

Dimitris K. Papanastasiou – Assistant Professor

Department of Environmental Sciences, University of Thessaly, Greece

Short Curriculum Vitae



Personal Information

Sex: Male | Nationality: Greek | Email: dkpapan -at- uth.gr

Education

- BSc in Physics (minimum duration of studies: 4 years), Aristotle University of Thessaloniki, Greece, 1995
- MSc in Environmental Physics, Aristotle University of Thessaloniki, Greece, 2000
- PhD in Atmospheric Pollution and Meteorology, Aristotle University of Thessaloniki, Greece, 2007

Current Academic Position

Assistant Professor, Department of Environmental Sciences, School of Technology, University of Thessaly, Greece Expertise: Atmospheric pollution, meteorology, and emissions to the air, in urban and rural environment

Research Interests

- Monitoring and analysis of atmospheric pollution levels, meteorological parameters, levels of thermal comfort of humans and animals, air quality and climatic conditions in agricultural buildings
- Urban heat island
- Emissions of atmospheric pollutants and greenhouse gases, environmental impact assessment
- Environmental education and training

Publications

- In peer-reviewed international scientific journals: 36 For the full list, please go to page 3
- In international scientific conferences: 46
- In national scientific conferences: 35
- In technical journal: 1
- Third Party Citations*: > 1030 , h-Index*: 17
 * Source: Scopus, self-citations of all authors were excluded

Foreign Languages

English (level C2), French (level B2), German (level B1)

Work experience

Teaching

- 2021 today: Assistant Professor, University of Thessaly, Greece
- 2007 2021: Lecturer under contract, University of Thessaly, Greece
- 2013 today: Collaborating Educational Staff in Postgraduate Programmes, Hellenic Open University, Greece
- 2001 2013: Lecturer and Assistant Professor under contract, Technological Educational Institutes of Thessaloniki, West Macedonia (Kozani), and Larissa, Greece
- Principal Supervisor of 2 PhD students' theses, member of the advisory committee of 1 more PhD student's thesis, member of the evaluation committee of 3 more PhD students' theses
- Principal Supervisor of 29 postgraduate students' theses, member of the evaluation committee of 34 more postgraduate students' theses
- Principal Supervisor of 25 undergraduate students' theses, member of the evaluation committee of 20 more undergraduate students' theses
- 2010 2020: Adult Trainer, Foundation for Youth and Lifelong Learning, Greece



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Short Curriculum Vitae



Research

- 2020 today: Researcher, University of Thessaly, Greece
- 2007 2023: Researcher, Institute of Bio-economy and Agri-technology, Centre for Research and Technology Hellas, Greece
- 2010 2014: Researcher, Aristotle University of Thessaloniki, Greece
- Participation in 30 research, development, and networking projects. Scientific responsible of 3 projects. For an indicative list, please go to page 5

Other

- 2018 2020: Associate to support municipalities and their stakeholders in environmental projects, Hellenic Agency for Local Development and Local Government, Greece
- 1994 2000: Insurance Counsellor to assess the hazard possibility of special insurance contracts

Administrative experience

Assigned by the Assembly of the Department of Environmental Sciences

- Member of the Coordinating Committee of the Postgraduate Studies Program "Environmental Management" of the Department
- Member of the Certification Committee of the Postgraduate Studies Program "Environmental Management" of the Department as a Member of the Coordinating Committee of the Postgraduate Studies Program
- Responsible for the course "Biosphere, Energy and Climate Change" of the Postgraduate Studies Program "Environmental Management" of the Department
- Member of the Internal Evaluation Group (OM.E.A.) of the Department
- Member of the Certification Committee of the Department
- Member of 6 Committees of the Department (Ethics, Research Planning, Equipment and Infrastructure, Representation of the Faculty Members of the Department in the Student Disciplinary Council of the University of Thessaly, Study Advisors)
- Academic Advisor for Postgraduate Students
- Member of 14 Committees for the evaluation of candidates for the support of educational activities of the Department and Substitute Member of 8 more corresponding Committees
- Member of 4 Committees for the appeals of candidates for the support of the educational activities of the Department
- Member of 1 Committee for the evaluation of Doctoral Candidates and of 1 Committee for the evaluation of Postdoctoral Candidates
- Member and Evaluator of 2 Committees for placement examinations and re-Evaluator of 1 more Committee for placement examinations
- Member of 1 Committee for the evaluation of application for courses recognition
- Member of 1 Committee for the appeals of practical training
- Substitute Member of the Electoral Committee in the context of the electoral procedure for the appointment of the President of the Department

Assigned by the Research Committee of the University of Thessaly

- Member of 9 Personnel Evaluation Committees within the framework of projects and Substitute Member of 3 more corresponding Committees
- Member of 11 annual Committees for the receipt of supplies of consumables / equipment and the provision of project services and Substitute Member of 6 more corresponding Committees
- Member of 1 Committee for the conduct of an open electronic tender



Department of Environmental Sciences, University of Thessaly, Greece

Short Curriculum Vitae



Additional Information

- COST Action No 21124, LIFT, Member of the Management Committee
- COST action No 20108, FAIRNESS, Member of the Management Committee
- COST Action No 16106, LivAGE, Substitute Member of the Management Committee
- COST Action No 15134, GroupHouseNet, Substitute Member of the Management Committee
- COST Review Panel Member 2017, Scientific Field Agricultural Sciences, Sub-Field Animal and Dairy Science
- Ministry of Development, General Secretariat for Research & Innovation, Member of the Register of Certified Evaluators
- Hellenic Foundation for Research and Innovation, Member of the Register of Certified Evaluators Experts
 - CIGR (International Commission of Agricultural and Biosystems Engineering):
 - Member of Technical Section II (Structures and Environment)
 - Technical Section II (Structures and Environment), Member of the Working Group on Animal Housing in Hot Climates
- Reviewer in 21 international scientific journals, Guest Editor in a special issue of an international scientific journal, Review Editor in an international scientific journal
- Member of the scientific committee of 10 conferences
- Presentations in 32 training courses and seminars
- Certified Adult Trainer and Trainer of Adult Trainers, by the National Organization for the Certification of Qualifications & Vocational Guidance

Publications in peer-reviewed international scientific journals - Full list

1. **Papanastasiou DK**, Melas D, Kioutsioukis I, 2007. Development and assessment of neural network and multiple regression models in order to predict PM10 levels in a medium-sized Mediterranean city. Water, Air and Soil Pollution 182, 325 – 334.

2. **Papanastasiou DK,** Melas D, 2008. Daily Ozone Forecasting in an Urban Area, using Meteorological & Pollution Data. Fresenius Environmental Bulletin 17 (3), 364 – 370.

3. **Papanastasiou DK**, Melas D, 2009. Statistical Characteristics of Ozone and PM10 Levels in a Medium Sized Mediterranean City. International Journal of Environment and Pollution 36 (1/2/3), Special Issue on Air Pollution, 127 – 138.

4. **Papanastasiou DK,** Melas D, 2009. Climatology and impact on air quality of sea breeze in an urban coastal environment. International Journal of Climatology 29, 305 – 315.

5. Georgoulias A, **Papanastasiou DK**, Melas D, Amiridis V, Alexandri G, 2009. Statistical analysis of boundary layer heights in a suburban environment. Meteorology and Atmospheric Physics 104, 103 – 111.

6. **Papanastasiou DK,** Melas D, 2010. Application of PM10's statistical distribution to air quality management – a case study in central Greece. Water, Air and Soil Pollution 207, 115 – 122.

7. **Papanastasiou DK,** Melas D, Bartzanas T, Kittas C, 2010. Temperature, comfort and pollution levels during heat waves and the role of sea breeze. International Journal of Biometeorology 54, 307 – 317.

8. **Papanastasiou DK**, Poupkou A, Katragkou E, Amiridis V, Melas D, Mihalopoulos N, Basart S, Pérez C, Baldasano JM, 2010. An assessment of the efficiency of dust regional modelling to predict Saharan dust transport episodes. Advances in Meteorology, vol. 2010, Article ID 154368.

9. **Papanastasiou DK,** Melas D, Lissaridis I, 2010. Study of wind field under sea breeze conditions; an application of WRF model. Atmospheric Research. 98, 102–117.

10. **Papanastasiou DK,** Fidaros D, Bartzanas T, Kittas C, 2011. Monitoring particulate matter levels and climate conditions in a Greek sheep and goat livestock building. Environmental Monitoring & Assessment 183, 285 – 296.

11. Poupkou A, Zanis P, Nastos P, **Papanastasiou D**, Melas D, Tourpali K, Zerefos C, 2011. Present climate trend analysis of the Etesian winds in the Aegean Sea. Theoretical and Applied Climatology 106, 459 – 472.

12. Banja M, **Papanastasiou DK**, Poupkou A, Melas D, 2012. Development of a short-term ozone prediction tool in Tirana area based on meteorological variables. Atmospheric Pollution Research 3, 32 – 38.



Department of Environmental Sciences, University of Thessaly, Greece

Short Curriculum Vitae



13. **Papanastasiou DK**, Kittas C, 2012. Maximum urban heat island intensity in a medium sized coastal Mediterranean city. Theoretical and Applied Climatology 107, 407 – 416.

14. **Papanastasiou DK,** Melas D, Bartzanas T, Kittas C, 2012. Estimation of ozone trend in central Greece based on meteorologically adjusted time series. Environmental Modeling & Assessment 17, 353 – 361.

15. Ikonomidis S, **Papanastasiou D**, Melas D, Avgoloupis S, 2012. The anthropogenic "Greenhouse Effect": Greek prospective primary teachers' ideas about causes, consequences and cures. Journal of Science Education and Technology 21, 768 – 779.

16. **Papanastasiou DK,** Fidaros D, Bartzanas T, Kittas C, 2013. Impact of urban heat island development on buildings' energy consumption. Fresenius Environmental Bulletin 22 (7a), 2087 – 2092.

17. **Papanastasiou DK**, Avgoloupis S, Melas D, Ikonomidis S, 2014. Future primary teachers' knowledge and understanding of environmental quality issues – a questionnaire survey. Global Nest Journal 16, 929 – 937.

18. **Papanastasiou D,** Bartzanas T, Panagakis P, Kittas C, 2014. Assessment of a typical sheep barn based on potential seasonal heat-stress of dairy ewes. Applied Engineering in Agriculture 30, 953 – 959.

19. **Papanastasiou DK,** Melas D, Kambezidis HD, 2014. Heat waves characteristics and their relation to air quality in Athens. Global Nest Journal 16, 919 – 928.

20. **Papanastasiou DK,** Bartzanas T, Kittas C, 2015. Classification of potential sheep heat-stress levels according to the prevailing meteorological conditions. Agricultural Engineering International: CIGR Journal, Special issue 2015: 18th World Congress of CIGR: 57 – 64.

21. **Papanastasiou DK**, Melas D, Kambezidis HD, 2015. Air quality and thermal comfort levels under extreme hot weather. Atmospheric Research 152, 4 - 13.

22. Antoniadis D, Katsoulas N, **Papanastasiou D**, Christidou V, Kittas, C, 2016. Evaluation of thermal comfort in schoolyards under Mediterranean climate conditions. International Journal of Biometeorology 60, 319 – 334.

23. **Papanastasiou DK**, Bartzanas T, Panagakis P, Zhang G, Kittas C, 2016. Study of heat-stress levels in naturally ventilated sheep barns during heat waves: development and assessment of regression models. International Journal of Biometeorology 60, 1637 – 1644.

24. Giannenas I, Bonos E, Anestis V, Filioussis G, **Papanastasiou DK**, Bartzanas T, Papaioannou N, Tzora A, Skoufos I, 2017. Effects of protease addition and replacement of soybean meal by corn gluten meal on the growth of broilers and on the environmental performances of a broiler production system in Greece. PLoS ONE 12(1), e0169511.

25. Tzora A, Giannenas I, Karamoutsios A, Papaioannou N, **Papanastasiou D,** Bonos E, Skoufos S, Bartzanas T, Skoufos I, 2017. Effects of oregano, attapulgite, benzoic acid and their blend on chicken performance, intestinal microbiology and intestinal morphology. The Journal of Poultry Science 54, 218 – 227.

26. Pu X, Wang T, Huang X, Melas D, Zanis P, **Papanastasiou DK,** Poupkou A, 2017. Enhanced surface ozone during the heat wave of 2013 in Yangtze River Delta region, China. Science of the Total Environment 603 – 604, 807 – 816.

27. Baxevanou CA, Fidaros DK, **Papanastasiou DK**, Bartzanas T, Kittas C, 2017. Numerical simulation of flow and transport phenomena in a livestock building. Environmental Engineering and Management Journal 16, 2513 – 2523.

28. **Papanastasiou DK**, Panagakis P, Anestis V, Bartzanas T, Skoufos I, Tzora A, Kittas C, 2018. Environmental conditions, potential heat-stress state and their relations in a sheep barn under hot climate. CIGR Journal, Special Issue: Animal housing in hot climate.

29. Nakov D, Hristov S, Stankovic B, Pol F, Dimitrov I, Ilieski V, Mormede P, Hervé J, Terenina E, Lieubeau B, **Papanastasiou DK,** Bartzanas T, Norton T, Piette D, Tullo E, van Dixhoorn IDE, 2019. Methodologies for assessing disease tolerance in pigs. Frontiers in Veterinary Science 5:329.

30. Anestis V, **Papanastasiou DK**, Bartzanas T, Giannenas I, Skoufos I, Kittas C, 2020. Effect of a dietary modification for fattening pigs on the environmental performance of commercial pig production in Greece. Sustainable Production and Consumption 22, 162 – 176.

31. Antoniadis D, Katsoulas N, **Papanastasiou DK**, 2020. Thermal environment of urban schoolyards: current and future design with respect to children's thermal comfort. Atmosphere 11, 1144.

32. Niemi JK, Edwards SA, **Papanastasiou DK**, Piette D, Stygar AH, Wallenbeck A, Valros A, 2021. Costeffectiveness analysis of seven measures to reduce tail biting lesions in fattening pigs. Frontiers in Veterinary Science 8:682330.

Dimitris K. Papanastasiou – Assistant Professor



Department of Environmental Sciences, University of Thessaly, Greece

Short Curriculum Vitae



33. Liora N, Kontos S, Parliari D, Akritidis D, Poupkou A, **Papanastasiou DK**, Melas D, 2022. "On-Line" Heating Emissions Based on WRF Meteorology – Application and Evaluation of a Modeling System over Greece. Atmosphere 13, 568.

34. Katsoulas N, Aslanidou M, **Papanastasiou DK**, Anestis V, 2023. Environmental impact assessment of aquaponic vegetable production: initial results. Acta Horticulturae 1377, 911 – 915

35. **Papanastasiou DK,** Keppas S, Melas D, Katsoulas N, 2023. Estimation of crops future irrigation water needs in a Mediterranean plain. Sustainability 15(21), 15548.

36. Avgeri EN, **Papanastasiou DK**, 2024. Atmospheric pollution depicted in Impressionists' paintings. Sustainability 16(22), 10147.

Participation in research, development, and networking projects - Indicative list

- Investigation of the climatological characteristics and study of the urban heat island in the greater urban area of Volos. Hellenic State Scholarship Foundation (I.K.Y.), Scholarship Programme: "Postdoctoral Research in Greece 2009 – 2010", 2010 – 2011.
- Development of water management plans, in Thessaly, Epirus and west central Greece, according to the EU Directive 2000/60/EC. Hellenic Ministry of Environment, Energy and Climate Change, 2010 2012.

Smart Controlled Environment Agriculture Systems (SMART-CEA). FP7-PEOPLE-2010-IRSES, 2011 – 2015.

Assessment of techniques and technologies for reducing the environmental footprint of poultry facilities (Green Poultry). Cooperation Programme 2011, Hellenic General Secretariat for Research & Technology, 2013 – 2015.

Regional climate-air quality interactions (REQUA). FP7-PEOPLE-2013-IRSES, 2014 – 2018.

Development and assessment of equipment and constructions issues for the sustainable sheep and goat production. Programme to develop Industrial Research and Technology (PAVET) 2013, Hellenic General Secretariat for Research & Technology, 2014 – 2015.

- Synergy for preventing damaging behaviour in group housed pigs and chickens (GroupHouseNet). COST Action No 15134, 2016 2020.
- Ammonia and Greenhouse Gases Emissions from Animal Production Buildings (LivAGE). COST Action No 16106, 2017 2021.
- Development of a broiler meat production system with reduced environmental impact and antibiotic free (Green Poultry Meat Antifree). "Research Create Innovate" Action, Hellenic General Secretariat for Research & Technology, 2018 2022. Scientific responsible of the Centre for Research and Technology Hellas (partner).
- Valorisation of ancient farming techniques in resilient and sustainable agriculture (Valor). Erasmus+, KA2 Cooperation for innovation and the exchange of good practices Knowledge Alliances for higher education, 2019 2022.
- Training Material for GCE (Global Citizenship Education) in rural areas (Rural GCE). Erasmus+, KA2 Cooperation for innovation and the exchange of good practices KA204 Strategic Partnerships for adult education, 2019 2022.
- Innovative actions to adapt to climate change impacts, with emphasis on land uses and water resources management (KARLA climate-land-water). "Natural Environment & Innovative Actions 2020" Funding Program, "Proposals Innovative actions with citizens 2021" Call, Green Fund, Ministry of Environment and Energy, 2021 2024. Scientific responsible of the University of Thessaly (partner)

Fair network of micrometeorological measurements (FAIRNESS). COST Action No 20108, 2021 – 2025.

Lifting farm animal lives – laying the foundations for positive animal welfare (LIFT). COST Action No 21124, 2022 – 2026.

Crop and livestock stress under climate change scenarios (AGRO FUTURE CLIMATE STRESS). Greece 2.0, Basic Research Financing Action (Horizontal support of all Sciences), Sub-action 2, Funding Projects in Leading-Edge Sectors, Hellenic Foundation for Research & Innovation, 2023 – 2025. Scientific responsible of the project and of the University of Thessaly (partner)

Innovative integral approach for WOOD waste depollution and multi-sector valorization (IN2WOOD). HORIZON-JU-CBE-2024-RIA-01, 2025 – 2029.