BRIEF CURRICULUM VITAE

Elissavet Bossioli

Family Status: Marrried, 2 children Tel: +30210 7276836; fax +30210 7276791

ebossiol@phys.uoa.gr

Current position

Assistant Professor, Department of Physics, University of Athens

Previous positions

- 2014-June 2021: Laboratory Teaching Personnel, Department of Physics, National and Kapodistrian University of Athens
- 2001-2014: permanent University Staff Department of Physics/Section of Environmental Physics and Meteorology/National and Kapodistrian University of Athens
- 2001: National Observatory of Athens, employee
- 1996-2001: Associate Researcher, Department of Physics/Section of Environmental Physics and Meteorology/National and Kapodistrian University of Athens

Academic studies

- PhD 2007: Department of Physics/Section of Environmental Physics and Meteorology/National and Kapodistrian University of Athens. Thesis title: 'Simulation of the effects of critical factors on ozone formation and accumulation in the greater Athens area'
- MSc in Environmental Physics. 1996: Department of Physics/Section of Environmental Physics and Meteorology/National and Kapodistrian University of Athens
- B.Sc. in Physics 1993: Department of Physics, National and Kapodistrian University of Athens

Academic awards and fellowships:

- 1998-2001: General Secretariat of Research and Technology, scholarship
- 2008-2011: National representative of the COST Action ES0602 "Towards a European Network on Chemical Weather Forecasting and Information Systems"

Research and projects

Research topics:

- Atmospheric Physics and Chemistry
- Radiation-cloud-aerosol interactions
- Atmospheric composition
- Application of regional photochemical on-line and off-line models, box photochemical models - Chemical mechanisms
- Application of the on-line WRF-Chem model study of fundamental atmospheric processes by exploiting airborne observations and modeling results over the Mediterranean region and the Arctic

Research projects:

• Associate researcher in the Group of Numerical Applications in the Atmosphere on several national and EC research projects (21) since 1996.

• Principal Investigator of the Service contract No. MOVE/C2/SER/2014-269/SI2.706115 for the development of a Public European Environmental Model Suite for Aviation (European Comission Directorate-General for Mobility and Transport).

Selected scientific publications (of 28, Scopus citations: 347, h-index: 12)

- Bossioli E., Tombrou M., Karali A., Dandou A., Paronis D., Sofiev M. (2012) Ozone production from the interaction of wildfire and biogenic emissions: a case study in Russia during spring 2006, *Atmos. Chem. Phys.*, 12, 7931-7953
- Tombrou M., Bossioli E., Kalogiros J., Allan J., Bacak A., Biskos G., Coe H., Dandou A., Kouvarakis G., Mihalopoulos N., Percival C.J., Protonotariou A.P., Szabó-Takács B. (2015) Physical and chemical processes of air masses in the Aegean Sea during Etesians: Aegean-Game airborne campaign, Sci. Total Environ., 506-507, 201-216
- Bossioli E., Tombrou M., Kalogiros J., Allan J., Bacak A., Bezantakos S., Biskos G., Coe,H., Jones B.T., Kouvarakis G., Mihalopoulos N., Percival C.J. (2016) Atmospheric composition in the Eastern Mediterranean: Influence of biomass burning during summertime using the WRF-Chem model, *Atmos. Environ.*, 132, 317-331
- Kalkavouras P., Bossioli E., Bezantakos S., Bougiatioti A., Kalivitis N., Stavroulas I., Kouvarakis G., Protonotariou A.P., Dandou A., Biskos G., Mihalopoulos N., Nenes A., Tombrou M. (2017), New particle formation in the southern Aegean Sea during the Etesians: importance for CCN production and cloud droplet number, *Atmos. Chem. Phys.*, 17, 175-192
- Dimitropoulou E., Assimakopoulos V.D., Fameli K.M., Flocas H.A., Kosmopoulos P., Kazadzis S., Lagouvardos K, Bossioli E., (2018) Estimating the Biogenic Non-Methane Hydrocarbon Emissions over Greece, *Atmosphere*, 9(1), 14.
- Sotiropoulou G., Bossioli E., M. Tombrou, (2019): Modeling extreme warm-air advection in the Arctic: the role of microphysical treatment of cloud droplet concentration, *J. Geophys. Res. Atmosphere*; doi: 10.1029/2018JD029252.
- Methymaki G., E. Bossioli, Kalogiros J., Kouvarakis G., Mihalopoulos N., Nenes A., Tombrou M., (2020): Aerosol absorption over the Aegean Sea under northern summer winds, Atmos. Environ., 231; doi.org/10.1016/j.atmosenv.2020.117533.
- Bossioli E., G. Sotiropoulou, G. Methymaki, and M. Tombrou, Modeling Extreme Warm-Air Advection in the Arctic: The Effect of Regional Sources on Cloud Properties, under review in JGR-Atmospheres.
- Bossioli E., Sotiropoulou G., Methymaki G., Tombrou M. (2021) Modeling Extreme Warm-Air Advection in the Arctic During Summer: The Effect of Mid-Latitude Pollution Inflow on Cloud Properties, Journal of Geophysical Research: Atmospheres, 126(7), e2020JD033291.
- 31 publications in conference proceedings, and 34 other publications (10 in books, and 24 technical reports)

Teaching activities

- 2018-now, Co-Teacher in MSc course, Methods of Data Analysis, Department of Physics/Section of Environmental Physics and Meteorology/National and Kapodistrian University of Athens
- 2015-now, Co-Teacher in MSc course, Atmospheric Physics and Chemistry, Faculty of Physics/Section of Environmental Physics and Meteorology/National and Kapodistrian University of Athens
- 2001-now, Laboratory courses, Department of Physics, National and Kapodistrian University of Athens

Assistant Advisor to: 8 Msc dissertations