

Curriculum Vitae

Family Name, First Name:

Liakakou Eleni (EL)

Contact information:

National Observatory of Athens

Institute for Environmental Research & Sustainable Development

I. Metaxa & Vas. Pavlou, P. Penteli, GR-15236, Athens, Greece

Tel: +30 2108109139, Fax: +30 2108103236, e-mail: liakakou@noa.gr

<http://www.meteo.noa.gr/personel.html>

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). Duties at NOA: Technical Manager–Main analyst in the Atmospheric Chemistry Laboratory (ACL), Station manager of the urban background ‘Thessio Aerosols Monitoring Station’ (Athens, Greece) and responsible for the ‘Mobile Air Quality Monitoring Station’. Experience in ISO/IEC 17025:2005 quality assurance standard application. 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 and the investigation of their optical properties. Her research interest also focuses on the non methane hydrocarbons. 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 20 research projects, published 19 articles in international peer-reviewed journals (h-index 10, more than 500 citations) and also has 45 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 (UoA), 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 (UoA), 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 (UoA), Greece, Supervisor: Prof. Nikolaos Mihalopoulos

Languages

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

Current Position

- **Associate Researcher:** 2009-now, Institute of Environmental Research and Sustainable Development (IERSD), National Observatory of Athens (NOA), Greece.

Previous Positions

- **Post doctoral researcher / 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, Role: PhD student).
2. European supersites for Atmospheric Aerosol Research EUSAAR-Co 026140 (2006-2008, P.I.: prof. N. Mihalopoulos, University of Crete, Role: scientific associate)
3. OOMPH - Organics over the Ocean Modifying Particles in both Hemispheres, FP6 (2007, P.I.: Dr. J. Williams Max Plank Institute for Chemistry, Role: scientific associate)
4. 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, Role: scientific associate)
5. Investigation of air quality and noise in Eastern Attica, Prefectural Administration of Eastern Attica (2008, P.I.: Dr. M. Petrakis Director of IERSD/NOA, Role: scientific associate).
6. 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, Role: Technical Manager–Main analyst)
7. 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, Role: Technical Manager–Main analyst)
8. THERMOPOLIS 2009 Campaign, European Space Agency (2009-2010, Coordinator: Democritus University of Thrace, Role: Researcher)
9. 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, Role: Researcher)
10. Measurements of particulate pollutants in the area of Patras, Region of Western Greece (2011, P.I.: Dr. M. Petrakis Director of IERSD/NOA, Role: Researcher)
11. NEO - Navarino Environmental Observatory, Private funds (TEMES S.A.) (2010-2014, P.I. for IERSD: Dr. E. Gerasopoulos, National Observatory of Athens, Role: Researcher)
12. 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, Role: Researcher)
13. 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, Role: Researcher)
14. 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, Role: Researcher)

15. Excellence Research Program GSRT- Siemens ARISTOTELIS (2015-2017, P.I.: prof. N. Mihalopoulos, National Observatory of Athens, Role: Researcher)
16. ACTRIS II - Aerosols, Clouds, and Trace gases Research InfraStructure Network, Horizon 2020, (2015–2018, P.I.: prof. N. Mihalopoulos, National Observatory of Athens, Role: Researcher)
17. 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)
18. PiraeusAQ - Specialized air quality measurements in the Port of Piraeus - Source identification, Funded by the Region of Attica (2017-2020, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens, Role: Researcher)
19. THESPIA II: 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 2014 - 2020, GSRT, (2017-2020, P.I.: prof. N. Mihalopoulos, National Observatory of Athens, Role: Researcher, deputy W.P. leader).
20. 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 (2017–2018, P.I.: Dr. V. Amiridis, National Observatory of Athens, Role: Researcher)
21. 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, (2017-2019, P.I.: Dr. E. Gerasopoulos, National Observatory of Athens, Role: Researcher)
22. 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, Role: Researcher)
23. 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, Role: Researcher)

Technical/Scientific 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. Gerasopoulos E., **Liakakou E.**, Psiloglou B., Roukounakis, N., Antoniadis, A., Terzopoulou, E., Valari, M., Goutsikostas, D., "Implementation of measurements and analyses of environmental indices for "atmospheric quality" along the Egnatia Highway (N. Greece)", 1st Technical Report on winter measurements campaign and carbon footprint estimation methodology, December 2015.
4. Gerasopoulos E., **Liakakou E.**, Psiloglou B., Roukounakis N., Gratsea M., Antoniadis, A., Terzopoulou, E., Valari, M., Goutsikostas, D., "Implementation of measurements and analyses of environmental indices for "atmospheric quality" along the Egnatia Highway (N. Greece)", 2nd Technical Report on summer measurements campaign, carbon footprint software and environmental indices, August 2016.
5. 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.
6. Mihalopoulos, N., Gerasopoulos, E., **Liakakou E.**, Grivas G., Bougiatioti A., Tsagaraki M., "Results of soil sampling chemical analysis collected at 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
- National Center for Scientific Research “Demokritos” (NCSR “Demokritos”), Institute of Nuclear & Radiological Sciences & Technology, Energy & Safety
- 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
- MT Lille Douai, Université de Lille, SAGE - Département Sciences de l’Atmosphère et Génie de l’Environnement, Lille, France
- Max Plank Institute for Chemistry, Mainz, Germany

Participation on research groups and nets

- 2016-now: Responsible for the ‘Mobile Air Quality Monitoring Station’ of NOA
http://www.meteo.noa.gr/aclab/aclab_infrastructure.html
- 2015-now: Member of Hellenic Association for Aerosol Research (HAAR)
<http://hellenic-aerosol.org/index.php?l=en>
- 2014-now: Station manager of the urban background ‘Thissio Aerosols Monitoring Station’ NOA, Athens, Greece,
http://www.meteo.noa.gr/aclab/aclab_infrastructure.html
- 2011-now: Member of the Atmospheric Physics and Chemistry Group (APCG) of the National Observatory of Athens
<http://apcg.meteo.noa.gr/>
- 2011-2012: Member of the EUFAR / European Facility for Airborne Research net
www.eufar.net
- 2009-now: Technical Manager–Main analyst in the Atmospheric Chemistry Laboratory (ACL)
http://www.meteo.noa.gr/aclab/aclab_index.html
- 2008-2013: Member of the Penteli Aerosol Monitoring Station of the National Observatory of Athens
(http://www.meteo.noa.gr/aclab/aclab_infrastructure.html)
- 2007-2008: Cooperation with the group ORSUM (Organic Reactive Species Understanding & Measurement), Max Plank Institute for Chemistry in the frame of the projects OOMPH - Organics over the Ocean Modifying Particles in both Hemispheres, Oceanographic ship Marian Dufresne, cruise over the South Hemisphere and DOMINO-Diel Oxidant Mechanisms in relation to Nitrogen Oxides, El Arenosillo station, Doñana National Park, SW of Spain
- 2002–2008: Member of the Finokalia Station of the University of Crete
(www.finokalia.chemistry.uoc.gr)

Publications in peer review scientific journals (h-index 10, 546 citations, Scopus, November 2018)

1. Bardouki H., Liakakou H., Economou C., Smolik J., Zdimal V., Eleftheriadis K., Lazaridis M., and 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, 2003.
2. Vrekoussis M., Liakakou E., Kocak M., Kubilay N., Oikonomou K., Sciare J., and 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., and Lelieveld J.,

Formation of HNO₃ and NO₃ in the anthropogenically-influenced Eastern Mediterranean marine boundary layer, *Geophysical Research Letters*, VOL. 33, L05811, doi.org/10.1029/2005GL025069, 2006.

4. ***Liakakou E.***, Vrekoussis M., Bonsang B., Donousis Ch., Kanakidou M., and 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., and 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. Gerasopoulos E., Kokkalis P., Amiridis V., ***Liakakou E.***, Perez C., Hausteine K., Eleftheratos K., Andreae M. O., Andreae T.W., and 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.
7. ***Liakakou E.***, Bonsang B., Williams J., Kalivitis N., Kanakidou M., and 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, 2009.
8. Gerasopoulos E., Kazadzis S., Vrekoussis M., Kouvarakis G., ***Liakakou E.***, Kouremeti N., Giannadaki D., Kanakidou M., Bohn B., and Mihalopoulos N., Factors affecting O₃ and NO₂ 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., and Mihalopoulos N., Long-term characterization of organic and elemental carbon in the 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., and 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., Zampas P., Psiloglou B., Sciare J., Maggos T., Bairachtari K., Bougiatioti A., Gerasopoulos E., Sarda-Estève R., Bonnaire N., and Mihalopoulos N., Multi-tracer approach to characterize domestic wood burning in Athens (Greece) during wintertime, *Atmospheric Environment*, Volume 148, Pages 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., and 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, doi.org/10.1016/j.scitotenv.2017.03.045, 2017.
13. Kalogridis A.C., Vratolis S., ***Liakakou E.***, Gerasopoulos E., Mihalopoulos N., and Eleftheriadis K., Assessment of wood burning versus fossil fuel contribution to wintertime black carbon and carbon monoxide concentrations in Athens, Greece, *Atmos. Chem. Phys.*, 18, 10219-10236, doi.org/10.5194/acp-18-10219-2018, 2018.
14. 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., Biniotoglou, 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 (2018), 28th International Laser Radar Conference ILRC 28, <https://doi.org/10.1051/epjconf/201817608005>, 2018.
15. Theodosi C., Tsagkarakaki M., Zampas P., Grivas G., ***Liakakou E.***, Paraskevopoulou D., Lianou M., Gerasopoulos E., and Mihalopoulos N., Multi-year chemical composition of the fine-aerosol fraction in Athens, Greece, with emphasis on the contribution of residential heating in wintertime, *Atmos. Chem. Phys.*, 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., and Mihalopoulos N., Non-methane hydrocarbon variability in Athens during wintertime: the role of traffic and heating, *Atmos. Chem. Phys.*, 18, 16139-16154, doi.org/10.5194/acp-18-16139-2018, 2018 (**corresponding author: Liakakou E.**).
17. Stavroulas I., Bougiatioti A., Grivas G., Paraskevopoulou D., Liakakou E., Gerasopoulos E. and Mihalopoulos N., Sources and Processes that control the submicron organic aerosol in an urban Mediterranean environment (Athens) using high temporal resolution chemical composition measurements, *Atmos. Chem. Phys.*, 19, 901-919, 2019.
18. Katsanos D., Bougiatioti A., Liakakou E., Kaskaoutis D.G., Stavroulas I., Paraskevopoulou D., Lianou M., Psioglou B.E., Gerasopoulos E., Pilinis C., and Mihalopoulos N.: Optical properties of near-surface urban aerosols and their chemical tracing in a Mediterranean city (Athens), *Aerosol Air Qual. Res.*, in Press, doi:10.4209/aaqr.2017.11.0544, 2019.
19. Paraskevopoulou D., Bougiatioti A., Stavroulas I., Fang T., Lianou M., Liakakou E., Gerasopoulos E., Weber R., Nenes A., and Mihalopoulos N., Yearlong variability of oxidative potential of particulate matter in an urban Mediterranean environment, *Atmos. Environ.*, 206, 183-196, 2019.

Reviewer in Scientific Journals

Boreal Environment Research, Environmental Chemistry, Atmosphere, Atmospheric Chemistry and Physics.

Publications in Conferences

Atmospheric Chemistry within the Earth System: From regional pollution to global change, 18-25 September 2002, Heraklion, Crete, Greece (attendance).

19th Pan-Hellenic Chemistry Conference, Heraklion, Crete, Greece, 6-10 November 2002,

1. Liakakou E., Bardouki H., Economou C., Smolik J., Zdimal V., Eleftheriadis K., Lazaridis M. and Mihalopoulos N., Seasonal study of chemical composition of Size Resolved Atmospheric Aerosols in the Eastern Mediterranean.

ACCENT Symposium, The Changing Chemical Climate of the Atmosphere, Urbino, Italy, 12-16 September 2005

2. Liakakou E., Bonsang B., Kanakidou M., and Mihalopoulos N., Diurnal and Seasonal Study of Isoprene at a Coastal Site in the Eastern Mediterranean.

Atmospheric Chemistry at the Interfaces, Cape Town, South Africa, 17-22 September 2006

3. Liakakou E., Bonsang B., Williams J., Kanakidou M., Mihalopoulos N., Seasonal variation of C3- C6 NMHCs over the Eastern Mediterranean.
4. Arsene C., Liakakou E., Bougiatioti A., Mihalopoulos N., Sources of non-methane hydrocarbons (NMHCs) in the Eastern Mediterranean.

European Aerosol Conference – EAC 2008, Thessaloniki, Greece, 24-29 August 2008

5. Kalivitis N., Bougiatioti A., Fountoukis C., Liakakou E., Kouvarakis G., Kopanakis I., Sciare J., Lazaridis M., Hillamo R., Nenes A., Pandis S. and Mihalopoulos N., Physicochemical characterisation of aerosols in the marine boundary layer of the Eastern Mediterranean during summer.

8th International Conference on Air Quality 2012, 19-23 March 2012, Athens, Greece

6. Paraskevopoulou D., Zarmas P., Liakakou E., Gerasopoulos E., and Mihalopoulos N., Four-year monitoring of PM_{2.5} and PM₁₀ fractions of particulate matter and ionic composition in Athens Greece.

*11th International Conference on Meteorology, Climatology and Atmospheric Physics - COMECAP 2012, Athens, Greece, 29 May – 1 June 2012 (*published as short papers)*

7. Amiridis V., Marinou E., Kazadzis S., Gerasopoulos E., Mamouri R.E., Kokkalis P., Papayannis A., Kouremeti N., Giannakaki E., Liakakou E., Paraskevopoulou D., Gratsea M., Kouvarakis G., Allakhverdiev K., Huseyinoglu F., Secgin A., Balis D., Bais A.F., Mihalopoulos N., Daglis I.A., Zerefos C.S., Evaluation of CALIPSO's aerosol classification scheme during the ACEMED experimental campaign over Greece: the case study of 9th of September 2011.
8. Gerasopoulos E., Mihalopoulos N., Kazadzis S., Vrekoussis M., Liakakou E., Kouvarakis G.,

Kouremeti N., Factors controlling the variability of photolysis rates of NO₂ and O₁D in the complex environment of the Eastern Mediterranean.

9. Paraskevopoulou D., Gerasopoulos E., Liakakou E., Gratsea M., Zarmpas P., Theodosi C., Mihalopoulos N. Optical properties of aerosols over Athens, Greece, and their relation with chemical composition.

European Aerosol Conference – EAC 2012, Granada, Spain, 2-7 September 2012

10. Athanasopoulou E., Gerasopoulos E., Vogel H., Kazadzis S., Liakakou E., Gratsea M., and Vogel B., Aerosol observations and predictions in the southeastern Europe during the extreme summer 2007.

European Aerosol Conference – EAC 2013, Prague, Czech Republic, 1-6 September 2013

11. Paraskevopoulou D., Liakakou E., Gerasopoulos E. and Mihalopoulos N.: Long-term variability of elemental and organic carbon in aerosols over Athens, Greece.
12. Gerasopoulos E., Liakakou E., Paraskevopoulou D., Zarbas P., Theodosi C., Kalivitis N., Maneas G., Mihalopoulos N., Zerefos C.: Aerosol chemical composition at NEO (Eastern Mediterranean) during the ARGON 2012 summer campaign.

European Geosciences Union General Assembly – EGU 2014, Vienna, Austria, 27 April – 2 May 2014

13. Liakakou E., Stravroulos I., Roukounakis N., Paraskevopoulou D., Fourtziou L., Psiloglou V., Gerasopoulos E., Sciare J., Mihalopoulos N., Black carbon measurements during winter 2013-2014 in Athens and intercomparison between different techniques.
14. Gerasopoulos E., Liakakou E., Psiloglou V., Stavroulas I., Fourtziou L., Roukounakis N., Lianou M., Kappos N., Zarmpas P., Kambezidis H., Sciare J., Mihalopoulos N., Smog events over Athens during winter 2013-2014: Pollution measurements and chemical characterization.
15. Paraskevopoulou D., Liakakou E., Theodosi C., Gerasopoulos E. and Mihalopoulos N., Long-term measurement of aerosol chemical composition in Athens, Greece.
16. Tsiflikiotou M., Papanastasiou D., Zarmpas P., Paraskevopoulou D., Diapouli E., Kostenidou E., Kaltsonoudis C., Bougiatioti A., Theodosi C., Kouvarakis G., Liakakou E., Vassilatou V., Siakavaras D., Biskos G., Eleftheriadis K., Gerasopoulos E., Mihalopoulos N., and Pandis S., Spatial distribution of summertime particulate matter and its composition in Greece.
17. I. Stavroulas, L. Fourtziou, P. Zarmpas, A. Bougiatioti, E. Liakakou, J. Sciare, N. Mihalopoulos, Contribution of wood combustion in winter submicron ambient aerosols over Athens

12th International Conference on Meteorology, Climatology and Atmospheric Physics - COMECAP 2014, Heraklion, Greece, 28 May – 31 May 2014

18. Paraskevopoulou D., Liakakou E., Theodosi C., Zarmpas P., Gerasopoulos E., Mihalopoulos N., Chemical mass closure of atmospheric aerosol collected over Athens, Greece.

European Geosciences Union General Assembly – EGU 2015, Vienna, Austria, 12-17 April 2015

19. Paraskevopoulou D., Liakakou E., Gerasopoulos E., Mihalopoulos N., Long-term measurements of aerosol optical parameters in Athens, Greece.

European Aerosol Conference - EAC 2015, Milan, Italy, 6-11 September 2015

20. Liakakou E., Lianou M., Gerasopoulos E., Psiloglou B., Sciare J. and Mihalopoulos N., The role of wintertime biomass burning in Athens on air pollution levels.
21. Paraskevopoulou D., Liakakou E., Gerasopoulos E., and Mihalopoulos N., Long-term aerosol optical properties over Athens, Greece, and their dependence on chemical composition.
22. Fourtziou L., Paraskevopoulou D., Liakakou E., Sciare J., Putaud J.P., and Mihalopoulos N., Inorganic particulate matter and its gaseous precursors during wintertime in Athens: Indication for HONO emission from biomass burning.
23. Theodosi C., Nicolaou P., Sciare J., Maggos T., Bairachtari K., Paraskevopoulou D., Liakakou E., Gerasopoulos E., and Mihalopoulos N., Biomass burning tracers in aerosols over Athens, Greece during winter time.

Air Quality 2016, Milan, 14-18 March 2016

24. Gratsea M., Gerasopoulos E., Liakakou E., Mihalopoulos N., Impact of biomass combustion on the urban air quality of Athens.

Fourth International Conference on Remote Sensing and Geoinformation of Environment – RSCy 2016, Paphos, Cyprus, 4-8 April 2016

25. Pikridas M., Keleshis C., Bezantakos S., Demetriades G., Liakakou E., Vrekoussis M.,

Mihalopoulos N. & Sciare J., Exploring the vertical distribution of black carbon over Athens with unmanned aerial vehicles (UAV).

European Geosciences Union General Assembly – EGU 2016, Vienna, Austria, 17–22 April 2016

26. Panopoulou A., Liakakou E., Psiloglou B., Gros V., Bonsang B., Sauvage S., Locoge N., Lianou M., Gerasopoulos E., Mihalopoulos N., Non Methane Hydrocarbons (NMHCs) at the centre of Athens: variability and relative contribution of traffic and wood burning.
27. Theodosi C., Nicolaou P., Tsagkaraki M., Liakakou E., Sciare J., Maggos T., Bairachtari K., Paraskevopoulou D., Lianou M., Gerasopoulos E., and Mihalopoulos N., Chemical composition and sources of ambient aerosol in an urban environment over Athens, Greece: Case study on the role of wintertime biomass burning.

European Aerosol Conference - EAC 2016, Tours, France, 4-9 September 2016

28. Liakakou E., Gerasopoulos E., Lianou M., Theodosi C., Paraskevopoulou D., Stavroulas I., Bougiatioti A., Furtziou L., Zampas P., Psiloglou B., Sciare J., Mihalopoulos N., Urban background aerosol monitoring (Athens center) with emphasis on biomass burning processes during winter-time and implications on air quality.
29. Gerasopoulos E., Maneas G., Kalivitis N., Metaxatos A., Liakakou E., Krejci R., Tunved P., Hansson H.C., Sciare J., Mihalopoulos N., Zerefos C., Aerosol monitoring activities at the Navarino Environmental Observatory, a new ACTRIS site in the Eastern Mediterranean.
30. Psiloglou B., Liakakou E., Paliatsos A., Mihalopoulos N., Long-term atmospheric measurements of benzene and toluene in Athens during wintertime: Indications of financial crisis influence on traffic and biomass burning emissions.
31. Pikridas M., Bezantakos S., Močnik G., Keleshis C., Brechtel Fred, Liakakou E., Bastardi F., Drinovec L., Tsekeri A., Vrekoussis M., Biskos G., Amiridis V., Mihalopoulos N., Sciare J., Comparison of three miniaturized aerosol-absorption instruments, under ambient and controlled conditions.
32. Kalogridis A.C., Fetfatzis P., Gini M., Vratolis S., Corbin J.C., Gysel M., Liakakou E., Mihalopoulos N., Eleftheriadis K., Large-scale intensive study of light absorption by urban aerosol in the Athens metropolitan Area.
33. Theodosi C., Tsagkaraki M., Zampas P., Paraskevopoulou D., Nicolaou P., Liakakou E., Lianou M., Gerasopoulos E., Mihalopoulos N., Chemical composition and mass closure of ambient aerosol in an urban environment over Athens, Greece: The role of winter time biomass burning on air pollution levels European Aerosol Conference.

13th International Conference on Meteorology, Climatology and Atmospheric Physics - COMECAP 2016, Thessaloniki, Greece, 19-21 September 2016 (*published as short papers)

34. Liakakou E., Gerasopoulos E., Lianou M., Fourtziou L., Psiloglou B., Sciare J. and Mihalopoulos N., Two years of air pollution measurements at Athens center: variability and role of wood burning.
35. Gerasopoulos E., Gratsea M., Liakakou E., Lianou M., Psiloglou B., Kappos N., Kambezidis H. and Mihalopoulos N., An overview of biomass burning impacts on Athens air quality and analysis of its increasing significance.
36. Theodosi C., Tsagkaraki M., Zampas P., P. Nicolaou, Paraskevopoulou D., Liakakou E., Lianou M., Gerasopoulos E. and Mihalopoulos N., Aerosol chemical mass closure in Athens, Greece: towards a better understanding of the seasonal variation of aerosol sources in the area.
37. Tsekeri A., Amiridis V., Lopatin A., Marinou E., Pikridas M., Sciare J., Gerasopoulos E., Liakakou E., Baars H., Kottas M., Kokkalis P., Raptis P.I., Solomos S., Binietoglou I., Mihalopoulos N., Engelmann R., Wandinger U., Ansmann A., Dubovik O. and Nenes A., Aerosol vertical profiling utilizing the synergy of lidar, sunphotometry and in-situ measurements in the framework of the ACTRIS-2 campaign in Athens.

European Geosciences Union General Assembly – EGU 2017, Vienna, Austria, 23–28 April 2017

38. Paraskevopoulou D., Bougiatioti A., Fang T., Liakakou E., Weber R., Nenes A., and Mihalopoulos N., Oxidative Potential of ambient particulate matter in Athens, Greece.
39. Bougiatioti A., Nenes A., Paraskevopoulou D., Fourtziou L., Stavroulas I., Liakakou E., Myriokefalitakis S., Daskalakis N., Weber R., Kanakidou M., Gerasopoulos E., and Mihalopoulos N., Biomass burning and its effects on fine aerosol acidity, water content and nitrogen partitioning.

28th International Laser Radar Conference, ILRC 2017, Bucharest, Romania, 25-30 June 2017

40. 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., Igloffstein, J., Wandinger, U., Ansmann, A., Dubovik, O., Goloub, P., (2017) Aerosol absorption profiling from the synergy of lidar and sun-photometry: The ACTRIS-2 campaigns in Germany, Greece and Cyprus, EPJ Web of Conferences Volume 176, 13 April 2018, Article number 08005.

36th Annual conference of the American Association for Aerosol Research, North Carolina, USA, 16-20/10/2017:

41. Paraskevopoulou D., Bougiatioti A., Fang T., Liakakou E., Weber R. J., Nenes A., Mihalopoulos N., "Oxidative Potential of Ambient Aerosol in Athens, Greece and its Dependence on Chemical Composition."

10th International Aerosol Conference (IAC 2018), Saint Louis, Missouri, USA, 2-7 September 2018:

42. Bougiatioti A., Stavroulas, I., Paraskevopoulou, D., Grivas, G., Zampas, P., Liakakou, E., Gerasopoulos, E., and Mihalopoulos N., Source apportionment and variability of submicron organic aerosol from year-long near real-time measurements over an urban Mediterranean area.

14th International Conference on Meteorology, Climatology and Atmospheric Physics - COMECAP 2018, Alexandroupolis, Greece, October 15-17, 2018

43. Liakakou E., Psiloglou B., Roukounakis N., Kappos N., Valkouma T., and Gerasopoulos E., Air Quality measurements along Egnatia Odos, in Northern Greece: Levels, diurnal patterns and contribution of sources for selected locations of open motorway, tolls and tunnels.
44. Metaxatou A., Kouvarakis G., Theodosi C., Maneas G., Kalivitis N., Stavroulas I., Liakakou E., Gerasopoulos E. and Mihalopoulos N., Navarino Environmental Observatory: Part I Long-term variability of aerosol optical properties.
45. Tsagkaraki M., Theodosi C., Metaxatos A., Zampas P., Grivas G., Liakakou E., Gerasopoulos E. and Mihalopoulos N., Navarino Environmental Observatory: Part II Chemical composition and sources of aerosols.

Publications in Workshops and Training Schools

1st Workshop the DOMINO campaign, Madrid, Spain, 3-5 November 2009

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.

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

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., and Liakakou E., Dust impact on urban air quality.

2nd ACTRIS-2 General Meeting, ESA/ESRIN Frascati, Italy, 29 February – 4 March 2016

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. Vassilis Amiridis 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. M.I. Gini, P. Fetfatzis, S. Vratolis, J. Corbin, A.C. Kalogridi, E. Diapouli, V. Vasilatou, V. Amiridis, A. Tsekeri, E. Liakakou, N. Mihalopoulos, M. Gysel, and K. Eleftheriadis, Aerosol absorption and coarse mode measurements during the JRA1 Aerosol absorption measurement campaign in Athens.

International workshop on Atmospheric Processes in the Mediterranean, Larnaca, Cyprus, 17 - 21 October 2016

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. et al. (included ***Liakakou E.***), Measurements of Volatile organic compounds using PTR-MS and investigation of the different sources to air pollution in Athens.

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.

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.

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, «Non methane hydrocarbons in Athens environment: Sources, seasonality and factors affecting their variability», 2016-present, University of Crete, Supervisor: Prof. Nikolaos Mihalopoulos, Committee: Prof. N. Mihalopoulos, Prof. M. Kanakidou, Dr. E. Liakakou.

Member of Supervising Committees of MSc Theses

1. Anastasia, Panopoulou, «Non methane hydrocarbons in Athens environment: Role of winter-time biomass burning, University of Crete», 2014-2015, Supervisor: Prof. Nikolaos Mihalopoulos, Committee: Prof. N. Mihalopoulos, Prof. M. Kanakidou, Dr. E. Liakakou.

Supervision of MSc Theses:

1. Fani Drouga, «Indoor-outdoor air quality interrelation at museum environments: The case of the Museum of Geostrophysics at N.O.A», 2016, University of the Peloponnese, MSc in Cultural Heritage Materials and Technologies, Supervisor: Dr. E. Liakakou, Committee: Prof. N. Zacharias, Dr. E. Gerasopoulos, Dr. E. Liakakou.

Supervision of students' undergraduate 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. Labrou Eleni, «Air pollution measurements and chemical analysis», University of Patras, Chemistry Department, July-September 2018.