

KOPANIA Theodora

Personal Information

DATE - PLACE OF BIRTH: 04 March 1976 in Athens, Greece
PROFESSION: Research Associate
PROFESSIONAL ADDRESS: National Observatory of Athens, Institute for
Environmental Research and Sustainable Development
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Academic Qualifications

2001: MSc in Environmental Impact Assessment, Auditing, and Management Systems.
School of Environmental Sciences, University of East Anglia, Norwich, UK.
1999: BSc in Physics. Department of Physics, National University of Athens, Greece.

Professional Experience

- ❑ 02/2006 – present: Research Associate, IERSD/National Observatory of Athens, Greece
- ❑ 06/2002 – 01/2006: External Research Scientist, IERSD/National Observatory of Athens, Greece
- ❑ 11/2001 – 05/2002: Consultant Assistant for certification of quality and environmental management systems (ISO 9000 and 14000), TQM Hellas S.A., Athens, Greece
- ❑ 09/1999 – 09/2000: Support Scientist (scientific instruments calibration), Solar & Other Energy Systems Laboratory, NCSR “Demokritos”, Athens, Greece.

Areas of Expertise

Activity in the fields of Meteorology, Climatology and Climate Change, Hydrology, Air Quality, Atmospheric Physics and Chemistry, Solar Radiation measurements, GIS and Remote Sensing and in-situ measurements.

Through the professional and research activities, experience has been gained in subjects related to:

- ❑ monitoring and maintenance/expansion of automatic weather stations (NOANN network of the National Observatory of Athens)
- ❑ field studies/campaigns, technical support (monitoring and maintenance of solar radiation scientific instruments)
- ❑ data processing and analysis
- ❑ calibration of scientific instruments (thermometers, pyranometers, flowmeters), tests of energy systems
- ❑ participation in research projects (data collection and management, map processing, use of GIS, measurements and data analysis, web development, technical reports writing, financial management, administrative assistance)
- ❑ implementation of Quality and Environmental Management Systems (ISO 9001, ISO 14001), creation of ISO procedures/documentation.

Other Qualifications/Activities

Languages

- ❑ English Cambridge First Certificate in English
- ❑ French Certificat de Langue Française, D.E.L.F.
- ❑ Spanish Basic knowledge.

Computer Skills

- ❑ Operating Systems Windows, Unix (basic knowledge)
- ❑ Software MS Office, ArcView (GIS), SPSS (basic knowledge), WordPress
- ❑ Programming Matlab (basic knowledge).

Participation in Committees

- ❑ 2013 – 2016: Member of the Young Scientists Committee of the NGO “Ecocity”, Athens
- ❑ 2009 – present: Member of the Organizing Committee and the Evaluation Committee for “Ecomobility”, “Free Mobility”, and “Eco2Mobility” (campaigns addressed to Secondary School students, Special Education students, and Second Chance students, respectively), organized by the NGO “Ecocity”, Athens.

Other

- 2018 – present: Member of Hellenic Association for Aerosol Research (HAAR).

Citation Report (Web of Science, 15/04/2024)



Publications in Scientific Journals

1. Mazi K., A. D. Koussis, S. Lykoudis, B. E. Psiloglou, G. Vitantzakis, N. Kappos, D. Katsanos, E. Rozos, I. Koletsis, T. Kopania (2023) Establishing and Operating (Pilot Phase) a Telemetric Streamflow Monitoring Network in Greece. *Hydrology*, 10(1), 19, <https://doi.org/10.3390/hydrology10010019>.
2. Kotroni V., K. Lagouvardos, A. Bezes, S. Dafis, E. Galanaki, C. Giannaros, T. Giannaros, A. Karagiannidis, I. Koletsis, T. Kopania, K. Papagiannaki, G. Papavasileiou, V. Vafeiadis, and E. Vougioulas (2021) Storm Naming in the Eastern Mediterranean: Procedures, Events Review and Impact on the Citizens Risk Perception and Readiness. *Atmosphere*, 12(11), 1537, <https://doi.org/10.3390/atmos12111537>.
3. Mamassis N., K. Mazi, E. Dimitriou, D. Kalogeras, N. Malamos, S. Lykoudis, A. Koukouvinos, I. Tsirogiannis, I. Papageorgaki, A. Papadopoulos, Y. Panagopoulos, D. Koutsoyiannis, A. Christofides, A. Efstratiadis, G. Vitantzakis, N. Kappos, D. Katsanos, B. Psiloglou, E. Rozos, T. Kopania, I. Koletsis, and A. D. Koussis (2021) OpenHi.net: A synergistically built, national-scale infrastructure for monitoring the surface waters of Greece. *Water*, 13(19), 2779, <https://doi.org/10.3390/w13192779>.
4. Lagouvardos K., V. Kotroni, A. Bezes, I. Koletsis, T. Kopania, S. Lykoudis, N. Mazarakis, K. Papagiannaki, and S. Vougioukas (2017) The automatic weather stations NOANN network of the National Observatory of Athens: operation and database. *Geoscience*

- Data Journal* (Open Access), vol. 4, issue 1, pp. 4-16, doi: 10.1002/gdj3.44.
5. Petrakis M., T. Kopania, B. Psiloglou, D. Briggs, G. Hoek, A. Aaheim, G. Shaddick, N. Sifakis, and A. Retalis (2005) GIS and remote sensing techniques in emission mapping for health management in Europe. *IASME Transactions*, vol. 2, issue 3, pp. 383-388, May 2005.
 6. Petrakis M., B. Psiloglou, C. Chalkias, M. Lianou, T. Kopania, and E. Petraki (2005) Use of satellite data for the assessment of carrying capacity for the Greek islands (case study Mykonos). *IASME Transactions*, vol. 2, issue 3, pp. 389-394, May 2005.
 7. Petrakis M., B. Psiloglou, M. Lianou, C. Chalkias, T. Kopania, and D. Briggs (2005) Development of social-environmental indicators from night light emission data. *IASME Transactions*, vol. 2, issue 3, pp. 395-399, May 2005.

Conferences

1. Raptis I.-P., Eleftheratos K., Kopania T., Kouklaki D., and Kazadzis S., Assessment of PANDORA total O₃ and total NO₂ retrievals in Athens, Greece. *15th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2021)*, Hybrid Congress, Ioannina, Greece, 26-29 September, 2021.
2. Mazi K., Koussis A. D., Lykoudis S., Vitantzakis G., Dimitriadis P., Kappos N., Psiloglou B., Katsanos D., Koletsis I., Rozos E., and Kopania T., HYDRO-NET: Hydro-telemetric Network for surface waters – Innovations and Prospects. *vEGU21: Gather Online, 23rd EGU General Assembly*, held online, 19-30 April, 2021, EGU2021-14956.
3. Raptis I.-P., Kazadzis S., Kopania D., and Amiridis V., Spectral solar measurements for atmospheric composition at Thissio station, Athens, Greece. *1st Scientific Conference PANACEA*, University of Crete, Heraklion, Crete, Greece, 23-24 September, 2019 (poster).
4. Kopania T., Kazadzis S., Lagouvardos K., Meleti C., Bais A. F., and Vougioukas S., Solar UV Index forecast and observational network of the National Observatory of Athens. *12th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2014)*, Heraklion, Crete, Greece, 28-31 May, 2014.
5. Giannakopoulos C., Lemesios G., Petrakis M., Kopania Th., and Roukounakis N., Projection of climate change in Cyprus using a variety selected regional climate models. *ADAPTtoCLIMATE International Conference*, Nicosia, Cyprus, 27-28 March, 2014.
6. Giannakopoulos C., Papadaskalopoulou C., Lemesios G., Xevgenos D., Psiloglou B., Kopania T., Petrakis M., and Loizidou M., Future climate change impact, vulnerability and adaptation assessment for the island state of Cyprus. *13th European Meteorological Society (EMS) Annual Meeting and 11th European Conference on Applications of Meteorology (ECAM)*, Reading, UK, 9-13 September, 2013 (poster FF17: EMS2013-638).
7. Kazadzis, S., Amiridis, V., Kouremeti, N., Gerasopoulos, V., and Kopania, D., Columnar aerosol absorption retrieval and effects on solar UV radiation. *International Radiation Symposium*, Dahlem Cube, Berlin, Germany, 6-10 August, 2012.
8. Lianou M., Kavouras I.G., Kopania T., and Kotronarou A., The impact of wind conditions on particle mass concentrations in Athens, Greece. *11th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2012)*, vol. 2, 1097-1103, Athens, Greece, 30 May - 1 June, 2012.
9. Petrakis M., Roukounakis N., Gerasopoulos E., Psiloglou B., Lykoudis S., and Kopania T., Use of alternative fuels for the improvement of air quality from the transport sector: The case of Eastern Attica. *12th International Conference on Environmental Science and*

- Technology (CEST 2011)*, vol. B, 881-887, Rhodes Island, Greece, 8-10 September 2011.
10. Marinou E., Amiridis V., Kazadzis S., Kopania D., and Papayannis A., Aerosol Optical Depth in East Mediterranean using MODIS and CALIPSO satellite retrievals. *European Aerosol Conference*, Manchester, UK, 4-9 September, 2011.
 11. Petrakis M., Kopania T., Retalis A., Sifakis N., Psiloglou B., and Briggs D., Assessment of Pollution Concentration and Emission mapping at regional and local scales using new generation satellites. *XXVIIIth URSI General Assembly*, F07.3(0515), New Delhi, India, 23-29 October, 2005.
 12. Petrakis M., Kopania T., Briggs D., Aahiem A., Hoek G., Shaddick G., Retalis A., and Sifakis N., Remote Sensing and GIS as pollution model validation and emission assessment tools. *10th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (HARMO10)*, Proceedings, 291-295, Sissi (Malia), Crete, Greece, 17-20 October, 2005.
 13. Petrakis M., Kavouras I., Psiloglou B.E., Lykoudis S., and Kopania T., Assessment of traffic induced pollution from the new highway of Athens (Attiki odos). *10th International Conference on Harmonisation within Atmospheric Dispersion Modeling for Regulatory Purposes (HARMO10)*, Proceedings, 616-620, Sissi (Malia), Crete, Greece, 17-20 October, 2005.
 14. Petrakis M., Psiloglou B., and Kopania T., Assessment of pollution concentration and emission mapping at regional and local scales using new generation satellites in the context of the GMES APMoSPHERE Project. *31st International Symposium on Remote Sensing of Environment*, Saint Petersburg, Russia, 20-24 June, 2005.

Technical/Scientific Reports

1. Giannakopoulos C., Petrakis M., Kopania T., Lemesios G., and Roukounakis N., Projection of climate change in Cyprus with the use of selected regional climate models. Deliverable 3.2 of CYPADAPT project (Development of a national strategy for adaptation to climate change adverse impacts in Cyprus) funded by the EU Life Programme (project no. LIFE10 ENV/CY/000723), 2012.
2. Giannakopoulos C., Kopania T., Kostopoulou E., and Petrakis M., Literature review and evaluation on the state-of-the-science computer-based climate simulation models. Deliverable 3.1 of CYPADAPT project (Development of a national strategy for adaptation to climate change adverse impacts in Cyprus) funded by the EU Life Programme (project no. LIFE10 ENV/CY/000723), 2012.
3. Petrakis M., Roukounakis N., and Kopania T., Preliminary study of the air pollution and noise impacts in the area of Kasteli, Crete, derived from the construction of the new airport. August 2009 (*in Greek*).
4. Petrakis M., Psiloglou B., Gerasopoulos E., Lykoudis S., Roukounakis N., Kopania T., and Liakakou E., Investigation of air quality and noise in Eastern Attica, Prefectural Administration of Eastern Attica. Final Report, Prefectural Administration of Eastern Attica, May 2009 (*in Greek*).
5. NOAA/IERSD, Climate changes in six European countries due to a 2°C global temperature rise. Report of INTERREG project, October 2006.
6. NOAA/IERSD, APMoSPHERE Mid-term Review. Satellite Data Analysis: WP6 of APMoSPHERE project, October 2004.
7. NOAA/IERSD, Review of the air quality in the Olympic sport centres, the Olympic Village and Broadcast Centres, the Olympic works and the Olympic Cities – Comparison with the

- air quality of big cities in Europe. Report for HELLAS 2004 programme, February 2004 (*in Greek*).
8. NOA/IERSD, Satellite mapping scoping report. Deliverable DL12 under WP6 of APMoSPHERE project, November 2003.
 9. NOA/IERSD (Petrakis M, Kavouras I., Psiloglou B.E., Chalbot M.-C, Vei I.-C., Lykoudis S., Akylas E. and Kopania T.) and Impetus S.A., Investigation of the impact of Attiki Odos Motorway on air quality and noise in the greater area of Athens. Final report (~400 pages + annexes), TE-06, ed. 2.0, Hellenic Ministry for the Environment, Physical Planning and Public Works, General Secretariat for Public Works, October 2003 (*in Greek*).
 10. Kotronarou A., Lalas D., Kopania T., Vei I., Georgopoulou E., Mirasgendis S., and Athanassiadi V., Establishment and Operation of Permanent Infrastructure for the Inspection of Compliance with Environmental Permits in Cyprus (INSPECTORATE). 2nd interim report of INSPECTORATE project, April 2003 (*in Greek*).

Projects – Participation as Member of Work Team

1. PICO – PhysICs fOr all. European Research Executive Agency, Horizon - Marie Skłodowska-Curie Actions (MSCA) 2023, 04/2024-03/2026.
2. CLIMPACT II – Support for upgrading the operation of the National Network for Climate Change. National Component of the Public Investment Programme (PIP) of the General Secretariat for Research and Innovation (GSRI), 03/2023-12/2025.
3. CLIMA-GRID21 – Provision of a wide range of weather & climate services for the municipality of Rethymno. Municipality of Rethymno, 10/2021-07/2026.
4. Monitoring system of meteorological and air quality conditions at the Municipality of Kato Nevrokopi. Municipality of Nevrokopi, 2020-2021.
5. DESFA-ZEYS – Estimating lightning risk over Greece. DESFA (Hellenic Gas Transmission System Operator) & COSMOTE (Mobile Telecommunications), 2019-2021.
6. RENA II – REsearchers' Nights organized by Athens area Research Institutions to convey the science benefits to the public and motivate young people to science careers. EU, Research and Innovation Framework Programme, Horizon 2020, 06/2018-01/2020.
7. HYDRO-NET – Hydro-Telemetric Networks of Surface Waters: Gauging instruments, smart technologies, installation and operation. Co-funded by the EU & the Hellenic Ministry of Economy and Development, National Strategic Reference Framework NSRF 2014-2020, 2018-2021.
8. KRIPIS II - THESPIA II – Development of synergistic and integrated methodologies and tools for the observation, management and forecast of environmental parameters and pressures. GSRT, National Strategic Reference Framework NSRF 2014-2020, 2017-2020.
9. DISARM – Drought and fire obServatory and eArly waRning systeM. European Union (ERDF) and national funds of the participating countries of the Programme EU-Interreg Balkan-Mediterranean 2014-2020, 2017-2019.
10. BERTISS – Balkan-mEd Real TIme Severe weather Service. European Union (ERDF) and national funds of the participating countries of the Programme EU-Interreg Balkan-Mediterranean 2014-2020, 2017-2019.
11. RENA – REsearchers' Nights organized by Athens area Research Institutions to convey the science benefits to the public and motivate young people to science careers. EU, Research and Innovation Framework Programme, Horizon 2020, 05/2016-11/2017.

12. REN-ATHENS – REsearchers’ Night: meeting science and your next door scientist. EU, Research and Innovation Framework Programme, Horizon 2020, 05/2014-10/2015.
13. KRIPIS - THESPIA – Development of synergistic and integrated methodologies and tools for the observation, management and forecast of environmental parameters and pressures. Infrastructure project, Greek Ministry of Education and Religious Affairs, GSRT, National Strategic Reference Framework NSRF 2007-2013, 01/2013-12/2015.
14. CYPADAPT – Development of a national strategy for adaptation to climate change adverse impacts in Cyprus. EU, LIFE+ Environment Policy and Governance 2010, 09/2011-03/2014.
15. 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.
16. XENIOS – Climate change impacts on the touristic development of sensitive areas in the Greek territory. Case study: Messinia - Integrated Tourism Development Areas (ITDAs). Hellenic Ministry of Economy, Competitiveness and Shipping, National Strategic Reference Framework NSRF 2007-2013, 12/2010-12/2013.
17. ACI-UV – Aerosol and Cloud Influence on global surface UV irradiance retrieved from satellite sensors. FP7 - People, Marie Curie Intra European Fellowship, Contr. No. 247492, 06/2010-05/2013.
18. UMMS – Intelligent Urban Mobility Management and traffic control System for the improvement of the urban environment quality in the central area of Thessaloniki's agglomeration. Financial Mechanism “European Economic Association” 2004-2009, Priority sector “Environment and Sustainable Development”, 07/2009-08/2012.
19. Investigation of air quality and noise in Eastern Attica. Prefectural Administration of Eastern Attica, 2008-2010.
20. Weather forecasts for the private sector, weather related applications and info, www.meteo.gr. Funded by Private Sector, involved since 2012, 2006-present.
21. ARISTEIA – Financial aid for the upgrade, maintenance and support of IERSD infrastructure. General Secretariat for Research and Technology, Excellence in Research Institutes of GSRT (2nd round), Operational Programme “Competitiveness”, 12/2005-06/2008.
22. 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 Programme “Competitiveness”, Greek Ministry of Development, 2005-2013.
23. Investigation of the impact of Attiki Odos Motorway on air quality and noise in the greater area of Athens. Hellenic Ministry for the Environment, Physical Planning and Public Works, General Secretariat for Public Works, 01/2003-12/2003.
24. APMoSPHERE – Air Pollution Modelling for Support to Policy on Health, Environment and Risk Management in Europe. Global Monitoring for Environment and Security (GMES) initiative, 5th Research Framework Programme of the European Union, DG-Environment (EVK2-CT-2002-00176), 12/2002-08/2005.
25. INSPECTORATE – Establishment and Operation of Permanent Infrastructure for the Inspection of Compliance with Environmental Permits in Cyprus. Ministry of Agriculture, Natural Resources & Environment of Cyprus, 04/2002-09/2003.

26. HELLAS 2004 – Infrastructure Works in Cities where Football Trial Games will be held, Infrastructure Works and Upgrading of points of entry into Greece, Promotion and Upgrading of Touristic Regions. Action Programme for Ancient Olympia, Ministry of Culture / General Secretariat for the Olympic Games 2004, NOA/IERSD, 12/2001-09/2002.
27. MANTLE – Mapping Night-time Light Emissions in the EU using satellite-observed visible-near infrared emissions as a policy tool. Information Society Technologies Programme, participants from Greece, UK, Italy, and France, 11/2000-10/2002.
28. XENOPHON II. Leonardo da Vinci European programme, European Union Community Vocational Training Action Programme, EMI S.A.-Management Consultants, involved 11/2001-05/2002.
29. Infrastructure of the Solar and Other Energy Systems Laboratory, Operational Programme Industry. 2nd Community Support Framework (CSF), NCSR “Demokritos”, involved 09/1999-09/2000.