

Conference Agenda

Session

Poster Session Monday

Time: Monday, 01/Sept/2025: 5:15pm - 6:45pm

Location: Studium2000

V.le San Nicola corner, Via di Valesio, 73100 Lecce LE

Presentations

Advancing Atmospheric Research in the Eastern Mediterranean: Insights from the Cyprus Atmospheric Remote Sensing Observatory

Hossein Panahifar¹, Maria Poutli^{1,2}, George Kotsias¹, Argyro Nisantzi^{1,2}, Silas Michaelides², Diofantos Hadjimitsis^{1,2}, Patric Seifert³, Albert Ansmann³, Rodanthi-Elisavet Mamouri^{1,2}

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Assessing the Sources of PM1 Trace Elements in the Marseille-Fos Basin through Rolling Positive Matrix Factorization Crossed-Study

Mathilde Brezins¹, Benjamin Chazeau¹, Nicolas Marchand¹, Amandine Durand¹, Grégory Gille², Jean-Luc Jaffrezo³, Gaëlle Uzu³, Barbara D'Anna¹

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Atmospheric Dry Deposition in the Central Mediterranean Seen from a Single-Particle Perspective

Marcos Eduardo Pérez Morán¹, Kilian Schneiders¹, Melanie Eknayan¹, Fernando De Tomasi², Pierina Ielpo³, Mark Scerri^{1,4}, Michael Nolle⁵, Konrad Kandler¹

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Atmospheric ions indicating continuous new particle formation in the Mediterranean coastal environment

Spyridon Emmanouil Markoulakis¹, Nikos Kalivitis¹, Panagiotis Kalkavouras^{2,3}, Veli-Matti Kerminen⁴, Markku Kulmala⁴, Maria Kanakidou^{1,5,6}

¹University of Crete, Greece; ²National Observatory of Athens, Greece; ³University of the Aegean, Greece; ⁴University of Helsinki, Finland; ⁵University of Patras, Greece; ⁶University of Bremen, Germany

Characterization of an event of heat wave and particulate matter increase in Bologna

Andrea Faggi¹, Erika Brattich¹, Tiziano Maestri¹, Laura Tositti², Alessandro Zappi²

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Characterization of the Atmospheric Microbiome at a high-altitude station in the eastern Mediterranean using Flow Cytometry

Ernest Abboud¹, Carolina Molina^{1,2}, Sofia Gkretsi¹, Romanos Foskinis^{1,3}, Promodos Fetfatzis⁴, Konstantinos Granakis⁴, Konstantinos Eleftheriadis⁴, Athanasios Nenes^{1,2}, Kalliopi Violaki¹

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Drivers of cloud droplet number using a synergy of remote sensing and in situ instrumentation during the Cleancloud Helmos Orographic site experiment (CHOPIN)

Romanos Foskinis¹, Nicole Clerx¹, Marilena Gidarakou², Christos Mitsios³, Carolina Molina³, Kaori Kawana³, Prodromos Fetfatzis⁴, Maria Gini⁴, Olga Zografou⁴, Konstantinos Granakis⁴, Aiden Jönsson⁵, Paul Zieger⁵, Lu Zhang⁶, Andreas Massling⁶, Mika Komppula⁷, Konstantinos Eleftheriadis⁴, Alexandros Papayannis², Alexis Berne¹, Athanasios Nenes^{1,3}

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Household biomass burning as a driver of winter aerosol pollution in Mediterranean urban areas

Diogo Lopes

University of Aveiro, Portugal

Interactions between urban heat island (UHI) and urban pollution island (UPI) under key atmospheric conditions

Andrea Cecilia¹, Annalisa Di Bernardino², Margherita Erriu², Anna Maria Siani², Giampietro Casasanta¹, Marianna Conte¹, Lorenzo Marinelli³, Stefania Argentini¹

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Long-term aerosol acidity in the urban center of Athens, Greece

Aikaterini Bougiatioti¹, Kalliopi Petrinoli^{1,2}, Iasonas Stavroulas³, Maria Tsagkaraki², Nikolaos Mihalopoulos¹

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Do Medicanes promote high dust concentrations in Italy? – A case study on the 2014 Mediane ‘Qendresa’

Franziska Vogel¹, Fabio Massimo Grasso², Umberto Rizza², Marco Zanatta¹, Angela Marinoni¹

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Heavy Metal(loid) fluxes and microbial community associated to Bulk Atmospheric Deposition in the port area of Ancona

Matteo Fanelli¹, Marco Basili¹, Grazia Marina Quero¹, Emanuela Frapiccini¹, Lorenzo Massi², Federico Girolametti², Behixhe Ajdini², Cristina Truzzi², Anna Annibaldi², Pierluigi Penna¹, Gian Marco Luna¹, Silvia Illuminati²

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Characterization of the Atmospheric Microbiome in a Semi-Rural Area of Central Europe Using Flow Cytometry

Ernest Abboud¹, Pierre Rossi², Benoit Crouzy³, Athanasios Nenes^{1,4}, Kalliopi Violaki¹

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Bicycle-based mapping of black carbon across the streets of Milan

Valeria Paola Maldonez Balderrama¹, Laura Renzi¹, Luca Boniardi², Cecilia Magnani¹, Marco Rapuano¹, Marco Zanatta¹, Alessandro Bigi³, Ferdinando Pasqualini¹, Cristina Colombi⁴, Angela Marinoni¹

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URBAN EMISSIONS FATE TOWARDS SECONDARY AEROSOL FORMATION; A CHAMBER STUDY

Sana Farhoudian¹, Rabbia Asgher¹, Avinash Kumar¹, Shawon Barua¹, Fariba Partovi¹, Matti Rissanen^{1,2}

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Antibacterial electrospun wound dressing with flame-made Ag/SiO₂ nanoparticles

Reshma V. Ramachandran^{1,2}, Jennifer Geara³, Maria Samara^{1,2}, Thomas Thersleff⁴, Ning Xu Landén³, Georgios A. Sotiriou^{1,2}

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Decreasing or increasing pollution in the Mediterranean atmosphere? 16 years of black carbon observations at the Monte Cimone GAW Global Station integrated with FLEXPART and COPERNICUS products.

Marco Zanatta¹, Paolo Bonasoni¹, Paolo Cristofanelli¹, Sabine Eckhardt², Nikolaos Evangelizou², Cecilia Magnani¹, Davide Putero¹, Laura Renzi¹, Franziska Vogel¹, Angela Marinoni¹

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Effects of Soil Amendments on Soil Carbon Sequestration Stability and Nutrient Availability in Fukuyama Lettuce: Applications of Biochar and Black Soldier Fly Frass

Man-Chu Hsiao, Chang-Tanh Chang

Department of Environmental Engineering, National Ilan University, Yilan City, 260007, Taiwan, Taiwan

Investigating New Particle Formation and Growth over an Urban Location in the Eastern Mediterranean

Yinon Rudich

Weizmann Institute, Israel

The Italian Automated Lidar Ceilometer Network ALICENET: From Near Real-time Monitoring to Long-term Characterisation of Aerosol Vertical Distributions across Italy

Francesca Barnaba¹, Annachiara Bellini², Alessandro Bracci¹, Henri Diemmoz², Luca Di Liberto¹, Caterina Mapelli^{1,3}, Ferdinando Pasqualini¹

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State of the art of lunar sun-photometry algorithms and application to Izaña 2023 MAPP campaign

Monica Campanelli¹, Victor Estelles², Gaurav Kumar², Africa Barreto³, Natalia Kouremeti⁴, Roberto Roman⁵, Ramiro Gonzalez², Pablo Gonzalez³, Lionel Doppler⁶, Mauro Mazzola⁷, Anca Nemuc⁸, Stefano Casadio⁹, AnnaMaria Iannarelli⁹, Paola Russo¹⁰

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Ground-Based Comparison and Validation of ATLID/EarthCARE L2 Aerosol and Cloud Products: Integrating E-PROFILE and AERONET Data

Onel Rodríguez-Navarro^{1,2}, Jorge Muñoz-Rosado^{1,2}, Alberto Cazorla^{1,2}, Roberto Román^{3,4}, Alexander Haeefe⁵, Eric Sauvageat⁵, Ana Del Águila^{1,2}, Daniel Pérez-Ramírez^{1,2}, Lucas Alados-Arboledas^{1,2}, Francisco Navas-Guzmán^{1,2}

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Optical and microphysical properties of local and long-range transport biomass burning aerosols with remote sensing techniques

Riccardo Damiano¹, Alessia Sannino¹, Zeeshan Ali¹, Matteo Manzo¹, Salvatore Spinosa¹, Salvatore Amoroso¹, Antonella Boselli²

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Validation of aerosol extinction and mass profiles derived from elastic LIDARs using in-situ measurements

Martine Collaud Coen¹, Maxime Hervé¹, Lena Fasnacht¹, Melania van Hove², Benjamin Brem³, Robin Modini³, Martin Gysel-Beer³, Augustin Mortier⁴, **Martine Collaud Coen⁵**, Alexander Haeefe¹

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Ceiliometer QA measurements for Aerosol Profiling

Frank Wagner¹, Alexander Geiss², Ina Mattis¹

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Deep-Pathfinder algorithm for ground-based assessment of ATLID/EarthCARE L2 aerosol product

Laurel Molina-Párraga^{1,2}, Ana del Águila^{1,2}, Jorge Muñoz-Rosado^{1,2}, Onel Rodríguez-Navarro^{1,2}, Alexander Haeefe³, Eric Sauvageat³, Francisco Navas-Guzmán^{1,2}, Lucas Alados-Arboledas^{1,2}

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Enhanced Fire Detection in Industrial Complexes Using Scanning LiDAR Technology

Kwanchul Kim¹, Seong-Min Kim¹, Sung-Jo Kim¹, Sae-ho Oh¹, Gahye Lee¹, Min-kyung Sung¹, Jeong-Min Park¹, Youngmin Noh², Kwonho Lee³, Young J. Kim³, Sungchul Choi⁴, Changgi Choi⁴, Woosuk Choi⁵, Chunsang Hong⁶

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Integrating remote sensing and in-situ measurements to assess the impact of PBL dynamics on air pollution in Milan, Po valley (Italy)

Camilla Perfetti^{1,2}, Francesca Barnaba³, Annachiara Bellini³, Alessandro Bracci², Marco Zanatta², Laura Renzi², Luca Di Liberto³, Ferdinando Pasqualini², Angela Marinoni²

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Remote Sensing Observations of Aerosol-Cloud Interactions in a Nitrogen Polluted Environment

Namita Sinha¹, George Biskos^{1,2}, Farhan R. Nursanto³, Herman Russchenberg¹, Isabelle Steinke¹, Ulrike Dusek⁴

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Synergistic Observations of Aerosol-Cloud Interactions During Long-Range Transported Dust Events

Gabriela Ciocan^{1,2}, Anca Nemuc¹, Jeni Vasilescu¹, Livio Belegante¹, Razvan Pirloaga¹

¹National Institute Of Research And Development For Optoelectronics - Inoe 2000, Remote Sensing Department, Romania; ²Faculty of Physics, University of Bucharest, Romania

Synergy of PollyXT Lidar & sun/sky photometer to retrieve aerosol properties utilizing GRASP algorithm in Limassol, Cyprus

Athina Savva^{1,2}, **Argyro Nisantzi**^{1,2}, **Francesco Scarlatti**¹, **Anton Lopatin**³, **Diofantos Hadjimitsis**^{1,2}, **Rodanthi Elisavet Mamouri**^{1,2}

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Assessment of microplastic particle exposure in indoor football halls by correlative microscopy

Maike Stange¹, **Torben Peters**¹, **John Schumann**¹, **Nico Dziurawitz**¹, **Carmen Thim**¹, **Asmus Meyer-Plath**¹, **Monica Andreassen**², **Berit Brunstad Granum**², **Igor Snapkow**², **Raymond Pieters**³, **Hubert Dirven**², **Dirk Broßell**¹

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Optimized Flotation Separation for the Characterization of Airborne Microplastics

Andrea Fricano¹, **Francesca Buiarelli**¹, **Fabio Candiano**¹, **Giulia Simonetti**¹, **Patrizia Di Filippo**², **Donatella Pomata**², **Carmela Riccardi**²

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Study of airborne microplastics emissions in workplaces

Federica Bianchi¹, **Marianna Pascucci**¹, **Elena Messina**¹, **Cristina Riccucci**¹, **Adriana Pietrodangelo**², **Donatella Pomata**³, **Gabriella Di Carlo**¹

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Airborne Nanoplastic Exposure Platform: From In-vitro to In-vivo

Yen Thi-Hoang Le, **Hanjin Yoo**, **Ki-Joon Jeon**
Inha University, Korea, Republic of (South Korea)

Atmospheric microplastics modelling and quantification using Gibbs sampler

Ondřej Tichý¹, **Nikolaos Evangelou**², **Václav Košík**¹, **Václav Smidl**¹

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Airborne Microplastic: Dry vs. Wet Precipitation Effects and Morphological Evaluation

Yuliya Logvina, **Helena Ribeiro**, **Luis Pinto da Silva**, **Joaquim Esteves da Silva**
University of Porto, Portugal

Analysis of microplastics in airborne particulate matter (PM) in Krakow, south Poland: Review of separation techniques, in vitro toxicity, and health impacts

Dominika Uchmanowicz¹, **Katarzyna Styszko**¹, **Madawan Chootham**¹, **Justyna Pyssa**¹, **Xymena Badura**²

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Characterization of microplastics in the air and evaluation of the cytotoxicity of two plastics and additives on A549 alveolar cells and RPMI 2650 nasal cells

Camille Bonnefous, **Frédéric Ledoux**, **Yann Landkocz**

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Indoor and Outdoor Airborne Microplastics in School Settings

Steigvilė Byčenkienė¹, **Ieva Uogintė**¹, **Lina Davulienė**¹, **Sergej Šemčuk**¹, **Vadimas Dudoitis**¹, **Simonas Kecorius**^{1,2}, **Mario Lovric**^{3,4}

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Microplastic particles in atmospheric bulk deposition samples in Berlin, Germany

Andreas Held¹, **Sarmite Kernchen**², **Martin G.J. Löder**², **Christian Laforsch**²

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Quantification of Near Real-Time Tyre Wear Particles in the Ambient PM2.5 Using Online Aerosol Mass Spectrometer

Rongyan Fang¹, **Gang Chen**¹, **Max Priestman**¹, **Henry Blake**¹, **Eric Auyang**¹, **Stephanie Wright**^{1,2}, **David C. Green**^{1,2}

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Size segregated, highly-time resolved elemental source apportionment at two European transportation hotspots

Laurence Christian Windell¹, **Kristina Glojek**², **Benjamin Chazeau**^{1,3}, **Andres Alastuey**², **Xavier Querol**², **Manos Ioannis Manousakas**⁴, **Cristina Colombi**⁵, **Roberta Vecchi**⁶, **Kaspar Rudolf Daellenbach**¹, **Jay Gates Slowik**¹, **André Stephan Henry Prévôt**¹

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Electrical Charging State and Effective Density of Brake Wear Particles

Sara Bengtsson¹, Jussi Hoivala², Yezhe Lyu³, Philipp Wacker¹, Vilhelm Malmberg^{1,4}, Topi Rönkkö², Jens Wahlström³, Joakim Pagels^{1,4}

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Investigations of Gaseous Emissions from Vehicle Braking Process with Chemical Ionization Mass Spectrometry

Wandera Kisimbiri^{1,2}, Romain Couval³, Karine Elihn¹, Ulf Olofsson³, Sophie Haslett^{1,2}, Sarah Steimer^{1,2}

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Evaluating the Repeatability of Tire Wear Particle Measurements in a Novel Housing-Based Collection System

Melis Seren Celenlioglu¹, Roberta Vecchi¹, Fabius Eppe², Manuel Löber³, Nina Reijrink³, Sven Reiland², Franz Philipps²

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On-Road Measurements of Wetness, Road Dust and Tyre Wear Particle from Truck

Sara Janhäll^{1,3}, Joacim Lundberg², Sebastian Schill¹, Jonas Sjöblom¹

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Identification of Non-Exhaust Emissions in Laboratory and Field Measurements

Seongho Jeong¹, Julian Schade¹, Carsten Neukirchen¹, Michael Maeder², Christian Trapp³, Thomas Adam¹

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An experimental characterization of PM emissions from railway braking events for the design of sustainable brake pads

Gianluigi De Falco¹, Giuseppe Russo², Vittorio De Soccio², Andrea D'Anna³

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Chemical and Morphological Characterisation of Particulate Matter from Brake Pads

Cecilia Gomiero^{1,3}, Enrico Casamassa², Giovanna Gautier di Confiengo³, Carmela Russo³, Barbara Apicella³, Maria Giulia Faga³, Dominika Zabiegaj⁴, Giuliana Magnacca¹

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Chemical composition of brake wear particles – results from two different brake pads

Sanna Saarikoski¹, Minna Aurela¹, Anssi Järvinen², Jussi Hoivala³, Sami Harni¹, Katariina Kylämäki³, Hilikka Timonen¹, Päivi Aakko-Saksa², Topi Rönkkö³

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Impact of Brake Pad Composition on Non-Exhaust Particle Emissions

Tawfiq Al-Wasif Ruiz, José Alberto Sánchez Martín, Carmen Cecilia Barrios Sánchez

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Size distributions and black carbon emissions from two comparable brake pads

Jussi Hoivala¹, Sanna Saarikoski², Minna Aurela², Kimmo Teinilä², Sami Harni², Katariina Kylämäki¹, Hilikka Timonen², Anssi Järvinen³, Topi Rönkkö¹

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Characterisation and Tribological Performance of Brake Wear Emissions

Aleandro Diana^{1,4}, Silvia Comis^{1,4}, Stefano Bertinetti¹, Minghui Tu², Lucas Bard², Mery Malandrino^{1,4}, Agusti Sin^{3,4}, Ulf Olofsson²

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The Effect of Collection Systems in TRWP Measurements: Impacts on Physical and Chemical Characterization

Melis Seren Celenlioglu¹, Roberta Vecchi¹, Fabius Eppe², Manuel Löber³, Nina Reijrink³, Sven Reiland², Franz Philipps²

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High Time Resolution Quantification of PM_{2.5} Oxidative Potential and Reactive Oxygen Species

Steven J. Campbell¹, Gang Chen¹, Alexandre Barth², Philip B. Punter^{1,3}, Anja H. Tremper¹, Max Priestman¹, Markus Kalberer², David C. Green^{1,3}

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International intercomparison of methodologies for measuring the oxidative potential of PM using ascorbic acid assay

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Oxidative potential of fine aerosols in sleeping micro-environments: a one-year study in Lisbon area dwellings

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Particle Toxicity and its Drivers in India: from Regional to Local Spatial Scales

Shreya Dubey, Harish Phuleria

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Global Health Map: Coupling EMAC and KM-SUB-ELF to estimate air pollution health effects using accurate iron soluble fractions

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Real-Time Oxidative Potential Monitoring: Performance of DTT and FOX-Based Systems

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Characterization of PM_{2.5} and its oxidative potential in three regions of the South Italy

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Investigating PM_{2.5} Toxicity: The Initial Comprehensive OP Study in Australia Utilising Various Acellular Assays

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Buildings located in valley cities : An original study for the characterization of the human exposure to the infiltrated outdoor air with measurements of oxidative potential

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Chemical characterization and Oxidative Potential of fine particulate matter from rural, urban and industrial sites in Sicily within the NOSE 2 project

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Oxidative potential of PM₁ and PM₁₀ at a Mediterranean urban site

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PM2.5 oxidative potential at urban and rural sites of the western Mediterranean basin

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Source apportionment of PM2.5 oxidative potential at urban and rural sites of the western Mediterranean basin

Álvaro Clemente María, Noelia Gómez Sánchez, Nuria Galindo Corral, Marina Alfosea Simón, José Francisco Nicolás Aguilera, Javier Crespo Mira, Eduardo Yubero Funes

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Biomonitoring of Airborne Particulate Matter Using Plane Tree Bark: Method Development and First Insights into Oxidative Potential measurement

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Differences in oxidative potential between rural and urban locations in the Netherlands and related source attributions for PM10

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Field deployment of simultaneous particulate mass and DTT consumption monitoring system for coarse PM and PM2.5

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Next-Gen Aerosol Tech: SAW-based Aerosol Sources for Industrial Applications

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Exploring Nanostructured Permalloy Particles Prepared by Aerosol Process for Power Converter component in Electronics

Eka Lutfi Septiani, Takashi Ogi

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Direct Synthesis of Silica-coated Iron (Fe@SiO₂) Particles Using an Aerosol Process

Delyana Ratnasari, Eka Lutfi Septiani, Takashi Ogi

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Light patterns for colorizations

Bingyan Liu, Jicheng Feng

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An Endoscope-sized Acoustofluidic Aerosol Generator for Minimally Invasive Medicine and Technical Applications

Andreas Winkler, Andreas Büst, Mehrzad Roudini, Steve Wohlrab

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Faraday lithography

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Removal of Sulfur Compounds from Pyrolysis Oil using Cu-MOF Beads

You-Yu Dong¹, Joy Thomas², Chang-Tang Chang¹

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Strategy for the synthesis of size-controlled oxide-free copper nanoparticles and their reactivity

Hideki Tanaka

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Synthesis of TWC Aggregated and Porous Particles via Spray Drying Method: Catalytic Performance and Internal Structure Analysis

Ai Ando

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MOF induced Perovskite for Cleaner Energy Production

Yi-Hsuan Tsai¹, Joy Thomas², Chang-Tang Chang¹

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Process Optimization for Repeated CO₂ Capture Using Porous MgO adsorbents

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Electrophoretic assisted flame synthesis of hydrophilic carbon nanoparticles film

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Template-free synthesis of porous metal nitride films from combustion aerosols

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Effect of the Oxidation State of Copper Nanoparticles on Their Interfacial Interaction with Metallic Substrates

Alexander Plack, Alfred P. Weber

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Electrochemical Sensor for Detection of Oxytetracycline Using ZnO-Modified Carboxylate Multi-Walled Carbon Nanotubes on Glassy Carbon Electrode

Yu -Ting Tsai, Chang-tang Chang

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Multifunctional and Eco-Friendly EDTA/PEI Aerogels for the Removal of Cu(II) from Aqueous Solutions

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Removal of Sulfur Compounds from Pyrolysis Oil using Cu-MOF Beads

You-Yu Dong¹, Joy Thomas², Chang-Tang Chang¹

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Synthesis of TiO₂ nanoparticle and rGO composite material by flame spray pyrolysis for Li-Sulfur battery cathode creation.

Kirill Murashko, Muhammad Tanveer, Anna Lähde

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Deep Spatio-Temporal Neural Network for Air Quality Reanalysis

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Effect of brake friction material on brake particle emissions

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Real-Time Characterization of PAH Derivatives in Bitumen Fume Emissions

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A Study on the Distribution Characteristics of Particulate Matter Emissions in Industrial Complex Areas Using Scanning LiDAR

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Analysis of the nano fraction content in the atmospheric air of the SE part of Warsaw

Tomasz Jankowski

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Evaluation of different causes of air pollution in the Central European Region

Vladimíra Volná, Blanka Krejčí, Radim Seibert, Daniel Hladký

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Monitoring of radioactive aerosols by two-layer filters in the premises air on low levels of the Shelter Object inside the New Safe Confinement

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Effects of exhaust dilution parameters on characteristics of semi-volatile aerosol emissions from a gasoline internal combustion engine

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Exploring the Formation and Toxicity of Secondary Particles in Gasoline Vehicle Emissions

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High secondary aerosol formation from motorcycle exhaust

Pauli Simonen¹, Atte Ojala¹, Giorgos Triantafyllopoulos², Dimos Melachrous³, Ukko-Ville Mäkinen¹, Kuisma Vesisenaho¹, Petteri Marjanen¹, Ville Leinonen¹, Thanasis Tziovas², Dimitris Katsaounis³, Leonidas Ntziachristos³, Panu Karjalainen¹

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The positive impact of burning sustainable aviation fuel on reducing non-volatile particle emissions

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CFD simulation of non-exhaust particles dispersion in the wake flow of a passenger car

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Effect of fuel composition to particles emitted from auxiliary heaters of cars

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Experimental Investigation of Particle Loss from Sampling Tube Surface Roughness, Tube Coiling, Flow Splitters, and Tube Fittings in Aviation nvPM Sampling Systems

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Roadside emission factors of emerging and unregulated pollutants

Lauri Savolainen¹, Teemu Lepistö¹, Heidi Hellén², Henna Lintusaari¹, Milja Jäppi¹, Jarkko V. Niemi³, Markus Lampimäki⁴, Janne Lampilahti⁴, Katrianne Lehtipalo⁴, Tuukka Petäjä⁴, Hilka Timonen², Topi Rönkkö¹

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Real-time monitoring of transport-related air and noise pollution in European cities (Net4Cities): Monitoring plan and approach

Martine Van Poppel¹, Jan Peters¹, Sean Schmitz², Robert Wegener³, Max Adam³, Aki Pajunoja⁴, Saskia Drossaert van Dusseldorp⁵, Michael Pikridas⁶, Joana Soares⁷, Roberto Sanz Pozo⁸, Kris Vanherle⁹, Erika von Schneidmesser²

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Exploring Particle Dynamics: Preliminary Investigations in Wear Particle Measurement for Tire and Road Surfaces

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Particulate emissions from vehicles: a detailed characterization of fine and ultrafine fractions

Christian Ferrarese^{1,2}, Sara Valentini², Dora Mehn², Jessica Ponti², Gabriella Schirini², Andrea Valsesia², Natalia Elisabeth Fonseca González¹, Dario Manara²

Emissions of particulate matter and pollution control technologies for marine engines operated with green fuels

Francesco Di Natale, Arianna Parisi

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Evaluation of Emissions in a Lab-scale Turbojet Engine Using Fossil and Sustainable Aviation Fuels

Enrique Rojas¹, David Sanz¹, Jesús Javier Rodríguez¹, Manuel Pujadas Cordero¹, Rosa María Pérez Pastor¹, Susana García Alonso¹, José Antonio Soriano García², Pablo Fernández Yañez², Reyes García Contreras², Octavio Armas Vergel²

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Ultrafine Particulate Emissions from the Transport Sector: First results from the Net4Cities project

Archita Rana¹, Robert Wegener¹, Max Gerrit Adam¹, René Dubus¹, Lukas Kesper¹, Dieter Klemp¹, Sean Schmitz², Martine van Poppel³, Aki Pajunoja⁴, Saskia Drossaert van Dusseldorp⁵, Michael Pikridas⁶, Erika von Schneidemesser²

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Fresh exhaust particle emissions from modern passenger cars

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Portable FTIRs' capability to measure secondary aerosol precursors from vehicle exhaust

Hannu Kuutti¹, Päivi Aakko-Saksa¹, Michal Vojtisek-Lom², Martin Pechout³, Wojciech Honkisz⁴, Piotr Bielaczyc⁴, Katariina Kylämäki⁵, Topi Rönkkö⁵, Sanna Saarikoski⁶, Hilikka Timonen⁶

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Influence of Fuel Standards on Vehicular Emissions: Assessing the Impact of Bharat Stage Regulations in Urban Idling Conditions

Amir Ali, Azajul Haque, Anjanay Pandey, Vikram Singh, Mayank Kumar

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Motor vehicle exhaust ultrafine particle number (PN) concentration monitor and calibration technology

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Regulated and unregulated pollutants emitted by an inland waterway ship – comparison of traditional fuel with two alternative fuels.

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Chitosan based crosslinked nanoparticles by coaxial electrospraying

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Charge status of particles generated in a bipolar electrospray aerosol generator

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Finite Taylor Cone: the impact of the electrospray

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Electrospraying polytetrafluoroethylene (PTFE) nanoparticle suspensions to form hydrophobic coatings

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Spark Ablation Generation of Metal and TiO₂ Nanoparticles for CO₂ Hydrogenation

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Combined Reduction of NO_x and PM Emissions from Small-scale Biomass Combustion with Electrostatic Precipitation

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CFD modeling of a perpendicularly oriented EHDA system in a pressurized lateral gas flow

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Automatic classification of electrohydrodynamic atomization modes based on machine learning

Kelly Schneider Moreira¹, Luigi Piero Di Bonito², Matheus Novelli³, Marc Artero¹, Lelio Campanile⁴, Francesco Di Natale², Luewton Lemos F Agostinho¹

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Droplet behavior and characteristics in high-flow rate electrospray processes

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Thin continuous polytetrafluoroethylene coatings by electrospray

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Spreading aerosol nanoparticles through mobilizing substrates for wafer-scale nanoprinting

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Sustainable Aliphatic Polyketone/Nylon6 fibrous Membrane for Emulsion Separation

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Volatile organic compounds emission factors for boreal forest surface fires in laboratory experiments

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Light absorption dynamics of wildfire-like BrC from wood combustion

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Condensable PM formation inside the masonry heater and in the emission gases

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Evaluation of Ultrafine Particle Abatement Systems in a 125 kW Biomass Pellet Boiler

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3D-printed Filters for Particulate Emissions Reduction in Biomass Combustion

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Electro Hydrodynamic Fabricated Ecofriendly Polymers for PM0.1-0.5 Capture

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Field testing of air filters for efficiency of removal aerosol particles in an air handling unit

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A Detailed assessment of catalytic reduction of organic emissions from a wood stove using PTR-ToF-MS and FTIR

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Analysis of pressure drops and dust-holding capacities of nano-micro composite filters during dust loading

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Development of a High Electric Field Type Electrostatic Precipitator with High Gas Velocity for Diesel Exhaust Particles

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Effect of reputation frequency on suspended particle trajectory in nanosecond pulsed discharge with DC bias

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Application of granular bed theory to predict the filtration performance of porous filters

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Determination of the initial concentration of aerosols and chemical agents at the portable air purifier test site

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Analysis of PM2.5 concentrations in African countries: findings from 2019 to 2024

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Atmospheric Particle Fluxes in the High Arctic Across Three Surface Types

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Characterisation of Physical and Optical properties of Arctic Dust Aerosols at Villum station

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Investigating the Impact of heating on Semi-Volatile Organic Species in Cloud Condensation Nuclei Counter

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Chemical characterization of fogs in the hyper arid zone of Namibia

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Evaluation of different sampling methodologies for the characterization of ice nucleating particle concentration using GRAINS, the new INP spectrometer at the AGORA Observatory

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The Influence of Precipitation on Black Carbon Aerosols

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Intercomparison experiments of two INP spectrometers (INSEKT and GRAINS) at AIDA chamber

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INP parameterization comparison: boundary layer vs free troposphere

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Atmospheric Aerosol Composition and Formation in an Alaskan Boreal Forest

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Atmospheric ions indicating continuous new particle formation in the Mediterranean coastal environment

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Composition of air ions during new particle formation events in Cyprus

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Contribution of new particle formation events to cloud condensation nuclei concentrations at U.S. observatories

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Methanesulfonic acid chemistry and new particle formation : a global model study

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Uncertainty Quantification of autoCONSTRAINTS derived Reaction Coefficients with MCMC

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Internally Mixed Aerosols in Urban Area of Katowice Conurbation (Poland)

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Secondary particle formation in the aqueous phase – Conversion of catechol in the presence of iron

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Sensitivity Analysis of a New Inorganic Multiphase Chemical Model

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Towards automated inclusion of representative autoxidation chemistry in explicit models

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Implementation of a particle resuspension model in a Large Eddy Simulation code

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Influence of long-range transport over the sea on submicron aerosol chemical composition

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Towards an improved historical emission dataset for modelling air quality in urban areas during the industrialization

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Optimizing Black Carbon emissions on a global scale using TM5-MP and CTDAS

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Simulating the Effect of Bark Beetle Infestation on Secondary Organic Aerosol (SOA) and Ozone

Jana Wackermann, **Marie Luise Luttkus**, **Roland Schrödner**, **Ralf Wolke**

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An improved Europe-wide spatiotemporal machine learning modelling for PM2.5 using European open databases

Tetiana Vovk, **Maciej Kryza**

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Development and Evaluation of Coupled Climate Simulations Using Machine Learning Enhanced Aerosol Model

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Numerical Simulation Analysis on SO2 and Sulfate Aerosol Source Apportionment in the Tibetan Plateau

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Spatial and temporal variability of ultrafine particle number concentrations and their link to air quality close to Munich airport in 2023

Shengyi Hou, **Markus Friedrich**, **Anke Nölscher**

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Assessment of Aerosol Optical Properties and Dipole Nature of Aerosol Induced Radiative Forcing for Shortwave and Longwave over Northwest India

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Impacts of changes in land use and land cover between 2001 and 2018 in winter haze pollution in North China Plain and surrounding areas-A case study

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Composition, sources and formation process of atmospheric aerosol in marine atmosphere

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A mass-spectrometric study of the formation and aging of organic aerosol from vanillin oxidation

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First study of the composition of cloud water collected at Monte Cimone observatory during the MC3 campaign in October 2024.

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Characterization of PM_{2.5}-Associated Dicarboxylic Acids and Sugars: Insights into Biomass Burning and Air Quality

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Characteristics and levels of carbonaceous aerosols from real-time measurements during Diwali festivity

Vidit Suryakant Parkar, Abhishek Chakraborty

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Emission factors of organic aerosols from a prescribed burning of European boreal forest

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Influence of the anthropic settlements on European Arctic climate in terms of Light-Absorbing Aerosol concentrations and Heating Rate

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Tethered Balloon Observations of Vertical Aerosol Distributions at Neumayer III, Coastal Antarctica

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Airborne measurements of the spatial distribution and variability of ultrafine aerosol particles in Svalbard during melting season 2024

Malte Schuchard¹, Barbara Harm-Altstädter¹, Konrad Bärfuss¹, Sven Bollmann¹, Lutz Bretschneider¹, Matthew Boyer², Dominic Heslin-Rees³, Mona Kellermann⁴, Ralf Käthner⁴, Radovan Krejci³, Christian Pilz⁴, Christoph Ritter⁵, Andreas Schlerf¹, Birgit Wehner⁴, Astrid Lampert¹

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Condensation-freezing Ice Nucleating Particles at Ny-Ålesund: seasonality and sources investigated by the Dynamic Filter Processing Chamber

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Dust sources in Iceland: Insights from the High-Latitude Dust Experiment in 2021/2022

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High Gaseous Methanesulfonic Acid in Antarctic Air: Evidence of Evaporation from Particle Surfaces During Katabatic Outflows

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High spatial resolution measurements of the aerosol climate-relevant parameters from mid-latitudes to the Arctic, up to 90°N (GAIA)

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Source areas and effect on snow albedo of mineral aerosol deposition on snow in North Western Greenland

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Zooplankton grazing increases atmospheric primary aerosol production in the high Arctic

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Characterizing Particulate Matter Concentrations in Southern Iceland

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Pristine Antarctic Cloud Condensation (CCN) and Ice Nucleating Particle (INP) Concentrations and Properties at Neumayer Station III

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A molecular journey from the Baltic Sea to Svalbard: HRMS on organic aerosols collected on board the Oceania vessel

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Black carbon in the Arctic (Ny-Ålesund): An Assessment Comparing AE33 and LIDAR Data

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Chemical Composition of Size-Segregated Aerosols During Second Turkish Arctic Scientific Expedition (TASE-II)

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Continental river runoff over the Arctic Ocean enhances atmospheric aerosol formation

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GAInfrA: A Versatile Mobile Laboratory for Aerosol, Clouds and Radiation Studies in Extreme Environments

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Long-term Trends of Key Chemical Species in the High Arctic and Possible Drivers

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Preliminary Results from the CleanCloud Campaign in Greenland – Villum Research Station

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The T-Bird – A new aircraft-towed instrument platform to measure turbulence and aerosol properties close to the surface

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Validation of methods for simulating aerosol samples from remote dust sources using a resuspension chamber

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A Simple Surface-bulk Partitioning Model for Estimating Size-dependent Surface Tension of Deliquesced Aerosol Particles

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Cloud Condensation Nuclei properties and variability at Mt. Cimone station

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Cloud droplet spectra measurements: comparison in low stratiform clouds

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Polysaccharides - Important Constituents of Ice Nucleating Particles of Marine Origin

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Can CCN activation of insoluble particles be predicted based on water adsorption measurements?

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CARGO-ACT – towards a global interoperability for aerosol, cloud and trace gas research infrastructures

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Cloud-Aerosol-Interactions in a Nitrogen-dominated Atmosphere (CAINA) – New particle formation, Activation, and Turbulence

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Ice-nucleating particles at a background site in the southeast Tibetan Plateau

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Ice-nucleating properties of mineral dust particles from Taklimakan Desert

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On the impact of Saharan dust on ice nucleating particles at high-mountain and urban environments in Southern Europe

Olga Ruiz-Galera¹, Elena Bazo^{1,2}, Gloria Titos^{1,2}, Diego Patrón¹, Alejandro Ontiveros¹, Sonia Castillo¹, Juan Andrés Casquero-Vera^{1,2}, Francisco José Olmo^{1,2}, Lucas Alados-Arboledas^{1,2}, Alberto Cazorla^{1,2}

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Co-located real-time bioaerosol monitoring and measurements of Ice Nucleating Particles (INP) at the rural background station Melpitz

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Investigations on the cirrus cloud seeding abilities of K-feldspar dust particles

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Synergistic Observations of Aerosol-Cloud Interactions During Long-Range Transported Dust Events

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Does decreasing of sulphur concentration influence the amount of low clouds?

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The Czech hydrometeorological institute, Czech Republic

First results of In-Situ Measurement Campaign for Cloud Studies at the Milešovka Observatory, Czechia

Sergej Sel, Henrik Hof, Frederik Weis, Volker Ziegler
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Investigating Marine Aerosol Variability and Climate Feedbacks: A Multi-Site Analysis Using Particle Composition and Size Distribution Data

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10 years of particle number size distribution in the urban supersite of Bologna in the Po Valley (Italy)

Arianna Trentini, Dimitri Bacco, Fabiana Scotto, Vanes Poluzzi
ARPAE, Italy

Atmospheric conditions that drive NPF events: a case study

Aare Luts, Urmas Horrak, Kaupo Komsaare, Marko Vana, Heikki Junninen
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Bi-directional vertical transport of cluster ions during new particle formation

Luzie Kretschmer, Andreas Held
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Diurnal cycle of new particle formation in the upper troposphere above the Amazon

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Enhanced new particle formation in Milan due to low pollution and atmospheric mixing

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First Determination of New Particle Formation in Istanbul

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New particle formation in urban background conditions in the Po valley

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Observations of atypical decreasing mode diameter events at a rural background site in Cyprus

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Differences of New Particle Formation in Seoul and Seosan, South Korea

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Estimation of particle growth rate using cross-correlation

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Humidity driven spontaneous OH radical-initiated oxidation of organic aerosols

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Characterisation of VOC over the Great Barrier Reef

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Competitive multiphase reactions of deliquesced aerosol particles in the presence of SO₂ and NO₂ regulated by aerosol pH

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SOA precursor emissions in and above a forest consisting of beech and Douglas fir and their relation to aerosol particle numbers and composition

Xuefeng Shi, Hao Li, Yanxia Li, Aurélie Orphal, Uzoamaka Ezenobi, Thomas Leisner, Harald Saathoff
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THE IMPACT OF VEHICLE EMISSION CHARACTERISTICS ON SECONDARY AEROSOL FORMATION: A LABORATORY STUDY USING AN OXIDATION FLOW REACTOR

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Growth of coating thickness driving absorption enhancement in the urban city of Barcelona

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Impact of Agricultural Emissions on Rural and Urban Air Quality (IMAGE)

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