







# Second scientific conference PANACEA

Web Conferencing 29 September – 1 October 2020



# **DAY 1 – Tuesday 29.09.2020**

Orals - 10 min presentation + 5 for questions

Posters – will have a 2 min oral introduction of the poster with only 1 slide that includes title, authors, interest of the study, methodology and conclusion. This slide has to be sent to the organizers <a href="mailto:panacea@chemistry.UoC.gr">panacea@chemistry.UoC.gr</a> the latest one day before the presentation for inclusion in the merged ppt of the poster session. In addition, the posters will be disposed the latest the day before the poster session in the protected web site of the conference (internal to PANACEA website) in the 1-page pdf or as a pdf with 10 slides max. The questions/comments poster session will be held through slack.

## Oral presentations-1.1 (12:00-13:15)

5 min Introductory remarks

25 min PANACEA Objectives and progress so-far general overview (Nikos Mihalopoulos, UOC/NOA)

**15 min** PM2.5 source apportionment in Greek urban and background environments (**Evaggelia Diapouli**, Demokritos)

**15 min** First time MAX-DOAS observations of tropospheric NO2 and HCHO columns in Ioannina, Greece during the PANACEA winter 2020 campaign (Dimitrios Karagiozidis, AUTH)

**15 min** The impact of biomass burning for heating on Ioannina city's air quality during winter time (**Christina-Anna Papanikolaou**, NTUA)

#### Poster session 1.1 (13:15-13:30)

- **2 min** Investigating variations in the PM2.5 concentrations over Thessaloniki station during the PANACEA campaigns using different measurement techniques (**Anthi Chatzopoulou**, AUTH)
- **2 min** Monoterpenes and Isoprene in the city of Athens: Natural vs anthropogenic origin and estimation of their contribution in secondary atmospheric pollutants' levels (**Anastasia Panopoulou**, UoC/NOA)
- **2 min** Identification of key aerosol types in Athens based on long-term in situ optical and chemical properties (**Dimitris Kaskaoutis**, UoC/NOA)
- **2 min** Overview of the two PANACEA campaigns for Thessaloniki station: Aerosol typing from remote sensing techniques and in situ data (Kalliopi-Artemis Voudouri, AUTH)
- **2 min** Comparison of in situ and remote sensing instruments at the Helmos free troposphere background station (**Stergios Vratolis**, Demokritos)

#### Discussion of poster on slack+









## 45 min break for lunch or coffee (13:30-14:15)

#### Oral presentations-1.2 (14:15-15:30)

- 15 min First results of the summer 2020 campaign (Spyros Pandis, ICE-HT)
- **15 min** Night-time chemistry of biomass burning plumes in urban areas: A dual mobile chamber study (Spiro Jorga, ICE-HT)
- 15 min The impact of wildfire aerosols on global and regional climates (Apostolos Voulgarakis, TUC)
- **15 min** Implementation of a dosimetry model for calculation of deposited dose of particulate matter (PM) in different locations in Greece (**Sofia-Eirini Chatoutsidou**, TUC)
- **15 min** Ozone and carbon monoxide measurements at the Navarino Environmental Observatory (NEO) in Messenia, Greece (**Theodora Stavraka**, BRFAA)

## Poster session 1.2 (15:30-15:45)

- **2 min** Properties of biomass burning particles as observed in PANGEA observatory (**Anna Gialitaki**, NOA/AUTH)
- 2 min Investigating Fire Events in the Mediterranean area using satellite-derived products (Eleni Kalogeraki, UoC)
- **2 min** Intercomparison of three collocated multi-wavelength aerosol lidar systems at the National Technical University of Athens' Campus during 2020 (Alexandros Papayannis, NTUA)
- **2 min** Aerosol optical, chemical and radiative properties of a 3-day dust event observed over Athens, Greece using laser remote sensing and modelling (**Ourania Soupiona**, NTUA)
- **2 min** The effect of air quality and clouds on surface solar radiation over Greece (**Georgia Alexandri**, AUTH)
- **2 min** The role of dust minerals in the atmosphere as precursors of Ice Nuclei Particles (Marios Chatziparaschos, UoC)

## Discussion of poster on slack

## End of day-1









# Day 2- Wednesday 30.09.2020

# Oral presentations-2.1 (12:00-13:15)

- 15 min COVID-19 campaign (Doina Nicolae)
- **15 min** Changes in nitrogen dioxide levels over Greece after the outbreak of COVID-19; a satellite view (Maria-Elissavet Koukouli, AUTH)
- **15 min** A satellite assessment of dust aerosol episodes over the broader Mediterranean Basin. Patterns of seasonal and inter-annual variability (Maria Gavrozou, UoI)
- **15 min** Case study analysis of aerosol shortwave radiative forcing over Athens, using the FORTH radiative transfer model, multi-wavelength Raman-lidar measurements and satellite observations (Vasileios Stathopoulos, UAegean)
- **15 min** Global trends of Aerosol and Dust Optical Depth based on MIDAS fine resolution dataset during 2003-2017 (**Stavros-Andreas Logothetis**, UPatras)

#### Poster session 2.1 (13:15-13:30)

- 2 min Changes in PM and atmospheric potential gradient during the COVID measures at Xanthi (Athanasios Karagioras, DUTH)
- 2 min Observations of aerosol load in PANGEA during COVID-19 lock-down and relaxation period (Eleni Marinou, NOA)
- 2 min Investigating variations in the aerosol load over Thessaloniki during the COVID-19 lock-down period in Greece using the remote sensing infrastructure of PANACEA (Nikolaos Siomos, AUTH)
- **2 min** MAX-DOAS retrieval of aerosol and NO2 vertical profiles over Thessaloniki, Greece (**Dimitrios Karagiozidis**, AUTH)
- **2 min** Total Nitrogen Dioxide column amount over Thessaloniki, Greece and comparison with satellite data (Fani Gkertsi, AUTH)
- **2 min** Detection of NO2 plumes from individual ships over the Mediterranean with the TROPOMI/S5P (**Aristeidis Georgoulias**, AUTH)

#### Discussion of posters on slack +

## 45 min break for lunch or coffee (13:30-14:15)

#### Oral presentations-2.2 (14:15-15:30) -mini sensors

- **15 min** Improving the uncertainty of air quality microsensors via computational intelligence methods (Konstantinos Karatzas, AUTH)
- 15 min Remarks from GSRT (Antonis Gypakis, GSRT)
- **15 min** Evaluation and Field Deployment of Low-cost PM Sensors in Different Urban Environments in Greece (lasson Stavroulas, NOA/UoC)
- **15 min** Autonomous ground based integrated path differential absorption device for remote sensing of atmospheric CO2 and CH4 (**Panagiotis Siozos**, FORTH)
- **15 min** New insights into the impact of atmosphere-sea interactions on carbon sequestration in the Eastern Mediterranean Sea: a three-year time-series study in the deep lerapetra Basin (Constantine Parinos, HCMR)









# Poster session 2.2 (15:30-15:45)

- 2 min Coccolithophore production and export in three deep-sea sites of the Aegean and Ionian Seas (Eastern Mediterranean): Biogeographical patterns and biogenic carbonate fluxes (Elisavet Skampa, NKUA)
- **2 min** Evaluation of the LOTOS-EUROS NO2 simulations using ground-based measurements and S5P/TROPOMI observations over Greece (Ioanna Skoulidou, AUTH)
- **2 min** Comparison of inferred S5P/TROPOMI NO2 surface concentrations with in-situ measurements over Central Europe (Andreas Pseftogkas, AUTH)
- 2 min Observed trends of greenhouse gases at Finokalia monitoring station (Nikos Gialesakis, UoC)
- 2 min Variability of CO2, CH4 and CO column averaged mixing ratios from one and a half year of measurements in Thessaloniki, Greece, using a portable EM27/SUN FTIR spectrometer (Marios Mermigas, AUTH)
- **2 min** Investigation of volcanic emissions in the Mediterranean: "The Etna-Antikythera connection" (Anna Kampouri, NOA)

Discussion of posters on slack

End of day 2 (16:30)









# Day 3 - Thursday 1.10.2020

#### Oral presentations-3.1 (12:00-13:15)

- 15 min Fast climate responses from present-day aerosols in a CMIP6 multi-model study (Prodromos Zanis, AUTH)
- **15 min** Electrified Saharan Dust: Does it reach Greece? An overview of the electrical activity of Saharan dust inferred from surface electric field observations (**Vasiliki Daskalopoulou**, NOA)
- **15 min** The potential of a synergestic lidar and sunphotometer retrievals for aerosol model evaluation (**Dimitra Konsta**, NKUA)
- **15 min** Design and Development of a Lidar Temperature Profiler. The first low cost prototype (**Giorgos Georgousis**, RAYMETRIC's founder and in-house LIDAR expert)
- **15 min** Turning research data to commercialized services and applications (**Panagiota Syropoulou**, DRAXI's Project Manager)

### Poster session 3.1 (13:15-13:30)

- **2 min** The influence of different aerosol properties and types on direct aerosol radiative forcing and efficiency in Europe and Mediterranean area (**Stavros-Andreas Logothetis**, UPatras)
- **2 min** Study of the Planetary Boundary Layer Height over selected sites in Greece during Panacea Campaigns (2019-2020) using multi-wavelength aerosol lidar systems (**Romanos Foskinis**, NTUA)
- **2 min** Planetary Boundary Layer Height retrievals using Polly-XT Lidar water vapor acquisitions (Ioanna Tsikoudi, NOA)
- **2 min** Induced errors in Direct Normal Irradiance due to uncertain Aerosol Optical Depth from CAMS reanalysis project (Vasileios Salamalikis, UPatras)
- **2 min** EVE lidar: The passport of EARLINET lidar systems towards Aeolus Cal/Val studies (**Peristera Paschou**, NOA)
- **2 min** First assessment of AEOLUS L2A products in the framework of PANACEA: Cal/Val aspects and evaluation results (Antonis Gkikas, NOA)

# Discussion of posters on slack

15 min Closing remarks - end of Conference (13:30-13:45)

#### 45 min break for Coffee /lunch (13:45-14:30)

## 90 min General Assembly (14:30-16:00)

- 40 min Comments by the Managing Authority (EPAnEK), GSRT and the Advisory Board
- **20 min** Publications, progress reports, deliverables status, new instrumentation, personnel and budget status (Evaggelia)
- 30 min Status of PANACEA campaigns (past, ongoing and future), other