranean City (Athens), Aerosol and Air Quality Research, 19, 49-70, [doi: 10.4209/aaqr.2017.11.0544](https://doi.org/10.4209/aaqr.2017.11.0544), 2019.
 18. Stavroulas, I., Bougiatioti, A., Grivas, G., Paraskevopoulou, D., Tsagkaraki, P., Zarmpas, P., *Liakakou, E.*, Gerasopoulos, E., Mihalopoulos, N., Sources and processes that control the submicron organic aerosol composition in an urban Mediterranean environment (Athens): a high temporal-resolution chemical composition measurement study, Atmospheric Chemistry and Physics, 19, 901-919, <https://doi.org/10.5194/acp-19-901-2019>, 2019.
 19. Paraskevopoulou D., Bougiatioti A., Stavroulas I., Fang T., Lianou M., *Liakakou E.*, Gerasopoulos E., Weber R., Nenes A., Mihalopoulos N., Yearlong variability of oxidative potential of particulate matter in an urban Mediterranean environment, Atmospheric Environment, 206, 183-196, <https://doi.org/10.1016/j.atmosenv.2019.02.027>, 2019.
 20. Grivas G., Stavroulas I., *Liakakou E.*, Kaskaoutis D.G., Bougiatioti A., Paraskevopoulou, D., Gerasopoulos E., and Mihalopoulos N., Measuring the spatial variability of black carbon in Athens during wintertime, Air Quality, Atmosphere and Health, 12, 1405–1417, <https://doi.org/10.1007/s11869-019-00756-y>, 2019.
 21. Pikridas, M., Bezantakos, S., Močnik, G., Keleshis, C., Brechtel, F., Stavroulas, I., Demetriadis, G., Antoniou, P., Vouterakos, P., Argyrides, M., *Liakakou, E.*, Drinovec, L., Marinou, E., Amiridis, V., Vrekoussis, M., Mihalopoulos, N., Sciare, J., On-flight intercomparison of three miniature aerosol absorption sensors using unmanned aerial systems (UASs), Atmospheric Measurement Techniques, 12, 6425–6447, <https://doi.org/10.5194/amt-12-6425-2019>, 2019.
 22. Dumka, U. C., Kaskaoutis, D. G., Francis, D., Chaboureau, J.-P., Rashki, A., Suresh Tiwari, Sachchidanand Singh, *Liakakou E.*, Mihalopoulos N., The Role of the Intertropical Discontinuity Region and the Heat Low in Dust Emission and Transport Over the Thar Desert, India: A Premonsoon Case Study, Journal of Geophysical Research: Atmospheres, 124, 13197 - 13219, [doi:10.1029/2019JD030836](https://doi.org/10.1029/2019JD030836), 2019.
 23. *Liakakou, E.*, Stavroulas, I., Kaskaoutis, D.G., Grivas, G., Paraskevopoulou, D., Dumka, U.C., Tsagkaraki, M., Bougiatioti, A., Oikonomou, K., Sciare, J., Gerasopoulos, E., Mihalopoulos N.: Long-term variability, source apportionment and spectral properties of black carbon at an urban background site in Athens, Greece, Atmospheric Environment, 222, 117137, <https://doi.org/10.1016/j.atmosenv.2019.117137>, 2020. (*Corresponding author: Liakakou E.*)
 24. Kaskaoutis D.G, Grivas G., Theodosi Ch., Tsagkaraki M., Paraskevopoulou D., Stavroulas I., *Liakakou E.*, Gkikas A., Hatzianastassiou N., Wu C., Gerasopoulos E., Mihalopoulos N., Carbonaceous Aerosols in Contrasting Atmospheric Environments in Greek Cities: Evaluation of the EC-tracer Methods for Secondary Organic Carbon Estimation, Atmosphere, 11, 161, [doi:10.3390/atmos11020161](https://doi.org/10.3390/atmos11020161), 2020.
 25. *Liakakou E.*, Kaskaoutis D.G., Grivas G., Stavroulas I., Tsagkaraki M., Paraskevopoulou D., Bougiatioti A., Dumka U.C., Gerasopoulos E., Mihalopoulos N., Long-term brown carbon spectral characteristics in a Mediterranean city (Athens), Science of the Total Environment, 708, 135019, <https://doi.org/10.1016/j.scitotenv.2019.135019>, 2020. (*Corresponding author: Liakakou E.*)
 26. Drougka, F., *Liakakou, E.*, Sakka, A., Mitsos, D., Zacharias, N., Mihalopoulos, N., Gerasopoulos, E., Indoor Air Quality Assessment at the Library of the National Observatory of Athens, Greece, Aerosol and Air Quality Research, 20, 889-903, <https://doi.org/10.4209/aaqr.2019.07.0360>, 2020. (*Corresponding author: Liakakou E.*)
 27. Dimitriou, K., *Liakakou, E.*, Lianou, M., Psiloglou, B., Kassomenos, P., Mihalopoulos, N., Gerasopoulos, E., Implementation of an aggregate index to elucidate the influence of atmospheric synoptic conditions on air quality in Athens, Greece, Air Quality, Atmosphere & Health, 13, 447–458, <https://doi.org/10.1007/s11869-020-00810-0>, 2020.
 28. Kalkavouras, P., Bougiatioti, A., Grivas, G., Stavroulas, I., Kalivitis, N., *Liakakou, E.*, Gerasopoulos, E., Pilinis, C., Mihalopoulos, N., On the regional aspects of new particle formation in the Eastern Mediterranean: A comparative study between a background and an urban site based on long term observations, Atmospheric Research, 239, 104911, doi.org/10.1016/j.atmosres.2020.104911, 2020.

29. Sakka, A., Gerasopoulos, E., ***Liakakou, E.***, Keramitsoglou, I., Zacharias, N., Spatial variability of aerosols over Greek archaeological sites using Space-Borne Remote Sensing, *Journal of Cultural Heritage*, <https://doi.org/10.1016/j.culher.2020.07.001>, 2020.
30. Stavroulas, I., Grivas, G., Michalopoulos, P., ***Liakakou, E.***, Bougiatioti, A., Kalkavouras, P., Fameli, K.M., Hatzianastassiou, N., Mihalopoulos, N., Gerasopoulos, E., Field evaluation of low-cost PM sensors (Purple Air PA-II) under variable urban air quality conditions, in Greece, *Atmosphere*, 11, 926, <https://doi.org/10.3390/atmos11090926>, 2020.
31. Panopoulou A., ***Liakakou E.***, Sauvage S., Gros V., Locoge N., Stavroulas I., Bonsang B., Gerasopoulos E., Mihalopoulos N., Yearlong measurements of Monoterpenes and Isoprene in a Mediterranean city (Athens): Natural vs anthropogenic origin, *Atmospheric Environment*, 243, 117803, <https://doi.org/10.1016/j.atmosenv.2020.117803>, 2020. (*Corresponding author: Liakakou E.*)
32. Grivas, G., Athanasopoulou, E., Kakouri, A., Bailey, J., ***Liakakou, E.***, Stavroulas, I., Kalkavouras, P., Bougiatioti, A., Kaskaoutis, D.G., Ramonet, M., Mihalopoulos, N., Gerasopoulos, E., Integrating in situ Measurements and City Scale Modelling to Assess the COVID-19 Lockdown Effects on Emissions and Air Quality in Athens, Greece, *Atmosphere*, 11(11), 1174, <https://doi.org/10.3390/atmos11111174>, 2020.
33. Dimitriou, K., Grivas, G., ***Liakakou, E.***, Gerasopoulos, E., Mihalopoulos, N., Assessing the contribution of regional sources to urban air pollution by applying 3D-PSCF modeling, *Atmospheric Research*, 248, 105187, <https://doi.org/10.1016/j.atmosres.2020.105187>, 2021.
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1. Liakakou E., Williams J., Mihalopoulos N., PAN during the DOMINO campaign: The first results, 1st Workshop the DOMINO campaign, 3-5 November 2009, Madrid, Spain.

(2) 6th International Workshop on Sand/Duststorms and associated dustfall, 7-9 September 2011, Athens, Greece

2. Amiridis V., Marinou E., Gerasopoulos E., Kazadzis S., Gratsea M., Liakakou E., Mamouri R., Kokkalis P., Papayannis A., Kouremeti N., Giannakaki E., Balis D., Bais A., ACEMED experimental campaign for the evaluation of CALIPSO's aerosol classification scheme over Greece.
3. Gerasopoulos E., Gratsea M., Kazadzis S., Amiridis V., Vrekoussis M., Liakakou E., Dust impact on urban air quality.

- (3) ***2nd ACTRIS-2 General Meeting, 29 February – 4 March 2016, ESA/ESRIN Frascati, Italy***
4. **Liakakou E.**, Gerasopoulos E., Stavroulas I., Sciare J., Paraskevopoulou D., Psiloglou V., Mihalopoulos N., Three-years absorption measurements at an urban background site in Athens.
 5. Amiridis V. et al. (**included E. Liakakou**), Aerosol vertical profiling utilizing the synergy of lidar, sunphotometry and insitu measurements in the framework of the ACTRIS campaigns in Athens and Melpitz.
 6. Gini M.I., Fetfatzis P., Vratolis S., Corbin J., Kalogridi A.C., Diapouli E., Vasilatou V., Amiridis V., Tsekeri A., **Liakakou E.**, Mihalopoulos N., Gysel M., Eleftheriadis K., Aerosol absorption and coarse mode measurements during the JRA1 Aerosol absorption measurement campaign in Athens.
- (4) ***International workshop on Atmospheric Processes in the Mediterranean, 17 - 21 October 2016, Larnaca, Cyprus***
7. **Liakakou E.**, Gerasopoulos E., Lianou M., Fourtziou L., Gratsea M., Theodosi C.1, Stavroulas I., Psiloglou B., Bougiatioti A., Paraskevopoulou D., Sciare J., A. Nenes, Mihalopoulos N., Wood burning contribution to air pollution in Athens, Greece.
 8. Panopoulou A., **Liakakou E.**, Gros V., Sauvage S., Kalogridis A.C., Bonsang B., Locoge N., Lianou M., Psiloglou B., Gerasopoulos E., Mihalopoulos N., Trends and sources of C2-C12 non-methane hydrocarbons (NMHCs) in the Great Athens Area.
 9. Pikridas M. et al. (**included Liakakou E.**), Characterization of three miniaturized aerosol-absorption instruments, under ambient conditions.
 10. Kalogridis A.C. et al. (**included Liakakou E.**), Measurements of Volatile organic compounds using PTR-MS and investigation of the different sources to air pollution in Athens.
- (5) ***COST Action CA16109 COLOSSAL - “Chemical On-Line cOmposition and Source Apportionment of fine aerosoL”, Training School on Black and Brown Carbon, Ljubljana, Jožef Stefan Institute, Ljubljana, Slovenia, 15-17 January 2018***
11. **Liakakou E.**, Black Carbon main findings at the Athens over the period 2013-2017.
- (6) ***4th ACTRIS-2 General Meeting, Nafplio, Greece, 17-19 April, 2018***
12. **Liakakou E. et al.**, Long-term measurements of high resolution biomass burning tracers in Athens, Greece.
- (7) ***Final ACTRIS-2 General Meeting, Darmstadt, Germany 1 - 4 April 2019***
13. **Liakakou E. et al.**, Black Carbon monitoring in the Athens urban background environment over the period 2015-2018.
- (8) ***CLIMATE AND ATMOSPHERE RESEARCH & INNOVATION IN THE EASTERN MEDITERRANEAN & MIDDLE EAST, 11-12 October 2021 (VIRTUAL WORKSHOP)***
14. **Liakakou, E.**, Sauvage, S., Gros V., Locoge N., Mihalopoulos N. , C2-C12 NMHC measurements in two sites with contrasted characteristics in the Greater Athens area over the period 2015-2019 – E. Liakakou.
 15. Kaskaoutis, D.G., Grivas, G., Stavroulas, I., Bougiatioti, A., **Liakakou, E.**, Gerasopoulos, E., Mihalopoulos, N., Assessment of the spectral absorptions by Black and Brown Carbon for different sources: Application in Athens.
 16. Kaskaoutis, D.G., Grivas, G., Stavroulas, I., Bougiatioti, A., **Liakakou, E.**, Gerasopoulos , E., Mihalopoulos, N., Optical properties and the curvature effect in spectral scattering and absorption coefficients for key aerosol types identified in Athens.

Educational activities

- 2016-now: Teaching of the course "Introduction to environmental measurements and techniques" in the frame of the MSc in Cultural Heritage Materials and Technologies, Department of History, Archaeology and Cultural Resources Management, University of the Peloponnese, Greece. (<http://culttech.uop.gr/index.html>, <http://culttech.uop.gr/personnel.html>)
- 2003-2004: Assistant at courses exercises in Analytical Chemistry in the frame of the PhD studies, University of Crete, Department of Chemistry, Heraklion, Crete, Greece
- 2002: Assistant at undergraduate laboratories of Organic and Analytical Chemistry, in the frame of the PhD studies, University of Crete, Department of Chemistry, Heraklion, Crete, Greece

Supervision of students

Member of Supervising Committees of PhD Theses:

1. Anastasia Panopoulou, «*VOC source apportionment and emission inventory evaluation over the great Athens, comparison with other cities of the Mediterranean basin*», 2016-2019, University of Crete, Chemistry Department and IMT Lil Douai, Supervisor: prof. N. Mihalopoulos UoC, [co-supervision for NOA: Dr. E. Liakakou](#) (member of the 8-member examination committee and the 3-member guidance committee)

Member of Supervising Committees of MSc Theses

1. Anastasia Panopoulou, «*Non-Methane hydrocarbons at the atmosphere of the greater Athens area: the role of biomass burning during winter*», 2014-2016, University of Crete, Chemistry Department, Supervisor: prof. N. Mihalopoulos UoC, [Committee](#): prof. N. Mihalopoulos (Supervisor), prof. M. Kanakidou, [Dr. E. Liakakou](#)
2. Kyriaki Papoutsidaki, «*Source apportionment of air pollution in the Piraeus port, Greece*», 2019-2020, Chemistry Department, Supervisor: prof. N. Mihalopoulos UoC, [Committee](#): prof. N. Mihalopoulos (Supervisor), prof. M. Kanakidou, [Dr. E. Liakakou](#)

Supervision of MSc Theses:

1. Fani Drougka, «*Indoor-outdoor air quality interrelation at museum environments: The case of the Museum of Geoastrophysics at N.O.A*», 2016, University of the Peloponnese, Department of History, Archaeology and Cultural Resources Management, Greece, MSc in Cultural Heritage Materials and Technologies, [Supervisor: Dr. E. Liakakou, Committee: prof. N. Zacharias, Dr. E. Gerasopoulos, Dr. E. Liakakou](#)
2. Patrick Layton, «*Particulate Matter in the libraries of the National Observatory of Athens and Mona Velanidias; application of SEM*», 2019-2020, University of the Peloponnese, Department of History, Archaeology and Cultural Resources Management, Greece, MSc in Cultural Heritage Materials and Technologies, [Supervisors: prof. N. Zacharias and Dr. E. Liakakou](#)

Supervision of undergraduate students' diploma thesis at IERSD/NOA:

1. Theodora Dimogeronta, «*Investigation of the ionic composition of fine particulates in Attica using the automated high resolution technique PILS-IC*», University of Crete, Department of Chemistry, October 2019-September 2020, Supervisor for the UoC: prof. N. Mihalopoulos
2. Tzenia Nanouri-Lysimachou, «*Investigation of aerosol oxidative potential in Attica*», University of Crete, Department of Chemistry, October 2019-September 2020, Supervisor for the UoC: prof. N. Mihalopoulos
3. Isidora Agglou, «*Volatile Organic Compounds in the atmosphere of Athens*», National and Kapodistrian University of Athens, Department of Chemistry, October 2019-September 2020, Supervisor for the UoA: prof. E. Bakeas
4. Elena Kaliontzi, «*Investigation of carbonaceous aerosol in Attica by means of high resolution techniques*», University of Crete, Department of Chemistry, September 2021-September 2022, Supervisor for the UoC: prof. N. Mihalopoulos.

Supervision of undergraduate students' internship:

1. Anastasia, Panopoulou, «*Determination of BaP in air filter samples by means of high pressure liquid chromatography*», University of Crete, Chemistry Department, April-June 2014.
2. Nikoleta Pateraki, «*Preparation and implementation of aerosol sampling/field measurements/site audit*», University of Patras, Department of Physics, June- August 2015.
3. Fedra-Ekaterini Kozonaki, «*Synergy of measurements and numerical simulations for the characterization of atmospheric processes in the frame of pollutant emissions after industrial incident*», University of Crete, Chemistry Department, July-September 2016.
4. Maria Eleutheriadi, «*Air pollution monitoring by means of PILS-IC*», Democritus University of Thrace, July-August 2016.
5. Christina Goula, «*Audit of air monitoring station and data analysis*», University of Patras, Department

of Physics, March-May 2017.

6. Andriana Gialitaki, «Air pollution monitoring in Athens by means of contemporary techniques», Technological Educational Institute of Ionian Islands, October 2017-April 2018.
7. Pavlos Spanos, «Field measurements and data analysis», University of Patras, Physics Department, April-June 2018.
8. Eleni Labrou, «Air pollution measurements and chemical analysis», University of Patras, Chemistry Department, July-September 2018.
9. Konstantina Palli, «Air pollution measurements/chemical analysis», National and Kapodistrian University of Athens, July-September 2019.