



VIRTUAL WORKSHOP

INNOVATION IN ATMOSPHERIC MEASUREMENT TECHNIQUES

Agenda

Thursday, 2nd June 2022

All times are in CEST (Central European)

Opening Session		
09:00	Workshop Introduction & Opening	Jean Sciare The Cyprus Institute
Session#1: International Initiatives and Opportunities		
09:15	Research Infrastructures Services Reinforcing Air Quality Monitoring Capacities in European Urban & Industrial AreaS (RI-URBANS) - connecting ACTRIS to the urban atmosphere	Tuukka Petäjä University of Helsinki
09:30	Pilot Application in Urban Landscapes - Towards integrated city observatories for greenhouse gases (PAUL)	TBC
Session#2: Instrumentation		
09:50	Pushing scientific boundaries needs continuity and excellent tools	J. Valentin Lavric Acoem Australasia
10:00	Calibrated measurements of the aerosol absorption coefficient with a multi-wavelength photo-thermal interferometer	Griša Močnik Haze Instruments d.o.o
10:10	The four-wavelength photoacoustic aerosol absorption spectrometer PAAS-4λ for long-term monitoring of the absorption coefficient in the UV-VIS-NIR spectral range	Franz Martin Schnaiter schnaiTEC GmbH
10:20	Development of RAPID-E+ for in-situ measurements of bacteria, fungi, pollen, and other bioaerosols	Minghui Zhang Plair SA
10:30	AeroTape: a real-time IoT atmospheric particle analyzer	Adrien Reynaud Oberon Sciences
10:40	A new robust UFP measuring device for long-term low-cost ambient monitoring	Martin Fierz Naneos particle solutions
10:50	New Instruments for Sizing and Counting Aerosol Particles	TBC TSI Inc.
11:00	A new high-resolution Cloud Droplet Analyzer for stationary in-cloud Monitoring	Sergej Sel Palas GmbH
11:10	Particle Habit imaging and polar scattering (PHIPS) probe for measurement of cloud optical and microphysical properties	Emma Järvinen KIT
Coffee break		
Session#3: Reactive Gases		
11:40	A Relaxed Eddy Accumulation (REA) LOPAP-System for Flux Measurements of Nitrous Acid (HONO)	Jörg Kleffmann University of Wuppertal
11:50	A new instrument for in-situ HONO measurements by iterative cavity enhanced DOAS	Johannes Lampel Airyx GmbH
12:00	New solution for simultaneous monitoring of greenhouse gases and air pollutants with extremely high precision	Morten Hundt MIRO Analytical AG
12:10	The ICAD NO ₂ / NO _x instrument: calibration free in-situ measurements of trace gases for atmospheric and emission studies	Denis Pöhler Airyx GmbH
12:20	Ammonia dry deposition measurements using two new instruments.	Arjan Hensen TNO
Lunch break		

Session#4: Aerosols		
13:20	Monitoring the Spatial aerosol distribution of volcanic ashes and Sahara dust on La Palma Island	Ann-Kathrin Goßmann Palas GmbH
13:30	Cutting-edge technologies for research in aerosols and gases in urban air quality (TIGAS-CM PROJECT)	Begoña Artiñano CIEMAT
13:40	Long-term & high-time resolution monitoring of desert dust PM concentration using an aerosol absorption photometer	Michael Pikridas The Cyprus Institute
Session#5: Greenhouse Gases		
13:50	Quantifying CH ₄ emissions from in-situ measurements and comparison with national emission inventory results	Yunsong Liu LSCE
14:00	Vertical profile of greenhouse gases (CO ₂ , CH ₄ , CO, N ₂ O, H ₂ O) from surface up to 35 km with Aircore: long-term monitoring program at Trainou, France	Julien Moyé LSCE
14:10	Characterizing regional CH ₄ emissions from the oil and gas sector using non-methane hydrocarbons	Emeric Germain-Piaulenne The Cyprus Institute
Session#6: Remote sensing		
14:20	Retrieving Vertically Resolved Cloud Condensation Nuclei Concentrations from Spaceborne Lidar measurements	Piyushkumar Patel Jet Propulsion Laboratory
14:30	The NO ₂ camera: A spectral imager for mapping urban pollution	Emmanuel Dekemper BIRA-IASB
14:40	The SKYSPEC instrument: Atmospheric monitoring with passive DOAS remote sensing	Jan-Lukas Tirpitz Airyx GmbH
14:50	The GRASP-SAS High-resolution Air Quality product	Richard Kleidman AirPhoton Inc
Coffee break		
Session#7: Mass Spectrometry		
15:20	Karsa multi ion chemical ionization inlet (MION2) for ultrasensitive trace vapor detection	Juha Kangasluoma Karsa Ltd
15:30	Performance of a New Higher-Resolution Aerosol Chemical Speciation Monitor for Long-Term Measurements of Non-Refractory Aerosol	Benjamin Nault Aerodyne Research Inc
15:40	Versatile chemical ionization time of flight mass spectrometer for detecting organic and inorganic trace gases	Matthieu Riva Tofwerk
15:50	Thermo desorption – multi-scheme chemical ionization inlet – Mass Spectrometer for Atmospheric precursor and security research	Tuija Jokinen The Cyprus Institute
Session#8: Airborne		
16:00	The new multi-instrument payload onboard the IAGOS-CARIBIC Airbus A350	Andreas Zahn KIT
16:10	Profiling mineral dust with UAV-based in-situ instrumentation & ground-based in-situ and remote sensing instrumentation (Cyprus Fall campaign 2021)	Maria Kezoudi The Cyprus Institute
16:20	Design of innovative modular multi-species balloon-borne sampling platform in the Parisian sky	Yaël Bourgeois LSCE
16:30	Recent Advances at Brechtel MFG in UAS-deployable aerosol instruments	Fred Brechtel Brechtel Manufacturing Inc.
Session#9: Sensors		
16:40	Development and assessment of “mid-cost” sensors for urban monitoring network	Olivier Laurent LSCE
16:50	Challenges associated with using FIGARO TGS 2611-E00 semi-conductor-based sensors to derive methane mole fraction	Adil Shah LSCE
17:00	VAISALA AQT530 sensors as a tool in comprehensive Air Quality Monitoring	TBC University of Helsinki
17:10	Field Performance Evaluation of Low-cost Air Quality Sensors	R. Papaconstantinou The Cyprus Institute
End of the Innovation Workshop		