

Curriculum Vitae

PERSONAL INFORMATION

First name / Surname Anastasia Poupkou
Institute Academy of Athens, Research Center for Atmospheric Physics and Climatology
Position in Institute Senior Researcher
Address 79 Vasilissis Sofias, 11521, Athens, Greece
Telephone(s) +30 2108832048
E-mail apoupkou@academyofathens.gr
Nationality Greek

EDUCATION

Title of qualification awarded PhD in Atmospheric Physics
Organisation providing education Aristotle University of Thessaloniki, Department of Physics

Title of qualification awarded MSc in Environmental Physics
Organisation providing education Aristotle University of Thessaloniki, Department of Physics

Title of qualification awarded BSc in Physics
Organisation providing education Aristotle University of Thessaloniki, Department of Physics

WORK EXPERIENCE

Institute Academy of Athens, Research Centre for Atmospheric Physics and Climatology, 11521 Athens, Greece
Position in Institute Researcher in the framework of the projects LIFE-IP AdaptInGR (EU), Climate-KIC Hub Greece (EU), NAVGREEN (National) and Agro Future Climate Stress (National). Research Associate in the framework of the EU research project MACC II
Main activities and responsibilities Climate indicators analysis, Data analysis, Chemical modelling, Pollutant emissions estimation, Comparison of Chemical Transport Model results with surface observational data

Institute Aristotle University of Thessaloniki, Department of Physics, Laboratory of Atmospheric Physics, PO Box :149, 54124 Thessaloniki, Greece
Position in Institute Research Associate in the framework of a) 10 EU research projects (LIFE ASTI,REQUA, PASODOBLE, CECILIA, GOA, CRYOPLANE and other), b) 6 research projects of the European Space Agency (PROMOTE, PROMOTE-2, PHAETHON, etc), c) 2 research projects of the European Territorial Cooperation MED Programme (APICE, CAIMANS), d) 1 research project funded by the University of Genoa, e) 1 research project funded by the Finnish Meteorological Institute, f) 1 research project funded by the TEXAS A&M University at QATAR, g) 2 Interreg MED projects (REMEDI0, WECAREMED) and h) 11 National research projects
Main activities and responsibilities Air quality modelling, Natural and anthropogenic pollutant emissions modelling, Model evaluation, Pollutant emissions impact assessment, Climate change impact assessment on natural emissions and air quality, Atmospheric processes analysis, Air pollution source apportionment

Institute University of Patras, Department of Physics, Laboratory of Atmospheric Physics, 26504 Patras, Greece
Position held Research Associate in the framework of the EU research project CESAPO
Main activities and responsibilities Natural and anthropogenic pollutants emissions modelling, Air quality modelling, Air pollution source apportionment

Institute **National and Kapodistrian University of Athens**, Faculty of Geology and Geoenvironment, Laboratory of Climatology and Atmospheric Environment, 15784 Athens, Greece

Position held Research Associate in the framework of the EU research projects MACC and GEMS

Main activities and responsibilities Air quality modelling, Natural emissions modelling, Anthropogenic emissions data processing, Model evaluation, Air quality climatology

Institute **University of Crete**, Department of Chemistry, Environmental Chemical Processes Laboratory, PO Box 1470, Leoforos Knossou, 71409 Irakleio, Greece

Position held Research Associate in the framework of the EU research project CITYZEN

Main activities and responsibilities Atmospheric modelling, Natural and anthropogenic pollutant emission data processing

Institute **National Technical University of Athens**, School of Chemical Engineering, 15780 Zografou, Athens, Greece

Position held Research Associate in the framework of the international research project "Evaluation of aerosol & ozone photochemical models over Athens using in situ sensors (DOAS) and LIDAR techniques combined with health indicators"

Main activities and responsibilities Air quality modelling, Air quality model evaluation

TEACHING EXPERIENCE

Institute **Hellenic Open University**, School of Science and Technology, Sahtouri 11, 26222 Patras, Greece

Position in Institute Academic Staff (adjunct) (Academic years 2013/14 to 2021/22, 2025/26, 2026/27)

Main activities and responsibilities

1. Lectures on "Air Pollution Management" in the Programme of Postgraduate Studies "Waste Management".
2. Lectures on "Introduction to Natural and Human Environment" in the Programme of Postgraduate Studies "Environmental Design of Infrastructure Works".
7. Lectures on "Introduction to climate change" in the Programme of Postgraduate Studies "Protection of Cultural Heritage and Monuments of Nature from the Effects of Climate Change" (in collaboration with the Academy of Athens).
3. Supervision of MSc theses in the Programmes of Postgraduate Studies "Environmental Design of Infrastructure Works" and "Waste Management".

Institute **Aristotle University of Thessaloniki**, Department of Physics, Laboratory of Atmospheric Physics, PO Box: 149, 54124 Thessaloniki, Greece

Position in Institute Educational Staff (external) (Academic years 2006/07 to 2019/20)

Main activities and responsibilities

1. Lectures on "Atmospheric Circulation Models" and "Atmospheric Chemistry" in the framework of the Programme of Postgraduate Studies "Environmental Physics"
2. (Co-)Supervision of BSc theses (Department of Physics) and MSc theses (Programme of Postgraduate Studies "Environmental Physics").

Institute **Technological Education Institution of Western Macedonia**, Department of Pollution Control Technologies, Faculty of Technological Applications, 50100 Koila, Kozani, Greece

Position in Institute Educational Associate (Academic years 2007/08 and 2008/09)

Main activities and responsibilities Laboratory exercises on "Environmental Physics", Lectures on "Current Environmental Issues"

ADDITIONAL INFORMATION

Honours and awards

1. Post-doctoral scholarship for the year 2011 of the Research Committee of the Aristotle University of Thessaloniki (Greece). Research topic: "Study of the impact of forest fires on the air quality of the Eastern Mediterranean with the use of high resolution mesoscale meteorological model and regional scale photochemical model"
2. Scholarship of the Greek State Scholarships Foundation in the framework of the programme IKYDA 2008 (joint research project between the Aristotle University of Thessaloniki (Greece) and the Institute of Chemistry and Dynamics of the Geosphere (Julich, Germany) entitled "Coupling of the photochemical mesoscale model CAMx with the global Chemistry Transport Model ECHAM5.HAM0Z").

Committees

1. Member of the Steering Committees of the EU projects APICE, CAIMANs, LIFE ASTI, WECAREMED, LIFE SIRIUS, NAVGREEN.
2. Member of the scientific review panel of the "International Conference on Energy, Environment and Health - Optimisation of Future Energy Systems", Copenhagen, 31 May – 2 June 2010.
3. Member of the scientific and organising committee of the International Workshop "The impact of harbor and maritime activities on the air quality of the cities of Patras and Brindisi", Thessaloniki, 30-31 January 2014.
4. Member of the scientific and organising committee of the European Seminar "Non-motorised Transport and Transport Energy Efficiency as Challenges for Road traffic Congestion and Air Quality Improvements in the Mediterranean Cities", Seville, 18 May 2017.
5. Member of the scientific and organising committee of the European Seminar "Improved urban mobility systems for a high quality of life", Split, 23 November 2017.
6. Member of the scientific and organising committee of the European Seminar "Sustainable Urban Mobility: Confronting Air Pollution and Climate Change", Thessaloniki, 22 May 2018.
7. Member of the scientific and organising committee of the International Conference "Horizontal Condominium as a Living Lab for Urban Renewals", Treviso, 1 October 2019.
8. Member of the organizing committee of the High Level Event "Addressing climate change impacts on cultural and natural heritage – The Way Forward", Brussels, 2 November 2021.
9. Member of the scientific committee of the 1st Conference of the CIVINET Greece-Cyprus Network, Athens, 9-10 December 2021.
10. Member of the scientific committee of the annual meeting of the International Society of Exposure Science (ISES 2022), Lisbon, 25-29 September 2022.
11. Member of the organizing committee of the conference "Climate Change: Action for Adaptation and Mitigation". Athens, 5 December 2022.
12. Member of the secretariat of the Coordination Unit of the Flexible Mechanism of the Greek Initiative at UN level for the Effects of Climate Change on Cultural and Natural Heritage.
13. Member of the committee for the Resilience of the Greek Forest Ecosystems to Climate Change, coordinated by the Academy of Athens (2021-2023).
14. Member of the Academic Supervisory Committee of the postgraduate studies programme "Protection of Cultural Heritage and Monuments of Nature from the Effects of Climate Change" of the Hellenic Open University in collaboration with the Academy of Athens (2021-2027).

Memberships

Member of the: 1) European Geophysical Union, 2) Hellenic Physical Society, 3) Hellenic Association for Aerosol Research, 4) Hellenic Meteorological Society.

Other

1. Expert of the EU H2020 and FP7 Programmes.
2. Participation in the Action "ES0602: Towards a European Network on Chemical Weather Forecasting and Information Systems (ENCWF)" of the intergovernmental framework for European Cooperation in Science and Technology (COST).
3. Participation in the EU Forum for air quality modelling in Europe (FAIRMODE).
4. SDSN Global Climate Hub: Member of the working team of Unit Atmospheric Physics and Climatology.
5. Reviewer of 7 scientific journals and of 6 international conferences.

ANNEX I. PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Kiranoudis, C.T., Kourniotis, S.P., Christolis, M., Markatos, N.C., Zografos, K.G., Giannouli, I.M., Androutsopoulos, K.N., Ziomas, I., Kosmidis, E., Simeonidis, P. and **Poupkou, A.**, 2002. "An Operational Centre for managing major chemical industrial accidents", *Journal of Hazardous Materials*, 89, pp. 141-161.
2. **Poupkou, A.**, Symeonidis, P., Ziomas, I., Melas, D. and Markakis, K., 2007. "A spatially and temporally disaggregated anthropogenic emission inventory in the southern Balkan Region", *Water, Air & Soil Pollution*, 185, pp.335–348.
3. Zanis, P., Katragkou, E., Kanakidou, M., Psiloglou, B., Karathanasis, S., Vrekoussis, M., Gerasopoulos, E., Lysaridis, I., Markakis, K., **Poupkou, A.**, Amiridis, V., Melas, D., Mihalopoulos, N. and Zerefos C., 2007. "Effects on surface atmospheric photo-oxidants over Greece during the total solar eclipse event of 29 March 2006", *Atmospheric Chemistry and Physics*, 7, pp. 6061-6073.
4. Symeonidis, P., **Poupkou, A.**, Gkantou, A., Melas, D., Yay, O.D., Pouspourika, E. and Balis, D., 2008. "Development of a computational system for estimating biogenic NMVOCs emissions based on GIS technology", *Atmospheric Environment*, 42, pp. 1777–1789.
5. **Poupkou, A.**, Symeonidis, P., Lysaridis, I., Melas, D., Ziomas, I., Yay, O. D. and Balis, D., 2008. "Effects of anthropogenic emission sources on maximum ozone concentrations over Greece", *Atmospheric Research*, 89, pp. 374–381.
6. **Poupkou, A.**, Melas, D., Ziomas, I., Symeonidis, P., Lysaridis, I., Gerasopoulos, E. and Zerefos, C., 2009. "Simulated summertime regional ground-level ozone concentrations over Greece", *Water, Air & Soil Pollution*, 196, pp. 169–181.
7. Zyrichidou, I., Koukouli, M. E., Balis, D. S., Katragkou, E., Melas, D., **Poupkou, A.**, Kioutsioukis, I., van der A, R., Boersma, F. K., van Roozendaal, M. and Richter, A., 2009. "Satellite observations and model simulations of tropospheric NO₂ columns over south-eastern Europe", *Atmospheric Chemistry and Physics*, 9, pp. 6119–6134.
8. Markakis, K., **Poupkou, A.**, Melas, D. and Zerefos, C., 2010a. "A GIS based anthropogenic PM₁₀ emission inventory for Greece", *Atmospheric Pollution Research*, 1, pp. 71-81.
9. Markakis, K., **Poupkou, A.**, Melas, D., Tzoumaka, P. and Petrakakis, M., 2010b. "A computational approach based on GIS technology for the development of an anthropogenic emission inventory of gaseous pollutants in Greece", *Water, Air & Soil Pollution*, 207, pp.157–180.
10. Huijnen, V., Eskes, H., **Poupkou, A.**, Elbern, H., Boersma, K. F., Foret, G., Sofiev, M., Valdebenito, A., Flemming, J., Stein, O., Gross, A., Robertson, L., D'Isidoro, M., Kioutsioukis, I., Friese, E., Amstrup, B., Bergstrom, R., Strunk, A., Vira, J., Zyryanov, D., Maurizi, A., Melas, D., Peuch, V.-H. and Zerefos, C., 2010. "Comparison of OMI NO₂ tropospheric columns with an ensemble of global and European regional air quality models", *Atmospheric Chemistry and Physics*, 10, pp. 3273–3296.
11. **Poupkou, A.**, Giannaros, T., Markakis, K., Kioutsioukis, I., Curci, G., Melas, D., and Zerefos, C., 2010. "A model for European biogenic volatile organic compound emissions: Software development and first validation", *Environmental Modelling and Software*, 25, pp. 1845-1856.
12. Im, U., Markakis, K., Unal, A., Kindap, T., **Poupkou, A.**, Incecik, S., Yenigün, O., D., Melas, Theodosi, C. and Mihalopoulos, N., 2010. "Study of a winter PM episode in Istanbul using the high resolution WRF/CMAQ modeling system", *Atmospheric Environment*, 44, pp. 3085-3094.
13. Papanastasiou, D.K., **Poupkou, A.**, Katragkou, E., Amiridis, V., Melas, D., Mihalopoulos, N., Basart, S., Pérez, C. and Baldasano, J.M., 2010. "An assessment of the efficiency of dust regional modelling to predict Saharan dust transport episodes", *Advances in Meteorology* (special issue on "Atmospheric Aerosols and Climate"), volume 2010, Article ID 154368, 9 pages, doi:10.1155/2010/154368.
14. Syrakov, D., Spiridonov, V., Prodanova, M., Bogatchev, A., Miloshev, N., Ganev, K., Katragkou, E., Melas, D., **Poupkou, A.**, Markakis, K., San Jose, R. and Pérez, J.L., 2011. "A system for assessment of climatic air pollution levels in Bulgaria: Description and first steps towards validation", *International Journal of Environment and Pollution*, 46, pp. 18-42.
15. Im, U., **Poupkou, A.**, Incecik, S., Markakis, K., Kindap, T., Unal, A., Melas, D., Yenigün, O., Topcu, S., Odman, M.T., Tayanc, M. and Guler, M., 2011. "The impact of anthropogenic and biogenic emissions on surface ozone concentrations in Istanbul", *Science of the Total Environment*, 409, pp. 1255–1265.
16. Im, U., Markakis, K., **Poupkou, A.**, Melas, D., Unal, A., Gerasopoulos, E., Daskalakis, N. and Kanakidou M., 2011. "The impact of temperature changes on summer time ozone and it's precursors in the Eastern Mediterranean", *Atmospheric Chemistry and Physics*, 11, pp. 3847–3864.
17. **Poupkou, A.**, Nastos, P., Melas, D. and Zerefos, C., 2011. "Climatology of Discomfort Index and Air Quality Index in a large urban Mediterranean agglomeration", *Water, Air & Soil Pollution*, 222, pp. 163–183.
18. **Poupkou A.**, Zanis P., Nastos P., Papanastasiou D., Melas D., Tourpali K. and Zerefos C., 2011. "Present climate trend analysis of the Etesian winds in the Aegean Sea", *Theoretical and Applied Climatology*, 106, pp. 459–472.
19. Zanis, P., Katragkou, E., Tegoulas, I., **Poupkou, A.**, Melas, D., Huszar, P. and Giorgi, F., 2011. "Evaluation of near surface ozone in air quality simulations forced by a regional climate model over Europe for the period 1991-2000", *Atmospheric Environment*, 45, pp. 6489-6500.

20. Im, U., Markakis, K., Kocak, M., Gerasopoulos, E., Daskalakis, N., Mihalopoulos, N., **Poupkou, A.**, Kindap, T., Unal, A. and Kanakidou, M., 2012. "Summertime aerosol chemical composition in the Eastern Mediterranean and its sensitivity to temperature", *Atmospheric Environment*, 50, pp. 164-173.
21. Kukkonen, J., Balk, T., Schultz, D.M., Baklanov, A., Klein, T., Miranda, A. I., Monteiro, A., Hirtl, M., Tarvainen, V., Boy, M., Peuch, V.-H., **Poupkou, A.**, Kioutsioukis, I., Finardi, S., Sofiev, M., Sokhi, R.S., Lehtinen, K., Karatzas, K., San Jose, R., Astitha, M., Kallos, G., Schaap, M.M., Reimer, E., Jakobs, H. and Eben, K., 2012. "A review of operational, regional-scale, chemical weather forecasting models in Europe", *Atmospheric Chemistry and Physics*, 12, pp. 1–87.
22. Banja, M., Papanastasiou, D., **Poupkou, A.** and Melas, D., 2012. "Development of a short-term ozone prediction tool in Tirana area based on meteorological variables", *Atmospheric Pollution Research*, 3, pp. 32-38.
23. Ebel, A., Melas, D., Ganev, K., Banja, M., Sandu, I., Friese, E., Giannaros, T., Jakobs, H.J., Kioutsioukis, I., Markakis, K., Memmesheimer, M., Miloshev, N., Pescaru, V., **Poupkou, A.**, 2012. "Assessment of impacts and risks of air pollution applying two strategies of numerical chemistry transport modelling", *Journal of Environmental Protection*, 3, pp. 26-40.
24. Zyryanov, D., Foret, G., Eremenko, M., Beekmann, M., Cammas, J.-P., D'Isidoro, M., Elbern, H., Flemming, J., Friese, E., Kioutsioukis, I., Maurizio, A., Melas, D., Meleux, F., Menut, L., Moinat, P., Peuch, V.-H., **Poupkou, A.**, Razinger, M., Schulz, M., Stein, O., Suttie, A.M., Valdebenito, A., Zerefos, C., Dufour, G., Bergametti G. and Flaud, J.-M., 2012. "3-D evaluation of tropospheric ozone simulations by an ensemble of regional Chemistry Transport Model", *Atmospheric Chemistry and Physics*, 12, pp. 3219-3240.
25. Zyrichidou, I., Koukouli, M. E., Balis, D., Kioutsioukis, I., **Poupkou, A.**, Katragkou, E., Melas, D., Boersma, F. and van Roozendaal, M., 2012. "Evaluation of high resolution simulated and OMI retrieved tropospheric NO₂ column densities over South-Eastern Europe", *Atmospheric Research*, 122, pp. 55-66.
26. Markakis, K., Katragkou, E., **Poupkou, A.** and Melas, D., 2013. "MOSESS: A new emission model for the compilation of model-ready emission inventories. Application in a coal mining area in Northern Greece", *Environmental Modeling & Assessment*, 18, pp. 509–521.
27. Akritidis, D., Zanis, P., Katragkou, E., Schultz, M., Tegoulas, I., **Poupkou, A.**, Markakis, K., Pytharoulis, I. and Karacostas Th., 2013. "Evaluating the impact of chemical boundary conditions on near surface ozone in regional climate-air quality simulations over Europe", *Atmospheric Research*, 134, pp. 116-130.
28. **Poupkou, A.**, Markakis, K., Liora, N., Giannaros, T., Zanis P., Im, U., Daskalakis, N., Myriokefalitakis, S., Kaiser, J. W., Melas, D., Kanakidou, M., Karacostas, T. and Zerefos, C., 2014. "A modeling study of the impact of the 2007 Greek forest fires on the gaseous pollutant levels in the Eastern Mediterranean ", *Atmospheric Research*, 148, pp. 1-17.
29. Zyrichidou, I., Koukouli, M.E., Balis, D., Markakis, K., **Poupkou, A.**, Katragkou, E., Kioutsioukis, I., Melas, D., Boersma, F. and Van Roozendaal, M., 2015. "Identification of surface NO_x emission sources on a regional scale using OMI NO₂", *Atmospheric Environment*, 101, pp. 82-93.
30. Karagiannidis, A., **Poupkou, A.**, Giannaros, T., Giannaros, C., Melas, D. and Argiriou, A., 2015. "The air quality of a Mediterranean urban environment area and its relation to major meteorological parameters", *Water, Air, & Soil Pollution*, 226:2239, DOI 10.1007/s11270-014-2239-8.
31. Marécal, V., Peuch, V.-H., Andersson, C., Andersson, S., Arteta, J., Beekmann, M., Benedictow, A., Bergström, R., Bessagnet, B., Cansado, A., Chéroux, F., Colette, A., Coman, A., Curier, R. L., Denier van der Gon, H. A. C., Drouin, A., Elbern, H., Emili, E., Engelen, R. J., Eskes, H. J., Foret, G., Friese, E., Gauss, M., Giannaros, C., Guth, J., Joly, M., Jaumouillé, E., Josse, B., Kadyrov, N., Kaiser, J. W., Krajsek, K., Kuenen, J., Kumar, U., Liora, N., Lopez, E., Malherbe, L., Martinez, I., Melas, D., Meleux, F., Menut, L., Moinat, P., Morales, T., Parmentier, J., Piacentini, A., Plu, M., **Poupkou, A.**, Queguiner, S., Robertson, L., Rouil, L., Schaap, M., Segers, A., Sofiev, M., Thomas, M., Timmermans, R., Valdebenito, Á., van Velthoven, P., van Versendaal, R., Vira, J. and Ung, A. "A regional air quality forecasting system over Europe: the MACC-II daily ensemble production", *Geoscientific Model Development*, 8, pp. 2777–2813.
32. Liora, N., Markakis, K., **Poupkou, A.**, Giannaros, T.M. and Melas, D., 2015. "The natural emissions model (NEMO): Description, application and model evaluation", *Atmospheric Environment*, 122, pp. 493-504.
33. Liora, N., **Poupkou, A.**, Giannaros, T.M. Kakosimos, K.E., Stein, O. and Melas, D., 2016. "Impacts of natural emission sources on particle pollution levels in Europe", *Atmospheric Environment*, 137, pp. 171-185.
34. Merico, E., Gambaro, A., Argiriou, A., Alebic-Juretic, A., Barbaro, E., Cesari, D., Chasapidis, L., Dimopoulos, S., Dinoi, A., Donato, A., Giannaros, C., Gregoris, E., Karagiannidis, A., Konstantopoulos, A.G., Ivošević, T., Liora, N., Melas, D., Mifka, B., Orlic, I., **Poupkou, A.**, Sarovic, K., Tsakis, A., Giua, R., Pastore, T., Nocioni, A. and Contini, D., 2017. "Atmospheric impact of ship traffic in four Adriatic-Ionian port-cities: Comparison and harmonization of different approaches", *Transportation Research Part D*, 50, pp. 431–445.
35. Pu, X., Huang, X., Melas, D., Zanis, P., Papanastasiou, D. and **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, pp. 807–816.

36. Drosoglou, T., Bais, A., Zyrichidou, I., Kouremeti, N., **Poupkou, A.**, Liora, N., Giannaros, C., Koukouli, M.E., Balis, D. and Melas, D., 2017. "Comparisons of ground-based tropospheric NO₂ MAX-DOAS measurements to satellite observations with the aid of an air quality model over Thessaloniki area, Greece". *Atmospheric Chemistry and Physics*, 17, pp. 5829–5849.
37. Siomos, N., Balis, D., **Poupkou, A.**, Liora, N., Dimopoulos, S., Melas, D., Giannakaki, E., Filioglou, M., Basart, S. and Chaikovsky, A., 2017. "Investigating the quality of modeled aerosol profiles based on combined lidar and sunphotometer data". *Atmospheric Chemistry and Physics*, 17, pp. 7003–7023.
38. Filioglou, M., Siomos, N., **Poupkou, A.**, Dimopoulos, S., Chaikovsky, A. and Balis, D., 2018. "A sensitivity study of the Lldar-Radiometer Inversion Code (LIRIC) using selected cases from Thessaloniki, Greece database". *International Journal of Remote Sensing*, 39, pp. 315–333.
39. Solomou E., **Poupkou A.**, Bolis S., Zanis P., Lazaridis M. and Melas D., 2018. "Evaluating near-surface ozone levels simulated from MACC global and regional modelling systems in Eastern Mediterranean under the influence of Etesian winds". *Atmospheric Research*, 208, pp. 191–200.
40. Kontos, S., Liora, N., Giannaros, C., Kakosimos, K., **Poupkou, A.** and Melas, D., 2018. "Modeling natural dust emissions in the central Middle East: Parameterizations and sensitivity". *Atmospheric Environment*, 190, pp. 294–307.
41. Zyrichidou I., Balis D., Koukouli M.E., Drosoglou T., Bais A., Gratsea M., Gerasopoulos E., Liora N., **Poupkou A.**, Giannaros C., Melas D., De Smedt I., Van Roozendael M., Van der A R.J., Boersma K.F., Valks P. and Richter A., 2019. "Adverse results of the economic crisis: A study on the emergence of enhanced formaldehyde (HCHO) levels seen from satellites over Greek urban sites". *Atmospheric Research*, 224, 42–51.
42. Zerefos, C., Solomos, S., Kapsomenakis, J., **Poupkou, A.**, Dimitriadou, L., Polychroni, I., Kalabokas, P., Philandras, C. and Thanos, D., 2020. "Lessons learned and questions raised during and post-COVID-19 anthropopause period in relation to the environment and climate". *Environment Development and Sustainability*, DOI: 10.1007/s10668-020-01075-4.
43. Kontos, S., Kakosimos, K., Liora, N., **Poupkou, A.** and Melas, D. 2021. "Towards a regional dust modeling system in the central Middle East: Evaluation, uncertainties and recommendations". *Atmospheric Environment*, 246, 118160.
44. Solomou, E.S., Pappa, A., Kioutsoukis, I., **Poupkou, A.**, Liora, N., Kontos, S., Giannaros, C. and Melas D., 2021. "Analog Ensemble technique to post-process WRF-CAMx ozone and particulate matter forecasts". *Atmospheric Environment*, 256, 118439.
45. Liora, N., **Poupkou, A.**, Kontos, S., Meleti, C., Chrysostomou, K., Aifadopoulou, G., Zountsa, S., Kalogirou, C., Chacartegui, R., Liguori, F., Bressan, M., Almeida, S.M. and Melas, D., 2021. "Estimating road transport pollutant emissions under traffic-congested conditions with an Integrated Modelling Tool—Emissions reduction scenarios analysis". *Emission Control Science and Technology*, 7, 137–152, <https://doi.org/10.1007/s40825-021-00191-5>.
46. Keppas, S., Papadogiannaki, S., Parliari, D., Kontos, S., **Poupkou, A.**, Tzoumaka, P., Kelessis, A., Zanis, P., Casasanta, G., de'Donato, F., Argentini, S. and Melas, D., 2021. "Future climate change impact on urban heat island in two mediterranean cities based on high-resolution regional climate simulations", *Atmosphere*, 12, 884. <https://doi.org/10.3390/atmos12070884>.
47. Liora, N., Kontos, S., Parliari, D., Akritidis, D., **Poupkou, A.**, Papanastasiou, D.K. and Melas, D., 2022. "On-line heating emissions based on WRF meteorology - Application and evaluation of a modeling system over Greece", *Atmosphere*, 13, 568, <https://doi.org/10.3390/atmos13040568>.
48. Kapsomenakis, J., Douvis, C., **Poupkou, A.**, Zerefos, S., Solomos, S., Stavraka, T., Melis, N., Kyriakidis, E., Kremlis, G. and Zerefos, C., 2022. "Climate Change Threats to Cultural and Natural Heritage UNESCO Sites in the Mediterranean", *Environment, Development and Sustainability*, 25, 14519–14544, <https://doi.org/10.1007/s10668-022-02677-w>.
49. Liora, N., **Poupkou, A.**, Papadogiannaki, S., Parliari, D., Giama, E., Pieretti, G.A., Da Rugna, L., Susanetti, L., Bressan, M., Villanueva, J.A.B., Chacartegui, R., Pintus, F.J., Greco, L., Bertolini, M. and Melas, D., 2023. "A methodology for carbon footprint estimations of research project activities—A scenarios analysis for reducing carbon footprint", *Atmosphere*, 14, 6, <https://doi.org/10.3390/atmos14010006>.
50. Giama, E., Chantzis, G., Kontos, S., Keppas, S., **Poupkou, A.**, Liora, N. and Melas, D., 2023. "Building energy simulations based on weather forecast meteorological model: The case of an institutional building in Greece", *Energies*, 16, 191, <https://doi.org/10.3390/en16010191>.
51. Tsiaousidis, D.T., Liora, N., Kontos, S., **Poupkou, A.**, Akritidis, D. and Melas, D., 2023. "Evaluation of PM chemical composition in Thessaloniki, Greece based on air quality simulations", *Sustainability*, 15, 10034, <https://doi.org/10.3390/su151310034>.
52. Papadogiannaki, S., Liora, N., Parliari, D., Cheristanidis, S., **Poupkou, A.**, Sebos, I., Progiou, A. and Melas, D., 2023. "Evaluating the impact of COVID-19 on the carbon footprint of two research projects: A comparative analysis", *Atmosphere*, 14, 1365, <https://doi.org/10.3390/atmos14091365>.
53. **Poupkou, A.**, Kontos, S., Liora, N., Tsiaousidis, D., Kapsomenakis, I., Solomos, S., Liakakou, E., Athanasopoulou, E., Grivas, G., Bougiatioti, A., Petrinoli, K., Diapouli, E., Vasilatou, V., Papagiannis, S., Progiou, A., Kalabokas, P., Melas, D., Mihalopoulos, N., Gerasopoulos, E.,

- Eleftheriadis, K. and Zerefos C., 2025. "Investigating the role of organic aerosol schemes in the simulation of atmospheric particulate matter in a large mediter-ranean urban agglomeration", *Sustainability*, 17, 2619, <https://doi.org/10.3390/su17062619>.
54. Papadogiannaki, S., Karatzas, K., Kontos, S., **Poupkou, A.**, Melas, D., 2025. "Comparative modeling approaches for predicting Olea and Quercus pollen seasons in Thessaloniki, Greece", *Scientific Reports*, 15, 12215, <https://doi.org/10.1038/s41598-025-92259-3>.
55. Papadogiannaki, S., Karatzas, K., Kontos, S., **Poupkou, A.**, Melas, D. 2025. "A multi-model approach to pollen season estimations: Case Study for Olea and Quercus in Thessaloniki, Greece", *Atmosphere*, 16, 454. <https://doi.org/10.3390/atmos16040454>.
56. Papanastasiou, D.K., Gelasakis, A.I., Papadopoulos, G., Melas, D., Douvis, K., Faraslis, I., Keppas, S., Stergiou, I., **Poupkou, A.**, Voloudaki, D., Progiou, A., Kapsomenakis, J. and Katsoulas N., 2025. "Projected heat-stress in sheep and cattle in Greece under future climate change scenarios", *Agriculture*, 15, 2141, <https://doi.org/10.3390/agriculture15202141>.
57. Elvanidi, A., Maletsika P., Katsoulas N., Papadopoulos G., Melas D., Douvis K., Faraslis I., Keppas S., Stergiou I., **Poupkou A.**, Voloudakis D., Kapsomenakis J., Papanastasiou, D.K., 2026. "Assessment of future water stress of winter wheat and olive trees in Greece using high-resolution climate model projections", *Agronomy*, 16, 35, <https://doi.org/10.3390/agronomy16010035>.
58. **Poupkou, A.**, Liora, N., Kontos, S., Grivas, G., Fameli, K.-M., Tsiaousidis, D., Solomos, S., Kapsomenakis, I., Assimakopoulos, V., Progiou, A., Kalabokas, P., Mihalopoulos, N., Kotrikla, A.M., Melas, D. and Zerefos, C., 2026. "Assessing the impact of ship emissions on the atmospheric chemical composition in the Eastern Mediterranean and the Piraeus port (Greece)", *Scientific Reports*, 16, 3805, <https://doi.org/10.1038/s41598-025-33968-7>.

ANNEX II. PUBLICATIONS IN BOOKS - EDITIONS

1. **Poupkou, A.** and Zanis, P., 2008. "Chemical Modeling" (Chapter 4). *Regional Transboundary Transport of Air Pollution: An Introductory Science Review*. Melas D. and Fra Paleo U. (eds), Published by the Universidad de Extremadura (ISBN:978-84-7723-784-6), pp.63-78.
2. Belis, C. A., Pernigotti D., Pirovano G. et al., 2018. "Results of the first European Source Apportionment intercomparison for Receptor and Chemical Transport Models". Technical report by the Joint Research Centre (JRC), the European Commission's science and knowledge service, ISBN 978-92-79-86573-2, Publications Office of the European Union, 2018.
3. Stavropoulou, P. and **Poupkou, A.**, 2021. "Scenarios to reduce atmospheric pollutant emissions from shipping". *Topics in Forestry and Environmental and Natural Resources Management*, Volume 13: Climate Change in the Anthropocene, Published by the Department of Forestry and Environmental and Natural Resources Management of the Democritus University of Thrace, Editor: Anastasia Paschalidou, ISBN: 978-960-9698-18-4, pp. 190 – 201.
4. Keppas, S., Parliari, D., Kontos, S., **Poupkou, A.**, Papadogiannaki, S., Tzoumaka, P., Kelessis, A., Melas, D., 2021. "Urban Heat Island and Future Projections: A study in Thessaloniki, Greece". *Environmental Protection and Disaster Risks Book, Selected Papers from the 1st International Conference on Environmental Protection and Disaster RISks (EnviroRISks)*, Editors Nina Dobrinkova & Georgi Gadzhev, Springer, ISBN 978-3-030-70189-5, pp. 201-212.
5. Guest Editor of the special issue "Urban Climate and Air Quality in Mediterranean Cities" of *Atmosphere* journal (https://www.mdpi.com/journal/atmosphere/special_issues/climate_air_quality).
6. Papadogiannaki, S., Liora, N. and **Poupkou, A.**, 2023. "Navigating Carbon Footprints: Insights and Strategies for Sustainable Research Projects". *European Research Consortium for Informatics and Mathematics (ERCIM) News* published by ERCIM EEIG, Number 135, October 2023, ISSN 0926-4981, pp. 18-19.
7. EADO, 2023. "Resilience of Forest Ecosystems of Greece to Climate Change". Committee for the Resilience of the Greek Forest Ecosystems to Climate Change (EADO) [M. Arianoutsou, C. Zerefos, K. Kalabokidis, **A. Poupkou**, F. Aravanopoulos (eds.)] (in Greek). Academy of Athens, Athens, Greece, 547 pp, ISBN 978-960-404-413-9.
8. EADO, 2023. "Resilience of Forest Ecosystems of Greece to Climate Change". Committee for the Resilience of the Greek Forest Ecosystems to Climate Change (EADO) [M. Arianoutsou, C. Zerefos, K. Kalabokidis, **A. Poupkou**, F. Aravanopoulos (eds.)] (in English). Academy of Athens, Athens, Greece, 514 pp, ISBN 978-960-404-444-3.
9. Zerefos, C., Xoplaki, E., Kapsomenakis, J., Solomos, S., **Poupkou, A.**, Gerasopoulos, E. "Past, Present and Future Climates in the Mediterranean". *Sustainability in the Mediterranean Region*. Carla Ferreira, Zahra Kalantari and Georgia Destouni (eds), Springer Geography, Volume Part F3390, pp. 59 – 80.

ANNEX III. PUBLICATIONS IN PROCEEDINGS OF INTERNATIONAL CONFERENCES (Peer-reviewed)

1. Ziomas, C. I., **Poupkou**, P. A. and Mouzakis, G., 1997. "An Investigation of the consequences from possible industrial accidents in Northern Greece". ESREL'97 International Conference on Safety and Reliability. 17-20 June 1997, Lisbon, Portugal, pp. 657-663.
2. **Poupkou**, A., Symeonidis, P., Lisaridis, I., Pouspourika, E., Yay, O.D., Melas, D., Ziomas, I., Balis, D. and Zerefos, C., 2004. "Compilation of an emission inventory for the purpose of studying the regional photochemical pollution in the Balkan Region". Quadrennial Ozone Symposium 2004. 1-8 June 2004, Kos, Greece, pp. 902-903.
3. Pouspourika, E., Symeonidis, P., **Poupkou**, A. and Balis, D., 2005. "Biogenic NMVOC emission calculations at the Balkan Peninsula using a Geographical Information System". N.R. Dalezios and H. Dobesch (Editors), Proceedings of the International Symposium on GIS and Remote Sensing: Environmental Applications. 7-9 November 2003, Volos, Greece, pp. 403-413.
4. **Poupkou**, A., Symeonidis, P., Lisaridis, I., Melas, D., Ziomas, I., Pouspourika, E., Yay, O. D., Balis, D., Gerasopoulos, E., Papanastasiou, D. and Zerefos, C., 2005. "Performance evaluation of photochemical modeling over the Eastern Mediterranean". Electronic proceedings of the 1st ACCENT Symposium on the Changing Chemical Climate of the Atmosphere. 12-16 September, 2005, Urbino, Italy.
5. Yay, O. D., **Poupkou**, A., Symeonidis, P., Gandou, A., Melas, D. and Dogeroglu, T., 2005. "Biogenic emissions of Volatile Organic Compounds from Turkey". 3rd International Symposium on Air Quality Management at Urban, Regional and Global scales and jointly organized 14th Regional IUAPPA conference. 26-30 September 2005, Istanbul, Turkey, pp. 1006-1014.
6. **Poupkou**, A., Symeonidis, P., Lisaridis, I., Ziomas, I., Melas, D., Yay, O. D. and Balis, D., 2005. "Emission sources and their effect on maximum ozone concentrations over Greece". 3rd International Symposium on Air Quality Management at Urban, Regional and Global scales and jointly organized 14th Regional IUAPPA conference. 26-30 September 2005, Istanbul, Turkey, pp. 498-505.
7. **Poupkou**, A., Melas, D., Kioutsioukis, I., Lisaridis, I., Symeonidis, P., Balis, D., Karathanasis, S. and Kazadzis, S., 2006. "Regional air quality forecasting over Greece within PROMOTE". Electronic Proceedings of the Atmospheric Science Conference. 8-12 May 2006, ESA ESRIN Frascati, Italy.
8. Katragkou, E., Kioutsioukis, I., **Poupkou**, A., Lisaridis, I., Markakis, K., Karathanasis, S., Melas, D. and Balis D., 2007. "An air quality study for Greece with the MM5/CAMx modelling system". Electronic Proceedings of the 2007 ESA ENVISAT Symposium. 23-27 April 2007, Montreux, Switzerland. (<http://earth.esa.int/workshops/envisatsymposium/proceedings/posters/4P18/507381ka.pdf>)
9. **Poupkou**, A., Melas, D., Kaimakamis, G., Kavouras, P., Kehagias, T. and Karakostas, T., 2007. "Air quality impact assessment of a pilot plant used for the treatment and stabilization of solid wastes". 11th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes. 2-5 July 2007, Cambridge, UK, pp. 145-149.
10. Zyrichidou, I., Koukouli, M. E., Balis, D. S., Katragkou, E., **Poupkou**, A., Kioutsioukis, I., van der A, R., Dirksen, R., van Roozendael, M. and Richter, A., 2008. "Satellite observations of tropospheric NO₂ columns over South Eastern Europe", Electronic Proceedings of the 2008 EUMETSAT Meteorological Satellite Conference, 8 - 12 September 2008, Darmstadt, Germany, EUMETSAT P.52, ISBN 978-92-9110-082-8, ISSN 1011-3932 (http://www.eumetsat.int/website/home/News/ConferencesandEvents/DAT_2042879.html)
11. **Poupkou**, A., Giannaros, T., Kioutsioukis, I., Markakis, K., Melas, D. and Zerefos, C., 2009. "A biogenic NMVOCs emission model". Electronic Proceedings of the 7th International Conference on Air Quality: Science and Application, 24-27 March 2009, Istanbul, Turkey, pp. 606-609.
12. Kioutsioukis, I., **Poupkou**, A., Katragkou, E., Giannaros, T., Markakis, K., Balis, D., Melas D. and Zerefos, C., 2009. "An evaluation of the MM5/CAMx system for Europe", Electronic Proceedings of the ESA Atmospheric Science Conference, 7-11 September 2009, Barcelona, Spain.
13. Zyrichidou, I., Koukouli, M. E., Balis, D. S., Katragkou, E., **Poupkou**, A., Kioutsioukis, I., Markakis, K., Melas, D., van der A, R., Boersma, F. K. and van Roozendael, M., 2009. "Comparison of satellite NO₂ observations with high resolution model simulations over the Balkan Peninsula", 7th General Conference of the Balkan Physical Union, 9-13 September 2009, Alexandroupolis, Greece, American Institute of Physics Conference proceedings volume 1203, published December 2009, ISBN 978-0-7354-0740-4, doi:10.1063/1.3322525, Issue Date: 21 January 2010, pp. 632-637.
14. Im, U., Incecik, S., Markakis, K., Kindap, T., **Poupkou**, A., Yenigün, O., Odman, M.T., Topçu, S., Tayanç, M. and Melas, D., 2010. "An investigation of high summertime ozone levels in Istanbul with MM5/CMAQ modeling system". 30th NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 18 – 22 May 2009, San Francisco, USA, Steyn, Douw G.; Rao, S. T. (Eds.), ISBN: 978-90-481-3810-4, pp. 373-378.
15. Syrakov, D., Ganev, K., Prodanova, M., Miloshev, N., Jordanov, G., Katragkou, E., Melas, D., **Poupkou**, A. and Markakis K., 2010. "Background pollution forecast over Bulgaria", 7th International Conference on "Large-Scale Scientific Computations", 4-8 June 2009, Sozopol, Bulgaria. Published in I. Lirkov, S. Margenov, and J. Wasniewski (Eds.), Lecture Notes in Computer Science 5910, Springer-Verlag Berlin Heidelberg 2010, pp. 531-537.

16. Syrakov, D., Prodanova, M., Miloshev, N., Ganev, K., Jordanov, G., Spiridonov, V., Bogatchev, A., Katragkou, E., Melas, D., **Poupkou**, A. and Markakis K., 2010. "Climate change impact assessment of air pollution levels in Bulgaria", 7th International Conference on "Large-Scale Scientific Computations", 4-8 June 2009, Sozopol, Bulgaria. Published in I. Lirkov, S. Margenov, and J. Wasniewski (Eds.), Lecture Notes in Computer Science 5910, Springer-Verlag Berlin Heidelberg 2010, pp. 538-545.
17. Syrakov, D., Spiridonov, V., Ganev, K., Prodanova, M., Bogatchev, A., Miloshev, N., Slavov, K., Katragkou, E., Melas, D., **Poupkou**, A. and Markakis, K., 2010. "Exploiting GRID for Model Estimates of Regional Climate Changes and Its Impact on the Air Quality of Bulgaria". In: Todorov M. and Chr. Christov (eds.), Application of Mathematics in Technical and Natural Sciences: Proceedings of the 2nd International Conference, Sozopol, (Bulgaria), 21–26 June 2010, American Institute of Physics Conference Proceedings v.1301, pp. 669-677.
18. Markakis, K., Liora, N., **Poupkou**, A., Katragkou, E., Giannaros, T. and Melas, D., 2011. "MOSESS: A new emission model for the compilation of model-ready emission inventories". Electronic proceedings of the 3rd ACCENT Symposium on Air Quality and Climate Change: Interactions and Feedback, 13-16 September 2011, Urbino, Italy (http://lampweb64bit.uniurb.it/accent/accent_documents/ext_abs/AIRQUALITY/Markakis.pdf).
19. Im, U., Daskalakis, N., Gerasopoulos, E., Kindap, T., Kocak, M., Markakis, K., Melas, D., Mihalopoulos, N., **Poupkou**, A., Unal, A., Kanakidou, M., 2011. "Impact of the emissions from the eastern Mediterranean megacities on air quality". Electronic proceedings of the 3rd ACCENT Symposium on Air Quality and Climate Change: Interactions and Feedback, 13-16 September 2011, Urbino, Italy (http://lampweb64bit.uniurb.it/accent/accent_documents/ext_abs/OZONE/Im_r.pdf).
20. Im, U., Markakis, K., Kocak, M., Gerasopoulos, E., Daskalakis, N., Mihalopoulos, N., **Poupkou**, A., Kindap, T., Unal, A. and Kanakidou, M., 2012. "Air quality in the Eastern Mediterranean: Emissions, chemical composition and climate sensitivity". Electronic Proceedings of the 8th International Conference on Air Quality - Science and Application, 19-23 March 2012, Athens. Greece, pp. 289-291.
21. Kukkonen, J., Balk, T., Schultz, D.M., Baklanov, A., Klein, T., Miranda, A I., Monteiro, A., Hirtl, M., Tarvainen, V., Boy, M., Peuch, V.-H., **Poupkou**, A., Kioutsioukis, I., Finardi, S., Sofiev, M., Sokhi, R.S., Lehtinen, K.E.J., Karatzas, K., San Jose, R., Astitha, M., Kallos, G., Schaap, M.M., Reimer, E., Jakobs. H. and Eben, K., 2012. "Operational chemical weather forecasting models on a regional scale in Europe". Electronic Proceedings of the 8th International Conference on Air Quality - Science and Application, 19-23 March 2012, Athens. Greece, pp. 381-384.
22. Saraga, D.E., Tolis, E.I., Filiou, K.F., Pey, J., Fernandez, P., Brescianini, C., Zannetti, M.T., Prati, P., Armengaud, A., Piga, D., Melas, D., **Poupkou**, A., Latella, A., Liguori, F., Patti, S. and Bartzis, J.G., 2012. "The air quality status of five European port-cities: An overview focused on PM10". Electronic Proceedings of the 8th International Conference on Air Quality - Science and Application, 19-23 March 2012, Athens. Greece, pp. 661-664.
23. Im, U., **Poupkou**, A., Incecik, S., Markakis, K., Kindap, T., Melas, D., Yenigün, O., Topcu, S., Odman, M.T., Tayanç, M. and Guler, M., 2012. "The impact of anthropogenic and biogenic emissions on surface ozone concentrations in Istanbul: A modeling study". 31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 27 Sept - 01 Oct 2010, Torino, Italy, D.G. Steyn and S. Trini Castelli (eds.), Air Pollution Modeling and its Application XXI, NATO Science for Peace and Security Series C: Environmental Security 4, DOI 10.1007/978-94-007-1359-8_18, Springer Science+Business Media B.V. 2012, pp. 103-106.
24. Kukkonen, J., Balk, T., Schultz, D.M., Baklanov, A., Klein, T., Miranda, A I., Monteiro, A., Hirtl, M., Tarvainen, V., Boy, M., Peuch, V.-H., **Poupkou**, A., Kioutsioukis, I., Finardi, S., Sofiev, M., Sokhi, R.S., Lehtinen, K.E.J., Karatzas, K., San Jose, R., Astitha, M., Kallos, G., Schaap, M.M., Reimer, E., Jakobs. H. and Eben, K., 2012. "Operational chemical weather forecasting models on a regional scale in Europe". 31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 27 Sept - 01 Oct 2010, Torino, Italy, In: D.G. Steyn, Douw G. and Trini Castelli, Silvia (Eds.), Air Pollution Modeling and its Application XXI, Series: NATO Science for Peace and Security Series C: Environmental Security 4, DOI 10.1007/978-94-007-1359-8_61, Springer Science+Business Media B.V. 2012, pp. 359-365.
25. **Poupkou**, A., Markakis, K., Liora, N., Giannaros, T., Im, U., Daskalakis, N., Myriokefalitakis, S., Melas, D., Zanis, P., Kanakidou, M. and Zerefos, C., 2012. "Study of the impact of an intense biomass burning event on the air quality in the Eastern Mediterranean". In: "Advances in Meteorology, Climatology and Atmospheric Physics", (C.G. Helmis and P.T. Nastos eds), Springer-Verlag Berlin Heidelberg 2012, Proceedings of the COMECAP 2012, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, 30 May – 1 June 2012, Athens, Greece, pp. 1189-1195.
26. Pakalidou, N., Katragkou, E., **Poupkou**, A., Zanis, P., Bloutsos, A. and Karacostas, T., 2012. "Decadal analysis of heat-wave events in Thessaloniki and investigation of impacts on PM10". In: "Advances in Meteorology, Climatology and Atmospheric Physics", (C.G. Helmis and P.T. Nastos eds), Springer-Verlag Berlin Heidelberg 2012, Proceedings of the COMECAP 2012, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, 30 May – 1 June 2012, Athens, Greece, pp. 663-669.
27. Akrítidis, D., Zanis, P., Katragkou, E., Tegoulas, I., **Poupkou**, A., Markakis, K., Karacostas, Th. and Pytharoulis, I., 2012. "Air quality simulations over Europe for the period 1996-2006 with emphasis on tropospheric ozone". In: "Advances in Meteorology, Climatology and Atmospheric Physics", (C.G. Helmis and P.T. Nastos eds), Springer-Verlag Berlin Heidelberg 2012, Proceedings of the COMECAP 2012, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, 30 May – 1 June 2012, Athens, Greece, pp. 849-855.

28. Koukouli, M.E., Valks, P., **Poupkou**, A., Zyrichidou, E., Rix, M., Hao, N., Katragkou, E., Balis, D.S., Loyola, D. and Melas, D., 2012. "Investigating the GOME2/MetopA total sulphur dioxide load with the aid of chemical transport modelling over the Balkan region". In: "Advances in Meteorology, Climatology and Atmospheric Physics", (C.G. Helmig and P.T. Nastos eds), Springer-Verlag Berlin Heidelberg 2012, Proceedings of the COMECAP 2012, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, 30 May – 1 June 2012, Athens, Greece, pp. 1075-1080.
29. Zyrichidou, I., Koukouli, M.E., Balis, D., Markakis, K., Kioutsioukis, I., **Poupkou**, A., Melas, D., Boersma, K.F. and van Roozendael, M., 2012. "Compilation of a NO_x emission inventory for the Balkan region using satellite tropospheric NO₂ columns". In: "Advances in Meteorology, Climatology and Atmospheric Physics", (C.G. Helmig and P.T. Nastos eds), Springer-Verlag Berlin Heidelberg 2012, Proceedings of the COMECAP 2012, 11th International Conference on Meteorology, Climatology and Atmospheric Physics, 30 May – 1 June 2012, Athens, Greece, pp. 1265-1271.
30. Liora, N., Markakis, K., **Poupkou**, A., Dimopoulos, S., Giannaros, T. and Melas, D., 2013. "Particulate matter emissions from natural sources in Europe – A case study of the impact of natural sources to PM pollution levels", ACCENT-Plus Symposium, Bringing together the European Research in atmospheric composition change Challenges for the next decade, 17 -20 September 2013, Urbino, Italy (http://lampweb64bit.uniurb.it/accent/accent_documents/ext_abs_2013/Liora_N.pdf).
31. **Poupkou**, A., Liora, N., Karagiannidis, A., Giannaros, T., Giannaros, C., Melas, D. and Argiriou, A., 2014. "Maritime sector emissions contribution to the particulate matter pollution in a Mediterranean city-port: A modeling approach". In: Air Pollution Modeling and Its Application XXIII, Eds: Douw Steyn, Rohit Mathur, ISBN: 978-3-319-04378-4, Springer Proceeding in Complexity, Proceedings of the 33rd International Technical Meeting on Air Pollution Modelling and its Application, 26 - 30 August 2013, Miami, Florida USA, pp. 307-310.
32. Im, U., Markakis, K., Unal, A., Kindap, T., **Poupkou**, A., Incecik S., Yenigun O., Melas D., Theodosi C. and Mihalopoulos, N., 2014. "Higher resolution modeling of the PM₁₀ levels over Istanbul for a winter episode". 32st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application, 7-11 May 2012, Utrecht, The Netherlands, In: Air Pollution Modeling and its Application XXII, Edition: NATO Science for Peace and Security Series C: Environmental Security, Chapter: Local and Urban Scale Modelling, Publisher: Springer Netherlands, Editors: Douw G. Steyn, Peter J.H. Builtjes, Renske M.A. Timmermans, ISBN: 978-94-007-5576-5, DOI:10.1007/978-94-007-5577-2_122, pp.721-725.
33. Liora, N., **Poupkou**, A., Markakis, K., Giannaros, T. and Melas, D., 2014. "Sea salt and windblown dust emissions in the Eastern Mediterranean – Study of the natural PM emissions dependence on meteorology". In: Proceedings of the 12th International Conference of Meteorology, Climatology and Physics of the Atmosphere (COMECAP 2014), 28 – 31 May 2014, Heraklion, Greece (M. Kanakidou, N. Mihalopoulos, P.Nastos Eds), Crete University Press, ISBN: 978-960-524-430-9, vol. 2, pp. 137-141.
34. Karagiannidis, A.F., **Poupkou**, A., Giannaros, C., Giannaros, Th., Dimopoulos, S., Liora, N., Melas, D. and Argiriou A.A., 2014. "Meteorological parameters affecting the air pollution of the city of Patras". In: Proceedings of the 12th International Conference of Meteorology, Climatology and Physics of the Atmosphere (COMECAP 2014), 28 – 31 May 2014, Heraklion, Greece (M. Kanakidou, N. Mihalopoulos, P.Nastos Eds), Crete University Press, ISBN: 978-960-524-430-9, vol.1, pp. 461-465.
35. Contini, D., Donato, A., Gambaro, A., Argiriou, A., Melas, D., Cesari, D., **Poupkou**, A., Karagiannidis, A., Tsakis, A., Merico, E., Cesari, R. and Dinoi, 2015. "A. Impact of ship traffic to PM_{2.5} and particle number concentrations in three port-cities of the Adriatic/Ionian area". In: Proceedings of the XIII International Conference on Aerosol Science and Technology (ICAST 2015), 16 – 17 April 2015, Lisbon. Portugal. World Academy of Science, Engineering and Technology, International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering Vol 9, No 4, 2015, pp. 454-459.
36. Solomou, E.S., Mpolis, S., **Poupkou**, A., Dimopoulos S. and D. Melas, 2015. "Effect of Etesian winds on ozone levels in Eastern Mediterranean Sea". In: Proceedings of the 14th International Conference on Environmental Science and Technology (CEST 2015), 3-5 September 2015, Rhodes, Greece, CEST2015_00719.
37. Siomos, N., Filoglou, M., **Poupkou**, A., Liora, N., Dimopoulos, S., Melas, D., Chaikovsky, A. and Balis, D., 2016. "The potential of the synergy of sunphotometer and lidar data to validate vertical profiles of the aerosol mass concentration estimated by an air quality model". Electronic proceedings of the 27th International Laser Radar Conference, 5-10 July 2015, New York, USA, EPJ Web of Conferences 119, 23025 (2016).
38. Filoglou, M., Balis, D., Siomos, N., **Poupkou**, A., Dimopoulos, S. and Chaikovsky, A., 2016. "A sensitivity study of lirc algorithm to user-defined input parameters, using selected cases from Thessaloniki's measurements". Electronic proceedings of the 27th International Laser Radar Conference, 5-10 July 2015, New York, USA, EPJ Web of Conferences 119, 23027 (2016).
39. Liora, N., **Poupkou** A., Giannaros, T.M. and Melas, D., 2016. "Study of the impact of natural sources on the air quality – Evaluation of a natural emissions model". In: Proceedings of the 9th International Physics Conference of the Balkan Physical Union, 24 – 27 August 2015, Istanbul, Turkey, AIP Conf. Proc. 1722, 270004-1–270004-4.
40. Papanastasiou, D.K., Huang, X., **Poupkou**, A., Pu, X., Zanis, P., Wang, T. and Melas, D., 2016. "Performance of RegCM4 model during heat waves - A case study for China". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing,

- Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 129-135.
41. Melas, D., Liora, N., **Poupkou**, A., Giannaros, C., Dimopoulos, S., Kontos, S., Symeonidis, P., Progiou, A., Sitara, A., Economides, D. and Ziomas, I., 2016. "An up-to-date assessment of the air quality in Greece with the use of modeling tools". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 1123-1128.
 42. Kontos, S., Liora, N., **Poupkou**, A., Giannaros, C., Garane, K. and Melas, D., 2016. "Air quality impact of cruise and passenger ship emissions in the port of Thessaloniki". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 1129-1134.
 43. Zyrichidou, I., Balis, D., Liora N., **Poupkou**, A., Giannaros, C., Melas, D., Koukouli, M.E., De Smedt, I., van Roozendaal, M and van der A, R., 2016. "Investigating the impact of the economic recession over Mediterranean urban regions on satellite-based formaldehyde columns; Comparison with chemistry transport model results". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 1027-1033.
 44. Drosoglou, Th., Bais, A.F., Zyrichidou, I., **Poupkou**, A., Liora, N., Giannaros, C., Koukouli, M., Kouremeti, N., Dimopoulos, S., Balis, D. and Melas D., 2016. "Comparison of ground-based tropospheric NO₂ columns with OMI/Aura products in the greater area of Thessaloniki by means of air quality modeling tool". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 1075-1080.
 45. Solomou, E., Bolis, S., **Poupkou**, A., Zanis, P., Lazaridis, M. and Melas D., 2016. "Evaluation of ozone levels from MACC global and regional modelling systems over Eastern Mediterranean - The influence of Etesian winds". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 1059-1065.
 46. Siomos, N., Filioglou, M., **Poupkou**, A., Liora, N., Dimopoulos, S., Melas, D., Chaikovskiy, A. and Balis, D.S., 2016. "Vertical separation of desert dust and biomass burning aerosol layers over Thessaloniki using the synergy of sunphotometer and lidar data". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 817-822.
 47. **Poupkou**, A., Huang, X., Papanastasiou, D. K., Pu, X., Zanis, P., Wang, T., Garane, A. and Melas, D., 2016. "Evaluating the performance of the RegCM-Chem4 model in the simulation of ozone levels during heat waves in China". In: "Perspectives on atmospheric sciences", Karacostas T et al. (eds), Springer International Publishing, Switzerland, Proceedings of the 13th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2016), 19-21 September 2016, Thessaloniki, Greece, pp. 1051-1057.
 48. Solomou, E., **Poupkou**, A., Liora, N., Giannaros, C., Kontos, S., Zanis, P., Lazaridis, M., Symeonidis, P., Progiou, A., Sitara, A., Economides, D., Ziomas, I. and Melas, D., 2018. "Air quality high resolution modeling using CAMx-WRF over the Greek domain: A model performance evaluation". In: Proceedings of the 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), 15-17 October 2018, Alexandroupolis, Greece, pp.363-367.
 49. López, E., Palomo, F., Liora, N., Kontos, S., Almedia-Silva, M., Baptista, P., Liguori, F., Lorenzet, K., Fernandez, R., Ortiz, C., **Poupkou**, A., Meleti, Ch., Melas, D., Patti, S., Faria, M.V., Ferreira, J. and Lanera C., 2018. "Integrated modelling tool for the analysis of traffic-congested roads in urban centers". In: Proceedings of the 14th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2018), 15-17 October 2018, Alexandroupolis, Greece, pp. 852-857.
 50. Parliari, D., Kontos, S., **Poupkou**, A., Papadogiannaki, S., Tzoumaka, P., Kelessis, A., Melas, D., 2019. "Studying the effects of Urban Heat Island during hot days: the case of Thessaloniki, Greece". In: Proceedings of the 9th International Symposium on Atmospheric Sciences (ATMOS2019): Interactions between Climate Change and Sectors, 23-26 October 2019, Istanbul, Turkey, pp. 88-98.
 51. Solomou, E.S., Pappa, A., Kioutsioukis, I., **Poupkou**, A., Liora, N., Kontos, S., Giannaros, C. and Melas, D., 2020. "Improvement of WRF-CAMx ozone forecasts through a post-processing technique". In: e-Proceedings of the online International Conference 'Protection and Restoration of the Environment XV', 2020, Greece.
 52. Solomos, S., Kampouri, A., Amiridis, V., Balis, D., Bais, A., Karagkiozidis, D., Papayannis, A., Mihalopoulos, N., Bougiatioti, A., Stavroulas, I., Liakakou, E., Gerasopoulos, E., Athanasopoulou, E., **Poupkou**, A., Zerefos, C., Mylonaki, M., Soupiona, O., Papanikolaou, C., Foskinis, R., Kakouri, A., Karagiannis D., 2021. "Pollutants dispersion from domestic wood burning for heating at Ioannina". In: Proceedings of the 15th

- International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2021), 26-29 September 2021, Ioannina, Greece, pp. 150-154.
53. Papadogiannaki, S., Liora, N., Parliari, D., Cheristanidis, S., **Poupkou**, A. and Melas D., 2023. "Assessing the carbon footprint of teleworking: A case study of two research projects before and after the COVID-19 pandemic". 16th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2023), 25-29 September 2023, Athens, Greece, Environ. Sci. Proc. 2023, 26, 101, <https://doi.org/10.3390/environsciproc2023026101>.
 54. Kalabokas, P., Stavraka, T., Kapsomenakis, J., **Poupkou**, A. and Zerefos, C., 2023. "The evolution of the seasonal variation and the summer diurnal variation of primary and secondary photochemical air pollution in Athens". 16th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2023), 25-29 September 2023, Athens, Greece, Environ. Sci. Proc. 2023, 26, 122, <https://doi.org/10.3390/environsciproc2023026122>.
 55. **Poupkou** A., Kontos S., Liora N., Tsiaousidis D., Kapsomenakis I., Solomos S., Liakakou E., Athanasopoulou E., Grivas G., Diapouli E., Vasilatou V., Papagiannis S., Progiou A., Kalabokas P., Melas D., Gerasopoulos E., Eleftheriadis K. and Zerefos C., 2023. "Evaluation of the simulated atmospheric particulate matter chemical composition in Athens - Organic aerosols formation sensitivity tests". 16th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2023), 25-29 September 2023, Athens, Greece, Environ. Sci. Proc. 2023, 26, 32, <https://doi.org/10.3390/environsciproc2023026032>.
 56. Douvis, K., Kapsomenakis, J., Solomos, S., **Poupkou**, A., Stavraka, T., Nastos, P. and Zerefos, C., 2023. "Change in aridity index in the Mediterranean region under different emission scenarios". 16th International Conference on Meteorology, Climatology and Atmospheric Physics (COMECAP 2023), 25-29 September 2023, Athens, Greece, Environ. Sci. Proc. 2023, 26, 171. <https://doi.org/10.3390/environsciproc2023026171>.
 57. **Poupkou**, A., Liora, N., Kontos, S., Solomos, S., Kapsomenakis, I., Grivas, G., Assimakopoulos, V., Fameli, K.-M., Progiou, A., Kalabokas, P., Mihalopoulos, N., Melas, D. and Zerefos, C., 2024. "Exploring the impact of shipping emissions on PM levels in the Eastern Mediterranean". In: Electronic Proceedings of the 22nd International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (HARMO22), 10-14 June 2024, Pärnu, Estonia.
 58. Kolovoyiannis, V., Mazioti, A.A., Potiris, M., Mamoutos, I., Krasakopoulou, E., Tragou, E., Zervakis, V., Majamäki, E., Hänninen, R., Sofiev, M., Fridell, E., Kukkonen, J., Jalkanen, J.-P., **Poupkou**, A., Liora, N., Skylaki, E., Parinos, C., Gogou, A., Mihalopoulos, N. and Zerefos Ch., 2025. "Maritime transport impact on pollution in Saronikos Gulf: modelling, insight and perspectives from two research projects". In: *Proceedings of the 19th International Conference on Environmental Science and Technology (CEST 2025)*, Proceedings ISSN: 2944-9820, 3 - 6 September 2025, Kos, Greece, <https://doi.org/10.30955/gnc2025.00458>.
 59. Kotrikla, A.M., Remoundos, G., Lekakou, M., Polydoropoulou, A., Papaioannou, G., Katsounis, I., Fameli, K.M., Assimakopoulos, V., Grivas, G., Mihalopoulos, N., Liora, N., **Poupkou**, A., Progiou, A., Zerefos, C., Grigoriadis, A., Tsegas, G., Fragkou, E. and Ntziachristos, L., 2025. "Ship electrification as a pathway to decarbonize shipping: The case of Perama-Salamina line". In: *Proceedings of the 19th International Conference on Environmental Science and Technology (CEST 2025)*, Proceedings ISSN: 2944-9820, 3 - 6 September 2025, Kos, Greece, <https://doi.org/10.30955/gnc2025.00250>.
 60. Liora, N., **Poupkou**, A., Kontos, S., Fameli, K.-M., Remoundos, G., Grigoriadis, A., Fragkou, E., Assimakopoulos, V., Bougiatioti, A., Grivas, G., Kotrikla, A., Mihalopoulos, N., Ntziachristos, L., Progiou, A., Solomos, S. and Zerefos C., 2025. "Air quality benefits of ship electrification: A modeling case study for Saronic Gulf, Greece". In: *17th International Conference on Meteorology, Climatology, and Atmospheric Physics (COMECAP2025)*, 29 September - 1 October 2025, Nicosia, Cyprus, *Environmental and Earth Sciences Proceedings*, 35, 12, <https://doi.org/10.3390/eesp2025035012>.
 61. Stavraka, Th., Kapsomenakis, J., **Poupkou**, A., Douvis, K. and Kalabokas, P., 2025. "The evolution of the interannual and seasonal variation of the main gaseous and particulate pollutants in Athens, Greece, for 2001–2023". In: *17th International Conference on Meteorology, Climatology, and Atmospheric Physics (COMECAP2025)*, 29 September - 1 October 2025, Nicosia, Cyprus, *Environmental and Earth Sciences Proceedings*, 35, 41, <https://doi.org/10.3390/eesp202503504>.