

VIRTUAL WORKSHOP

INNOVATION IN ATMOSPHERIC MEASUREMENT TECHNIQUES

Draft Program

Thursday, 12th of June 2025

All times are in CEST (Central Europe Standard Time)

08:00 - Opening Session

Welcome & Introduction to the Workshop

Workshop introduction and opening

Jean Sciare
The Cyprus Institute

08:15 – VOCs (Chair: Stephane Sauvage)

Simplified VOC monitoring with a novel VUV PTR Ionization Reactor and Automated Instrument performance checks

Veronika Pospisilova
TOFWERK, Switzerland

VOCENTINEL - A novel solution for automated real-time monitoring of atmospheric VOCs

Markus Leiminger
IONICON Analytik GmbH, Austria

Long-term stability & field applicability of a portable paraformaldehyde generator using a temperature-controlled permeation tube system

Audrey Grandjean
Chromatotec, France

Advancements in the detection and monitoring of VOCs

Jan Wozniak
PICARRO B.V., Poland

Validation of two on-line instruments for OVOC monitoring, a formaldehyde analyser and an on-line AUTO-GC-FID system: Laboratory validation and field validation at the Puy de Dôme

Damien Bazin
Chromatotec, France

Multi-Pressure Chemical Ionisation for seamless detection from VOCs to HOMs in a single instrument

H.J. Jost
Karsa, Finland

Method development for analysis of condensing vapors using thermal desorption mass spectrometry

Mihai Ciobanu
The Cyprus Institute, Cyprus

09:25 – Greenhouse & Reactive Gases (Chair: Sindu Raj Parampil)

A dual-platform approach for quantifying methane emissions at site level

Roubina Papaconstantinou
The Cyprus Institute, Cyprus

A new all-in-one instrument for air quality and greenhouse gas monitoring

Jonas Bruckhuisen
MIRO Analytical, Switzerland

Ammonia monitoring: meeting new EU Air Quality directive with Picarro pi2103 Analyzer and INI Permecal system

Magdalena Hofmann
Picarro B.V., Netherland

QUALARIA: an AI system to monitor and predict metropolitan area of São Paulo street-level air quality

Victória Maria Lopes Peli
MeteoIA Data Science, Brazil

10:05**Coffee Break****10:15 – International Initiatives** (Chair: Niku Kivekäs)

Enabling climate risk research through research infrastructure services

Päivi Haapanala

Luke, Finland

The DUST doctoral network

Franco Marengo

The Cyprus Institute, Cyprus

CAELOSCOPE: added-value atmospheric products based on Sentinel-5p/TROPOMI measurements in Terrascope

Jeroen van Gent

BIRA-IASB, Belgium

10:45 - Aerosol in-situ measurement techniques (Chair: Jean Sciare)

Monitoring ambient ultrafine particles with modified PN-PTI instruments

Hüwe Florian

nanoDUST GmbH, Germany

AE36s improving aerosol source understanding with the AE36s aethalometer model

Matic IvančičAerosol Magee Scientific,
Slovenia

Characterization of the aerosol infrared monitor for autonomous aerosol chemical composition measurements.

Andrea Baccarini

Aerospec SA, Switzerland

Towards a portable device for real-time monitoring of oxidative activity in aerosols

María Cerrato ÁlvarezUniv. de Castilla-La Mancha,
Spain

The measurement of the total number concentration of aerosols without a working fluid

Patrick Weber

FZ Juelich, ICE-3, Germany

Implementation of real-time source apportionment approaches using the ACSM-Xact-Aethalometer (AXA) set-up with Sofi RT: the Athens case study

Olga Zografou

NCSR Demokritos, Greece

Microwave induced plasma time-of-flight mass spectrometer (MIPToF): a new tool for real-time quantitative analysis of metals in air

Alexander Gundlach-Graham

TOFWERK AG, Switzerland

11:55**Coffee break****12:15 - Aerosol & Cloud Optical Properties** (Chair: Franco Marengo tbc)

LAST: A cutting-edge system for multi-spectral lidar signals simulation

Guido Di Donfrancesco

ALA srl, Italy

Can UAV-based and lidar synergistic observations improve mineral dust quantification?

Alkistis Papetta

The Cyprus Institute, Cyprus

Trinocular all sky imaging network for cloud and solar applications

Max AragonWemetics FlexCo / Mines Paris
PSL, France

Dual field-of-view depolarization method using the POLLY-xt Raman lidar of CARO Limassol national facility: parameterization of aerosol-cloud interactions

Konstantinos Chrysostomou

Eratosthenes CoE, Cyprus

Synergistic measurements from satellite and in-situ sampling for air quality applications

Vanderlei Martins

GRASP Earth, USA



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 856612 and the Cyprus Government.



Funded by the European Union. Views and opinions expressed are however those of the author(s) and do not necessarily reflect those of the European Union or REA. Neither the European Union, nor the granting authority can be held responsible for them."



This project is funded by the European Union under Horizon Europe (project No.101071247)

13:05 – PICO session (Chair: Ulrich Bundke)

Hydrogen leak detection at ppm-level in real time at an industrial site	Doreen Schell Heidelberg Univ (Germany)
New UAV observations to assess the dust particle morphology and orientation	Kenneth Tschorn The Cyprus Institute, Cyprus
AEROTAPE: A novel technology for real time quantification and characterization of dust and its sources	Eleni Kolintziki The Cyprus Institute, Cyprus
Global dust estimation from novel space missions	Zuhir Bona The Cyprus Institute, Cyprus
Fast and fine-scale hourly air quality mapping using hybrid dispersion and KNN approaches	Lucas Bouche Atmo Hauts-de-France, France
Dual cavity dual comb interferometry with incoherent light	Jarni Braal Univ. College Cork, Ireland
NH ₃ sensors and UAVs: a comprehensive assessment of ground-based and aerial nh3 measurements at a poultry farm in northern England	Clare Pearson UKCEH, UK
Leveraging advanced sensor networks and machine learning for real-time air quality monitoring: a fusion of innovation and policy impact	Linchun yu News, China
Hourly PM _{2.5} and PM ₁₀ matter concentrations prediction in Pune, India, using Aeronet aerosol optical depth (AOD) and meteorological data	Ranjitkumar Solanki National Institute of Technology, Surat, India
Assessing urban land use dynamics and air quality interaction in Ahmedabad using Google Earth engine and earth observation data	Mahi Patel Silver Oak University, India
Traffic induced atmospheric pollution and associated health impact – a pilot study with street fruits vendors	Bertrand Tchanche Alioune Diop Univ., Senegal

13:30

End of Workshop



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 856612 and the Cyprus Government.



Funded by the European Union. Views and opinions expressed are however those of the author(s) and do not necessarily reflect those of the European Union or REA. Neither the European Union, nor the granting authority can be held responsible for them."



This project is funded by the European Union under Horizon Europe (project No.101071247)