Conference Agenda

Session

Poster Session Tuesday

Time: **Tuesday, 02/Sept/2025: 5:15pm - 6:45pm**

Location: **Studium2000 Building5**

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

Presentations

PO2: 1

Switching regimes in fire plumes: regional implications

Eleni Dovrou[1,2], Apostolos Voulgarakis[1,2]

[1]School of Chemical and Environmental Engineering, Technical University of Crete, Greece; [2]Leverhulme Center for Wildfires, Environment and Society, Imperial College London, London, UK

PO2: 2

Biomass Burning Organic Aerosols as a Pool of Atmospheric Reactive Triplets to Drive Multiphase Sulfate Formation

Chak Keung Chan[1], Zhancong Liang[1], Liyuan Zhou[1], Yuqing Chang[1], Yiming Qin[2]

[1]King Abdullah University of Science and Technology, Saudi Arabia; [2]City Univeristy of Hong Kong, Hong Kong

PO2: 3

Aerosol composition and gas/particle partitioning in a nitrogen dominated atmosphere

Pascale Ooms[1], Farhan Nursanto[1], Willem Kroese[2], Marianne Heida[3], Margreet van Zanten[1,3], Roy Wichink Kruit[3], Marte Voorneveld[3], Marten in 't Veld[3], Rupert Holzinger[2], Uli Dusek[4], Juliane Fry[1]

[1]Wageningen University & Research, the Netherlands; [2]Utrecht University, the Netherlands; [3]National Institute for Public Health and Environment, the Netherlands; [4]Rijksuniversiteit Groningen, the Netherlands

PO2: 4

Chemical formation pathways of secondary organic aerosols in the Beijing-Tianjin-Hebei region in wintertime

Jie Li

Yunnan University, China

PO2: 5

Cross-validation of methods for quantifying the contribution of local (urban) and regional sources to PM2.5 pollution: Application in the Eastern Mediterranean (Cyprus)

Elie Bimenyimana[1], Jean Sciare[1], Konstantina Oikonomou[1], Minas Iakovides[1], Michael Pikridas[1], Emily Vasiliadou[3], Chrysanthos Savvides[3], Nikos Mihalopoulos[1,2]

[1]Climate and Atmosphere Research Centre (CARE-C), Nicosia, Cyprus; [2]National Observatory of Athens, Athens, Greece; [3]Department of Labour Inspection, Ministry of Labour and Social Insurance, Nicosia, Cyprus

PO2: 6

Black Carbon Trends and Source Apportionment in Berlin: A Multi-Year Analysis

Himanshu Setia[1], Michael Pikridas[2], Seán Schmitz[1], Erika Von Schneidemesser[1]

[1]Forschungsinstitut für Nachhaltigkeit – Helmholtz-Zentrum Potsdam, Germany; [2]Climate and Atmosphere Research Center (CARE-C), The Cyprus Institute, Nicosia, Cyprus

PO2: 7

Aerosols from Biomass Burning: A Comparative Study under Controlled and Uncontrolled Combustion Conditions

Durre Nayab Habib, Laurynas Bucinskas, Andrius Garbaras, Agne Masalaite

State Research Institute, Center For Physical Sciences And Technology, Vilnius, Lithuania, Lithuania

PO2: 8

Modelling Air Pollution in Coastal Industrial Zones of Chile: A Fuzzy Clustering and High-Resolution Spatial Approach Including the “Gray Zone”

Miguel Ángel Lugo Salazar, Hector Iván Jorquera González

Pontifical Catholic University of Chile, Chile

PO2: 9

Source apportionment analysis of phosphorus in PM2.5 and PM10 in two Greek cities

Kyriaki Papoutsidaki[1], Georgios Grivas[2], Faidra Aikaterini Kozonaki[1,2], Kalliopi Tavernaraki[1], Konstantina Oikonomou[3], Irini Tsiodra[2], Maria Tsagkaraki[1], Aikaterini Bougiatioti[2], Nikolaos Mihalopoulos[2], Maria Kanakidou[1,4,5]

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PO2: 10

Source apportionment of aerosol particles by positive matrix factorization in urban background environment (Vilnius, Lithuania)

Viachaslau Alifirenka, Vitalij Kovalevskij, Mindaugas Gaspariūnas, Mindaugas Bernatonis, Steigvilė Byčenkienė
State research institute Center for Physical Sciences and Technology, Lithuania

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PO2: 11

Spatial characterization of Urban Particle Phase Pollution Sources through Mobile Measurements in Sarajevo

Michael Bauer[1], Jay Gates Slowik[1], Marta Via[2], Peeyush Khare[1,5], Benjamin Guy Jacques Chazeau[3], Kristina Glojek[1,6], Manousos Ioannis Manousakas[1,7], Zachary C.J. Decker[1,8], Almir Bijedić[4], Enis Krečinić[4], Griša Močnik[2], André S. H. Prévôt[1], Katja Džepina[1]
[1]PSI Center for Energy and Environmental Sciences, 5232 Villigen PSI, Switzerland; [2]University of Nova Gorica, Nova Gorica, 5000, Slovenia; [3]Aix Marseille Univ., CNRS, LCE, Marseille, 13007, France; [4]Federal Hydrometeorological Institute of Bosnia and Herzegovina, Sarajevo, 71000, Bosnia and Herzegovina; [5]now at: Institute of Climate and Energy Systems (ICE-[3]Troposphere, Forschungszentrum Jülich, 52428 Jülich, Germany; [6]now at: Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Barcelona, 08034, Spain; [7]now at: Environmental Radioactivity & Aerosol Tech. for Atmospheric & Climate Impacts, INRaSTES, National Centre of Scientific Research "Demokritos", Ag. Paraskevi, 15310, Greece; [8]now at: NOAA CSL & Cooperative Institute for Research in Environmental Sciences (CIRES), Boulder, CO, USA

PO2: 12

Chemical composition, sources and vertical transport of non-refractory submicron aerosol in Po Valley: simultaneous on-line measurements at Bologna (54 m a.s.l.) and Mt. Cimone (2165 m a.s.l.)

Marco Rapuano[1], Cecilia Magnani[1], Matteo Rinaldi[1], Marco Paglione[1], Alessandro Bracci[1], Ferdinando Paqualini[1], Laura Renzi[1], Martina Mazzini[1], Simonetta Montaguti[1], Claudia Roberta Calidonna[2], Marco Zanatta[1], Camilla Perfetti[1], Nora Zannoni[1], Stefano Decesari[1], Angela Marinoni[1]
[1]Institute of Atmospheric Sciences and Climate (CNR-ISAC), National Research Council of Italy, Bologna, 40129, Italy; [2]Institute of Atmospheric Sciences and Climate (CNR-ISAC), National Research Council of Italy, Lamezia Terme, 88046, Italy

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PO2: 13

Comprehensive source apportionment of black carbon at a rural site in Punjab using the aethalometer model and positive matrix factorization (PMF) model

Ajit Kumar[1], Vikas Goel[1,3], Mohammad Faisal[2,4], Umer Ali[2], Anjanay Pandey[2], Vikram Singh[2], Mayank Kumar[1]
[1]Department of Mechanical Engineering, Indian Institute of Technology Delhi, New Delhi, 110016, India; [2]Department of Chemical Engineering, Indian Institute of Technology Delhi, New Delhi, 110016, India; [3]Department of Civil and Environmental Engineering, Virginia Tech, Blacksburg, USA, 24060; [4]Laboratory of Atmospheric Chemistry, Paul Scherrer Institute, Villegen, Aargau 5232 Switzerland

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PO2: 14

Advancing Air Quality and Climate Insights in Lahti, Finland: Investigating Regional Emission Sources

Haitong Zhang[1,2], Benjamin Foreback[1,2], Michael Boy[1,2,3]
[1]1Institute for Atmospheric and Earth System Research/Physics, University of Helsinki, Finland; [2]Atmospheric Modelling Centre Lahti, Finland; [3]3School of Engineering Science, Lappeenranta-Lahti University of Technology,Finland

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PO2: 15

Black carbon source apportionment and air mass transport effects in urban areas across warm and cold seasons

Moritz Hey[1,2], Agne Minderyte[3], Nikolaos Evangeliou[4], Steigvilė Byčenkienė[3], Iwona S. Stachlewska[2]
[1]Institute for atmospheric Physics, University of Mainz (JGU); [2]University of Warsaw; [3]Center for Physical Sciences and Technology; [4]Stiftelsen NILU (former Norwegian Institute for Air Research)

PO2: 16

Light Absorbing Carbon in Atmospheric Particulate Matter in Lagos

Adebola Odu-Onikosi[1,2], Paul Solomon[3], Philip K. Hopke[1,4]
[1]Clarkson University, United States of America; [2]EnvironQuest Limited, Nigeria; [3]PAS Environmental, LLC, United States of America; [4]University of Rochester, United States of America

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PO2: 17

Evaluation of aerosol optical properties of cooking emissions in rural East African homes

Andrea Cuesta-Mosquera[1], Thomas Müller[1], Leizel Madueno[1], Allan Mubiru[2], Christine Muhongerva[3], Manuela van Pinxteren[1], Dominik van Pinxteren[1], Henning Kothe[4], Mira Pöhlker[1]
[1]Leibniz Institute for Tropospheric Research, Leipzig, 04318, Germany; [2]Atmosfair gGmbH, Berlin, 12059, Germany; [3]Safer Rwanda, Kigali, P.B 7301, Rwanda; [4]Buana e.V., Hamburg, 22767, Germany

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PO2: 18

Optical and Aerodynamic Properties of Solid Aerosol Aggregates in the Context of Potential Stratospheric Aerosol Injection

Zhongxia Sun[1], Sandro Vattioni[2], Martin Gysel-Beer[1]
[1]Paul Scherrer Institute PSI, Switzerland; [2]ETH Zürich, Switzerland

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PO2: 19

Characteristics of Black Carbon in San Luis Potosi City, Mexico.

Valter Armando Barrera Lopez[1], Juan Pablo Lopez[2], Guadalupe Galindo[3]
[1]UASLP, Mexico; [2]IMAREC, UASLP, Mexico; [3]CIACYT, UASLP, Mexico

PO2: 20

Unraveling the Role of PAHs in Shaping Primary and Secondary Brown Carbon Absorption in Eastern India's Semi-Urban Atmosphere

Prerna Thapliyal[1], Apoorvi Sharma[1], Ashish Soni[2], Pratibha Vishwakarma[1], Tarun Gupta[1]

[1]Indian Institute of Technology, Kanpur, India; [2]Indian Institute of Tropical Meteorology, Pune, India

PO2: 21

Wintertime aerosol chemical composition over the Arabian Sea based on shipboard collected aerosols: Implication to surface water biogeochemical processes

Garima Shukla[1,2], Ashwini Kumar[1,2]

[1]1CSIR-National Institute of Oceanography, Dona Paula, Goa, 403004, India; [2]2Academy of Scientific and Innovative Research (AcSIR), Ghaziabad 201002, India

PO2: 22

Spatial and Seasonal Variation in Chemical Composition of Urban Residential Outdoor PM2.5 across four cities in India

Rajdeep Singh, Vinayak Sahota, Sonali Borse, Akshay Kumar, Harish C. Phuleria

Indian Institute of Technology Bombay, India

PO2: 23

Multiphase Aerosol-Cloud Chemistry and Secondary Aerosol Formation from α-pinene

Laurie Anne Novák[1], Jinglan Fu[2,4], Willem S. J. Kroese[3], Juliane Fry[1], Maarten Krol[1,3]

[1]Wageningen University & Research, The Netherlands; [2]Center for Isotope Research, Rijksuniversiteit Groningen, The Netherlands; [3]Institute for Marine and Atmospheric Research Utrecht, Utrecht University, The Netherlands; [4]Institute of Meteorology and Climate Research-Atmospheric Aerosol Research, Karlsruhe institute of Technology, Germany

PO2: 24

On-line speciation of glyoxal multiphase reactions on deliquesced ammonium sulfate particles

Anne Monod[1], Nicolas Brun[1], Anil Kumar Mandariya[2], Junteng Wu[3], Jian Xu[1], Manon Rocco[1], Laurent Poulain[4], Mathieu Cazaunau[2], Antonin Berge[2], Edouard Pangui[2], Brice Temime-Roussel[1], Bénédicte Picquet-Varrault[2], Jean-Louis Clément[1], Aline Gratien[2], Liang Wen[4], Thomas Schaefer[4], Andreas Tilgner[4], Hartmut Herrmann[4], Jean-François Doussin[2]

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PO2: 25

Playing with bricks: speciation models to depict the interaction among water-soluble components of the atmospheric particulate matter

Stefano Bertinetti[1], Matteo Marafante[1], Luca Carena[1], Clemente Bretti[2], Demetrio Milea[2], Anna Annibaldi[3], Cristina Truzzi[3], Silvia Illuminati[3], Debora Fabbri[1], Davide Vione[1], Milena Sacco[4], Mery Malandrino[1], Silvia Berto[1]

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PO2: 26

Results from the first chemical ionization mass spectrometry Intercomparison Workshop at the TROPOS twin chamber setup in ACTRIS CiGas

Peter Mettke[1], Nina Sarnela[2], Falk Mothes[1], Hartmut Herrmann[1]

[1]Atmospheric Chemistry Department (ACD), Leibniz Institute for Tropospheric Research, Germany (TROPOS); [2]Institute for Atmospheric and Earth System Research (INAR) / Physics, University of Helsinki

PO2: 27

Concentrations of Key Atmospheric Pollutants: BC and PAHs in PM2.5 – Levels, Meteorological Influence, Correlation with Other Pollutants and Health Aspects

Lenia-Nezaet de Brito Gonsalvesh[1], Nadya Neykova[2], Blagorodka Veleva[2], Stela Naydenova[1], Anife Veli[1], Zilya Mustafa[1], Elena Hristova[2]

[1]Burgas State University Prof. Dr Asen Zlatarov, Bulgaria; [2]National Institute of Meteorology and Hydrology, Sofia, Bulgaria

PO2: 28

Effects of hydroperoxy radical heterogeneous loss on the summertime ozone formation in the North China Plain

Ruonan Wang

Institute of Earth Environment, Chinese Academy of Sciences, China, People's Republic of

PO2: 29

Modelling for atmospheric radicals and oxidants on PM2.5 and O3 episodic and non-episodic days in an urban area of Taiwan

Shi-Ya Tang, Li-Hao Young

China Medical University, Taiwan

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Photosensitization Induced by Carbonyl Compounds and Its Role in Secondary Aerosols Formation

Ruifeng Zhang, Chak Chan
King Abdullah University of Science and Technology, Saudi Arabia

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Fast generation of peroxides via particulate photosensitization

Zhancong Liang, Liyuan Zhou, Chak K. Chan
King Abdullah University of Science and Technology, Saudi Arabia

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Wildfire chromophores enhance the production of sulfate radicals in Ammonium Sulfate photochemistry

Angelina Petersen[1], Zonghao Luo[2], Alair Wong[1], Ruiyang Xiao[2], Tran Nguyen[1]
[1]University of California, Davis, United States of America; [2]Central South University, Changsha, China

PO2: 33

Numerical Analysis of Fuel Injection Control and Its Impact on Aerosol Formation and Transport in Urban Canyons and Open Environments

Mojtaba Bezaatpour[1], Mehrdad Nazemian[2], Miikka Dal Maso[1], Matti Rissanen[1,3]
[1]Tampere University, Finland; [2]Sahand University of Technology; [3]University of Helsinki

PO2: 34

Dust contribution in the performance evaluation of the FARM dispersion model

Annalisa Tanzarella[1], Angela Morabito[1], Ilenia Schipa[1], Francesca Intini[1], Tiziano Pastore[1], Stefano Spagnolo[1], Nicola Pepe[2], Paola Radice[2], Roberto Primerano[1], Vincenzo Campanaro[1]
[1]ARPA Puglia, Italy; [2]ARIANET srl

PO2: 35

Impact of Traffic Emissions on Near-Road Air Quality in the Presence of a Noise Barrier: A PALM-LES Simulation

Ali Kooh andaz[1], Xiaoyu Li[2], Ville Silvonen[1], Jarkko Niemi[3], Juan Andres Casquero-Vera[2], Sami D. Harni[4], Leena Järvi[2,5], Topi Rönkkö[1], Anu Kousa[3], Tommy Chan[2], Tuukka Petäjä[2], Hilkka Timonen[4], Miikka Dal Maso[1]
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PO2: 36

Radiative Cooling in New York/New Jersey Metropolitan Areas by Wildfire Particulate Matter

Georgios A. Kelesidis[1,2], Constantinos Moularas[1,2], Hooman Parhizkar[2], Leonardo Calderon[3], Irini Tsiodra[4], Nikolaos Mihalopoulos[4,5], Marios Bruno Korras-Carraca[6], Nikolaos Hatzianastassiou[6], Panos G. Georgopoulos[2], Jose G. Cedeño Laurent[2], Philip Demokritou[2]
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PO2: 37

Monitoring and Analysis of Black Carbon in different cities in Mexico

Valter Armando Barrera Lopez
UASLP, Mexico

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Aerosol Model-Measurement Comparison for Improving the Prediction of Aircraft Engine Deterioration

Erik Seume[1], Barbara Harm-Altstädter[2], Lutz Bretschneider[2], Jan Göing[1]
[1]Institute of Jet Propulsion and Turbomachinery, Technische Universität Braunschweig, Germany; [2]Institute of Flight Guidance, Technische Universität Braunschweig, Germany

PO2: 39

Desert dust exposure in sub-Saharan Africa: the case of the city of Cotonou, Benin

Marcos Migan[1,2], Fabrice Cazier[3], Nathalie Verbrugghe[4], Anthony Verdin[1], Fresnel Boris Cachon[2], Marc Fadel[1], Aurore Dega[2], Aaron Kakpo[2], Loïc Adonouhoue[2], Firmin Sagbo[2], Dorothee Dewaele[3], Nour Jaber[1], Faustin Aissi[1], Ulrich Patinvoh[5], Gildas Agodokpessi[5], Ménonvè Cynthia Atindehou[2], Arnauld Fiogbe[5], Richard Lalou[6], Dominique Courcot[1]
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PO2: 40

Effects of Urban Form on PM2.5 Concentration Using Explanatory Machine Learning

Mehri Davtalab, Steigvilė Byčenkienė
SRI Center for Physical Sciences and Technology (FTMC), Lithuania

PO2: 41

Investigating the vertical distribution of sporadic appearance of ultrafine aerosol particles emitted at the airport FRA

Malte Schuchard[1], Anna Voß[1], Konrad Bärfuss[1], Sven Bollmann[1], Lutz Bretschneider[1], Markus Hermann[2], Frank Holzäpfel[4], Ralf Käthner[2], Astrid Lampert[1], Falk Pätzold[1], Andreas Schlerf[1], Steffen Schmitt[3], Barbara Harm-Altstädter[1]
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PO2: 42

Saharan Dust Transport in the Mediterranean: Circulation Patterns, Air Quality Monitoring, and Chemical Composition Analysis

Francesca Calastrini[1,3], Andrea Orlandi[2], Gianni Messeri[1,3], Riccardo Benedetti[3], Alessandro Zaldei[1], Carolina Vagnoli[1], Beniamino Gioli[1], Giovanni Gualtieri[1], Tommaso Giordano[1], Simone Putzolu[1], Silvia Becagli[4], Rita Traversi[4], Mirko Severi[4], Silvia Nava[5], Franco Lucarelli[6]
[1]Istituto di BioEconomia IBE-CNR, 50145 Florence, Italy; [2]ENEA, SSPT-CLIMAR, 40121 Bologna, Italy; [3]Consorzio LaMMa, 50019 Sesto Fiorentino, Florence, Italy; [4]Department of Chemistry, University of Florence, 50019 Sesto Fiorentino, Florence, Italy; [5]I.N.F.N., Florence, Via Sansone 1, 50019 Sesto F.no, Florence, Italy; [6]Department of Physics and Astronomy, University of Florence, 50019 Sesto F.no, Florence, Italy

PO2: 43

Dust storm dynamics: a study using HYSPLIT and WRF to analyze dust transport patterns in León, Spain

Evi Becerra-Acosta[1], Ana I. Calvo[1], Josue M. Polanco-Martinez[2], Carlos Blanco-Alegre[1], Lucrecia Bile Osa-Akara[1], Darrel Baumgardner[3], Roberto Fraile[1]
[1]University of Leon, Spain; [2]University of Salamanca; [3]Droplet Measurement Technologies

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The Spectroscopic Multiparameter Particle Analyzer

Darrel Baumgardner
Droplet Measurement Technologies, United States of America

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Enhancing Air Quality Governance: Results from LIFE SIRIUS in Rome

Maria Agostina Frezzini, Donatella Occhiuto, Laura Bennati, Arianna Marinelli, Alessandro Di Giosa
Enviromental Protection Agency of Lazio Region ARPA Lazio, Italy

PO2: 46

High-Resolution Modeling of Air Pollution in Poland: Evaluation of EMEP4PL and uEMEP for PM2.5, NO2, and O3

Kinga Areta Wisniewska[1], Małgorzata Werner[1], Bruce R. Denby[2], Qing Mu[3], Maciej Kryza[1]
[1]University of Wrocław; [2]Norwegian Meteorological Institute; [3]Xi'an Jiaotong-Liverpool University

PO2: 47

Impacts of urban expansion on meteorology and air quality in North China Plain during wintertime: A case study

Qian Jiang
Institute of earth environment, Chinese Academy of Sciences, China, People's Republic of

PO2: 48

Microscale impact assessment of particulate matter emissions from a large steel plant in Taranto (Italy)

Francesca Intini[1], Angela Morabito[1], Annalisa Tanzarella[1], Ilenia Schipa[1], Gianni Tinarelli[2], Daniela Barbero[2], Umberto Giuriato[2], Tiziano Pastore[1], Vincenzo Campanaro[1]
[1]ARPA PUGLIA, Italy; [2]ARIANET Srl, via B. Crespi 57, Milan, 20159, Italy

PO2: 49

Preliminary Analysis of Aerosol Size Distribution at Col Margherita

Claudia Rossetti[1], Eleonora Favaro[2], Elena Barbaro[1], Matteo Feltracco[2], Andrea Gambaro[2], Lorenzo Giovannini[3], Giorgio Doglioni[3], Massimo Cassiani[3,4], Marco Di Paolantonio[5], Paolo Di Girolamo[6], Akanksha Rajput[3], Dino Zardi[3], Warren Lee Raymond Cairns[1]
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PO2: 50

Investigating drivers of recent reductions in PM2.5 concentrations across the UK

Daniel Bryant[1,2], Alastair Lewis[1,2], Sarah Moller[1,2]

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PO2: 51

Characterization of Secondary Organic Aerosols formed in Atmospheric Simulation Chambers and Flow Tube with Liquid Chromatography - High-Resolution Mass Spectrometry

Nicolas Houzel[1], Paul Genevray[1], Fatima Al Ali[1,2], Lingshuo Meng[1,2], Florence Jacob[2], Fabrice Cazier[1], Manolis Romanias[2], Alexandre Tomas[2], Cécile Coeur[1]

[1]Université du Littoral Côte d'Opale, France; [2]IMT Nord europe, Institut Mines-Télécom

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Urban vs. Suburban PM10 Organic Aerosols fingerprints in an Eastern Mediterranean medium-sized coastal city

Evangelos Stergiou[1,2], Anastasia Chrysovalantou Chatziioannou[1], Spiros A. Pergantis[1], Maria Kanakidou[1,2,3]

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Organic and emerging pollutants in indoor suspended particles hospitals before, during and after SARS-CoV2 pandemic.

Paola Romagnoli, Francesca Vichi, Catia Balducci, Angelo Cecinato

CNR, Italy

PO2: 54

Primary emissions and secondary organic aerosol production potential of a large automobile fleet focusing on cold starts at an underground parking facility

Christos Kaltsonoudis[2], Damianos Pavlidis[1,2], Angeliki Matrali[1,2], Christina N. Vasilakopoulou[2], Silas Androulakis[1,2], Christina Christopoulou[1,2], Georgia A. Argyropoulou[1,2], Katerina Seitanidi[2], Yanfang Chen[3], A. S. H. Prevot[3], Spyros N. Pandis[1,2]

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PO2: 55

Stability of clusters of highly oxygenated organic molecules from alpha-pinene ozonolysis and sulphuric acid oxidation.

Heikki Junninen[1], Paap Koemets[1,6], Eva Sommer[2], Ruth Konrat[3], Sander Mirme[1,6], Kalju Tamme[1], Paul Winkler[3], Manjula Canagaratna[4], Doug Worsnop[5]

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Chemical aerosol composition of biomass burning emissions exposed to daytime and nighttime oxidation conditions in the EUPHORE chambers

Mila Ródenas[1], Rubén Soler[1], Teresa Vera[1], Balint Alfoldy[2], Asta Gregorič[2,3], Martin Rigler[1], Esther Borrás[1], Eduardo Yubero[4], Javier Crespo[4], Tatiana Gómez[1], Maria L. Martinez[1], Amalia Muñoz[1]

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Aerosol composition, sources, and their relation to meteorology on the highest mountain in southwest Germany

Harald Saathoff[1], Yanxia Li[1], Alexander Böhmländer[1], Milin Sebastian[1], Ottmar Möhler[1], Franziska Vogel[2], Hengheng Zhang[3], Thomas Leisner[1]

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ATMOMACCS: Predicting atmospheric compound properties.

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Cheating the path to new molecular tracers: gas-phase ammonia and organic aerosol-driven reactivity

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Comparative Analysis of Chemical Composition and Oxidative Potential of PM1.0 and PM2.5 in Seosan, Republic of Korea

Chaehyeong Park, Seoyeong Choe, Hajeong Jeon, Dong-Hoon Ko, Myoungki Song, Geun-Hye Yu, Min-Suk Bae

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Composition and sources of organic particles and vapours in an urban location during wintertime

Angeliki Matrali[1,2], Christos Kaltsonoudis[2], Maria Georgopoulou[1,2], Andreas Aktypis[2], Georgia Argyropoulou[1,2], Christina N. Vasilakopoulou[2], Katerina Seitanidi[2], Spyros N. Pandis[1,2]
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Identification of fine particulate matter and Gaseous Pollution Sources Contributing to Oxidative Potential in a National Petrochemical Industrial Complex: Based on the source apportionment Model

Seoyeong Choe, Chaehyeong Park, Hajeong Jeon, Dong-Hoon Ko, Myoungki Song, Geun-Hye Yu, Min-Suk Bae
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Impact of Agricultural Activities on PM2.5 Emissions and Oxidative Potential in Rural Areas of South Korea

Hajeong Jeon, Chaehyeong Park, Seoyeong Choe, Dong-Hoon Ko, Myoungki Song, Geun-Hye Yu, Min-Suk Bae
Mokpo National University, Korea, Republic of (South Korea)

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Long-Range Transport and Airborne Measurements of VOCs Using Proton-Transfer-Reaction Mass Spectrometry Validated Against GC-MS-Canister Data During the ASIA-AQ Campaign

Dong-Hoo Ko, Sea-Ho Oh, Chaehyeong Park, Seoyeong Choe, Hajeong Jeon, Myoungki Song, Geun-Hye Yu, Min-Suk Bae
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Monitoring of Nitrated Polycyclic Aromatic Hydrocarbons in the Czech Republic

Zdeňka Rohanová, Irina Nikolova, Jiří Kovářík
Czech Hydrometeorological Institute, Czech Republic

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Saccharides study in aerosol during wintertime over urban sites in Central Europe and Indo-Gangetic Plain

Pradhi Rajeev[1], Tarun Gupta[2], Leszek Marynowski[3]
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The impact of open burning of rice straw on PM concentrations and tracer components in eastern Spain

Nuria Galindo
Miguel Hernández University of Elche, Spain

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Long-term monitoring of carbonaceous aerosols in the UK: Insights form national air quality monitoring network

Gyanesh K Singh, Krzysztof Ciupek, David M Butterfield, Chris C Robins, Douglas Walker, Andrew S Brown
National Physical Laboratory, UK, United Kingdom

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Nighttime vertical distribution of black and brown carbon from biomass combustion during traditional Burning of the Witches in Central Europe

Saliou Mbengue[1], Petr Vodička[2], Kateřina Komínková[1,3], Jaroslav Schwarz[2], Naděžda Zíková[2], Radek Lhotka[2], Lenka Suchánková[1,2,4], Laurence Windell[2,5], Vlastimil Hanuš[1], Gabriela Vítková[1], Roman Prokeš[1,4], Adéla Holubová Šmejkalová[6], Petra Pokorná[2], Jakub Ondráček[2], Vladimír Ždímal[2]
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Optical and chemical properties of smoke aerosols from peri-urban wildfires in Athens

Dimitris G. Kaskaoutis[1], Kalliopi Petrinoli[2], Georgios Grivas[2], Panayiotis Kalkavouras[2], Maria Tsagkaraki[3], Kalliopi Tavernaraki[3], Kyriaki Papoutsidaki[3], Iasonas Stavroulas[2], Despina Paraskevopoulou[2], Aikaterini Bougiatioti[2], Eleni Liakakou[2], Rafaella-Eleni P. Sotiropoulou[4], Efthimios Tagaris[1], Evangelos Gerasopoulos[2], Nikolaos Mihalopoulos[2]
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Source attribution of carbonaceous fraction of particulate matter in the urban atmosphere based on chemical composition

Katarzyna Styszko[1], Alicja Skiba[2], Anna Tobler[3], Roberto Casotto[4], Zbigniew Gorczyca[2], Lucyna Samek[2], Dariusz Widel[5], Mirosław Zimnoch[2], Anne Kasper-Giebl[6], Jay G. Slowik[3], Kaspar R. Daellenbach[3], Andre S. H. Prevot[3], Kazimierz Różański[2]
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Carbon content in PM10 and PM2.5 at a rural background monitoring site in the hinterland of Zadar, Croatia

Ranka Godec, Helena Prskalo, Suzana Sopčić, Ivan Bešlić, Gordana Pehnec
Institute for Medical Research and Occupational Health, Croatia

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Carbonaceous Particles from Gasoline and Diesel Vehicles' Exhaust: Chemical and Isotopic Composition

Agne Masalaite[1], Rupert Holzinger[2], Inga Garbariene[1], Laurynas Bucinskas[1], Andrius Garbaras[1], Ulrike Dusek[3]
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Characterization of endocrine disruptors and other organic compounds in gas and particles from outdoor and indoor air in Northern France

Marc Fadel[1], Peggy Desmettres[2], Léa Habib[1], Jean-Pierre El Morr[1], Carine Bail[3], Yann Landkocz[1,3], Dominique Courcot[1], Frédéric Ledoux[1]
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Mass concentrations of carbonaceous species in PM2.5 between seasons at different monitoring sites

Helena Prskalo, Ranka Godec, Valentina Gluščić, Ivona Mikić, Ivan Bešlić
Institute for Medical Research and Occupational Health, Division of Environmental Hygiene, Croatia

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Multi-Seasonal Chemical Characterization of Organic Aerosols at Gruvebadet Laboratory

Diego Fellin[1,2], Gregory Vandergrift[3], Swarup China[3], Zhenli Joy Lai[3], Nurun Nahar Lata[3], Zezhen Cheng[3], Claudio Mazzoleni[4], Naruki Hiranuma[5], Mauro Mazzola[2], Elena Barbaro[1,2], Andrea Gambaro[1], Stefania Gilardoni[2]
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Physicochemical characterization of soot emissions from combustion of jet fuel blended with pentanol

Constantinos Moularas[1], Una Trivanovic[2,3], Irini Tsiodra[4], Kalliopi Tavernaraki[4], Nikos Mihalopoulos[4,5], Georgios A. Kelesidis[1]
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Rising Role of Secondary Organic Aerosol Amidst Emission Reductions in North China Plain

Chunshui Lin
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Evaluation of automated online-GC systems for time-resolved continuous measurements of ozone precursor VOCs in laboratory and field application

Max Hell[1], Dominik van Pinxteren[1], Hartmut Herrmann[1], Susanne Bastian[2]
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Automatic detection of allergenic pollen grains using the Swisens Poleno Jupiter in 2024–2025 (Poland, Wrocław)

Szymon Tomczyk[1], Małgorzata Werner[1], Małgorzata Malkiewicz[1], Karol Bubel[2]
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Characterization of a novel, mid-cost device for ambient monitoring of ultrafine particles

Una Trivanovic[1], Osnan Maragoto Rodriguez[2], Kevin Auderset[1], Florian Hüwe[2], Konstantina Vasilatou[1]

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Comparison of ultrafine particle penetration in inertial and diffusional aerosol spectrometers: Nanocol vs. SDI2001

Maida Domat[1], Olivier Masson[2], François Gensdarmes[2]
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An Improved Method for Measuring Cyclone Efficiency

Abhigya Devkota, Kerry Chen, Jason Olfert
University of Alberta, Canada

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Improving the accuracy of aerosol concentration measurements of an optical particle counter (UCASS) for balloon soundings

Sina Jost[1], Ralf Weigel[1], Konrad Kandler[2], Luis Valero[1,2], Jessica Girdwood[3,4], Chris Stopford[3], Warren Stanley[3], Luca Katharina Eichhorn[1], Christian von Glahn[1], Holger Tost[1]
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Systematic Investigation of CPC Counting Efficiency for Three Alternative Working Fluids and Five Particle Seed Materials Cut-Offs at 10 nm and 23 nm

Victoria Fruhmann, Martin Kupper, Helmut Krasa, Alexander Bergmann
Graz University of Technology, Austria

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Atomically precise determination of cluster structures

Yaochen Han, Shirong Liu, Jicheng Feng
School of Physical Science and Technology, ShanghaiTech University, Shanghai, 201210, China

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Improving the time resolution of a size scanning Particle Size Magnifier

Joonas Vanhanen[1], Joonas Purén[1], Herbert Hartl[2], Aki Pajunoja[1]
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Measurement of number concentration of nanoparticles in suspension using ES-DMA technique

Jaeseok Kim
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Glassy nano-aerosol phase state and viscosity analysis using improved dual tandem differential mobility analyzer technique

Harsh Raj Mishra, Robert Groth, Branka Miljevic, Zoran Ristovski
School of Earth and Atmospheric Sciences, Queensland University of Technology, Brisbane, Australia

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How to quantify the uncertainty of the dilution factor of diluters with internal mixing gas preparation?

Lars Hillemann, Annett Mütze, Daniel Göhler, Stephan Gabsch, Stephan Große
Topas GmbH, Germany

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Spectral aerosol light absorption measurements with a self-calibrated photothermal interferometer

Alireza Moallemi, Timothy Andrew Sipkens, Daniel Poitras, Jalal Norooz Oliaee, Joel Christopher Corbin
National Research Council Canada

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The Fluidizer - a newly standardized method for dustiness determination

Carla Ribalta[1], Anna Pohl[1], Spyros Bezantakos[2], Daniela Wenzlaff[1], Kathleen De Maeyer[3], Bart De Vos[3], Kai-Helge Schäfer[4], Dirk Broßell[1], Elisabeth Heunisch[1], Thomas A.J. Kuhlbusch[1]
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Use of a Particle-on-Slide Model for the Collection of Scattered Light, and Application to Multiphase Aerosols in Time-Dependent Systems

Thomas Dight, Chris Stopford, Richard S Greenway, Robert Lewis, Ricky Linforth
Particle Instrumentation and Diagnostics, School of Physics, Engineering and Computer Science, University of Hertfordshire, United Kingdom

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Expanded Polytetrafluoroethylene Membrane-Based Humidification System for Aerosol Light Scattering Measurements

Cade Tischer, Jonathan Linderich, James Sherman, Patrick Richardson
Appalachian State University, United States of America

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The VERT GPF-Retrofit Program for Cleaner Urban Mobility within the HORIZON Europe AeroSolfd Project

Lauretta Rubino, Andreas Mayer, Thomas Lutz, Jan Czerwinski, Lars Larsen
VERT Association, Switzerland

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Measuring NaCl with the CV-ToF-ACSM

Marije van den Born, Jan Mulder, Ulrike Dusek
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Application of ToF-ACSM for Characterizing NR-PM1 chemical Composition at CIAO observatory in Southern Italy

Francesco Cardellicchio[1], Emilio Lapenna[1], Teresa Laurita[1], Davide Amodio[1], Antonella Buono[1], Isabella Zaccardo[1,2], Canio Colangelo[1], Gianluca Di Fiore[1], Serena Trippetta[1], Lucia Mona[1]
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One filter at a time: development of a novel analysis workflow

Sebastian Holm[1,2], Henning Finkenzeller[1,2], Joona Mikkilä[2], Aleksei Shcherbinin[2], Matti Rissanen[3,4], Juha Kangasluoma[1]
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Maximizing the output from filter sample analysis: Evolved gas analysis from thermal-optical carbon analysis (TOCA) using photoionization mass spectrometry (PIMS)

Sven Ehlert[1], Hendryk Czech[2,3], Marco Schmidt[2], Patrick Martens[4], Martin Rigler[5], Andreas Walte[1], Ralf Zimermann[2,3]
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A new experimental Bench for Respiratory Droplet Analysis Under Varying Hygrothermal Conditions: Design and Characterization

Lyes Ait Ali Yahia, Evelyne Géhin, Thibault Perin, Cheikhouna Fall, Bilel Rahmouni
Univ Paris-Est Creteil, France

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Generation of aged bioaerosols in the laboratory for training machine-learning algorithms of automatic bioaerosol monitors

Tianyu Cen[1], Stefan Horrender[1], Nicolas Bruffaerts[2], Elizabet D'hooge[2], Astha Tiwari[2], Christina Giannakoudaki[1], Benoit Crouzy[3], Elias Graf[4], Konstantina Vasilatou[1]
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Quantifying the Impact of Environmental Conditions and Biological Data Variability on the Robustness of Deep Learning-Based Pollen Classification Models

Christina Giannakoudaki[1,5], Stefan Horender[1], Elias Graf[3], Benoît Crouzy[2], Sophie Erb[2,4], Julia Schmale[4], Konstantina Vasilatou[1]
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Bioaerosol and ChAMBRe: methodologies to study the bacterial viability in different atmospheric conditions

Virginia Vernocchi[1], Marco Brunoldi[1,2], Elena Gatta[2], Tommaso Isolabella[1,2], Dario Massabò[1,2], Federico Mazzei[1,2], Franco Parodi[1], Paolo Prati[1,2]

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Effects on viability, culturability and cell fragmentation of two bioaerosol generators during E. coli bacteria aerosolization

Federico Mazzei[1,2], Marco Brunoldi[1], Elena Gatta[1], Muhammad Irfan[1], Tommaso Isolabella[1,2], Dario Massabò[1,2], Franco Parodi[2], Virginia Vernocchi[2], Paolo Prati[1,2]

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In situ characterization of adsorbates on aerosol nano-aggregates

Alfred Weber, Vinzent Olszok, Philipp Rembe, Annett Wollmann

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Selective detection of aerosolised respiratory droplets in ambient air

Matjaž Malok[1], Darko Kavšek[1], Anja Pogačnik Krajnc[1], Maja Remškar[1,2]

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Development of an online instrument for measuring the oxidative potential of atmospheric particulate matter with two complementary assays.

Albane Barbero[1], Guilhem Freche[1], Luc Piard[1], Lucile Richard[1], Takoua Mhadhbi[1], Anouk Marsal[1], Julie Camman[1,2], Mathilde Brezins[1,2], Benjamin Golly[3], Jean-Luc Jaffrezo[1], Gaëlle Uzu[1]

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Developing an RH-based correction for a PM2.5 low-cost sensor network

Savinda Heshani Arambawatta Lekamge, Henry Paul Oswin

Queensland University of Technology, Australia

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From the EU metrology projects AEROMET I & II to the HE project MI-TRAP – Reliable chemical aerosol analysis by X-ray spectrometry without calibration samples

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WALL-E: A New Wall-Free Particle Evaporator for Real-Time Online Particle Composition Measurements

Imad Zgheib[1,2], Linyu Gao[2], Cecilie Carstens[2], Frederic Bourgain[2], Michel Dupanloup[2], Felipe Lopez-Hilfiker[1], Sebastien Perrier[2], Matthieu Riva[1,2]

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A New Ground-Based Spectrometer for Improved Microphysical Characterization of Aerosols and Clouds

Lea Haberstock[1,2], Almuth Neuberger[1,2], Darrel Baumgardner[3], Dagen Hughes[3], Ilona Riipinen[1,2], Paul Zieger[1,2]

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Fine Particulate Matter (PM) Atmospheric Pollution : Monitoring Air Quality Using Plane Tree Barks as Bio-Monitors

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High temporal frequency and online aerosol characterization for source apportionment evaluations. An application to a mixed urban and industrial hotspot.

Eleonora Marchetti[1,2], Marco Vecchiocattivi[2], Elisa Spano[3], David Cappelletti[1]

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Investigation of DMSO-H2O mixture as working fluid for Condensation Particle Counters

Sarah Kirchhoff[1,2], Patrick Weber[1], Gerhard Steiner[3], Christian Kunath[3], Andreas Petzold[1,2], Ulrich Bundke[1]

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Optimizing UAV methodology with a low-cost sensing system for air quality monitoring in diverse environmental settings

Joana Lage[1,2], Carolina Correia[1], Susan Marta Almeida[1], Diogo Henriques[3], Jens Voigtländer[4], Sebastian Düsing[4], Birgit Wehner[4], Ajit Ahlawat[4,5]

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Single particle polarization measurement for aerosol characterization and classification

Dominic Rothenfluh, Yanick Zeder, Philipp Burch, Reto Abt, Erny Niederberger, Andreas Schwendimann, Elias Graf
Swisens AG, Switzerland

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Implementation of a sensor network for the detection of airborne pollutants in a medium-sized city (In the context of the MAMELI project)

Giacomo Fanti[1], Andrea Spinazzè[2], Andrea Cattaneo[2], Ester Luconi[1], Elia Biganzoli[3,4], Valentina Bollati[1,3]

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A novel approach for the determination of Total Carbon, Organic Carbon, and Elemental Carbon with Aerosol Magee Scientific Carbonaceous Aerosol Speciation System CASS

Klemen Kunstelj[1], Matic Ivancic[1], Asta Gregoric[1,2], Gasper Lavric[1], Balint Alfoldy[1], Irena Jezek Brecelj[1], Martin Rigler[1]

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Environmental and Procedural Influences on PM Filter Weighing Accuracy in a Robotic System

Kamila Widziewicz-Rzońca, Dmytro Chyzhykov, Patrycja Rogula-Kopiec, Monika Błaszczak, Barbara Mathews
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Understanding Indoor Air Quality Under Various Ventilation Strategies Using Low-Cost Sensors in a Future Home

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Assessing Air Pollution in Irish Towns using a Low-Cost Sensor Network

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Low cost sensors network for PM and NO2 urban monitoring: initial and ongoing calibration and management

Davide Gallione[1], Nicole Mastromatteo[1], Davide Bertoni[4], Saverio De Vito[5], Grazia Fattoruso[5], Sofia Fellini[1], Silvia Ferrarese[4], Pietro Salizzoni[2], Silvia Trini Castelli[3], Marina Clerico[1]

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A Source Specific Calibration of Low-Cost Air Quality Sensors Using Machine Learning and Emission Inventories: A Case Study in Fianarantsoa, Madagascar

Rajat Sharma, Erwann Rayssac, Andry Razakamanantsoa, Agnès Jullien
University Gustave Eiffel, France

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Aerosol monitoring on commercial ships and private sailing boats

Laura Köhler, Lena Pünter, Andreas Herber
Alfred Wegener Institute, Germany

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Evaluating the performance of AE51 and MA200 micro-aethalometers during bicycle-mounted field deployment in city streets

Valeria Paola Mardoñez Balderrama[1], Laura Renzi[1], Luca Boniardi[2], Marco Zanatta[1], Alessandro Bigi[3], Ferdinando Pasqualini[1], Cristina Colombi[4], Angela Marinoni[1]

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Evaluating the performance of the low-cost black carbon sensor bcMeter at an urban background site

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Machine Learning-Driven PM2.5 Mapping and Hotspot Analysis Using a Large-Scale Low-Cost Sensor Network in Bihar, India

Vaishali Jain, Malay Pandey, Piyush Rai, Sachchida Nand Tripathi

Indian Institute of Technology Kanpur, India

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Miniaturized and Cost-Effective Electrochemical Sensors for Environmental Monitoring Using Additive Manufacturing

Abhishek Raj, Ankit Sahai, Rahul Swarup Sharma

Dayalbagh Educational Institute, India

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Air mass trajectory-based monitoring network for off-line atmospheric aerosol sampling

Radim Seibert, Daniel Hladký, Vladimíra Volná, Blanka Krejčí

Czech Hydrometeorological Institute, Czech Republic

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Air quality PM sensors performances compared to conventional measurement techniques

Francesca Vichi, Catia Balducci, Cristiana Bassani, Giulio Esposito, Antonietta Ianniello, Andrea Imperiali, Mauro Montagnoli, Mattia Perilli, Paola Romagnoli, Valerio Paolini

Consiglio Nazionale delle Ricerche - Istituto sull'Inquinamento Atmosferico (CNR-IIA), Italy

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Feasibility study of a low-cost miniaturised Bio-OPC for biologically relevant fluorescent particle detection

Jianghan Tian, Ricky Linforth, Thomas Dight, Robert Lewis, Warren Stanley, Paul Kaye, Chris Stopford

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Occupational exposure assessment using miniaturized aerosol instruments in different workplace environments

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Selective detection of NO2 at ppb concentration with small Cu3N-based sensor

Adrien Baut, Michael Pereira Martins, Andreas Thomas Güntner

ETH Zuerich, Switzerland

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Using low-cost sensors for assessing human exposure and dose

Maria Triantafillaki[1], Sofia Eirini Chatoutsidou[1], Theodosios Kassandros[2], Stavros Cheristanidis[3,4], Serafim Kontos[3,4], Evangelos Bagkis[2], Kostas Karatzas[2], Dimitrios Melas[4], Mihalis Lazaridis[1]

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Comparison of online (Xact) and offline (ICP-MS) measurements for trace elements in particulate matter across the EU

Petra Makorič[1], Kristina Glojek[1,2], Andres Alastuey[2], Xavier Querol[2], Andre Prevot[3], Enis Omerčić[4], Enis Krečinić[4], Damir Smajić[4], Almir Bijedić[4], Ismira Ahmović[4], Ranka Godec[6], Gordana Pehnec[6], Jean-Luc Jaffrezo[5], Gaelle Uzu[5], Sophie Darfeuil[5], Iain Rober White[1], Katja Džepina[1,3], Griša Močnik[1]

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Aerosol monitoring using different measurement platforms – bicycle, tram, tethered balloon, drone, low-cost sensors

Abdul Samad, Ulrich Vogt
University of Stuttgart, Germany

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Characterization of Photoacoustic Sensors for the Measurement of Soot at Different EC/OC contents and Black Carbon in Comparison to an Aethalometer

Martin Kupper[1], Ioannis Raptis[2], Nikos Kousias[2], Herbert Reingruber[3], Michael Arndt[3], Hafiz Hashim Imtiaz[1], Martin Penz[1], Markus Knoll[1], Helmut Krasa[1], Leonidas Ntziachristos[2], Alexander Bergmann[1]

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INITIAL MEASUREMENTS OF ATMOSPHERIC AEROSOL SIZE DISTRIBUTIONS FOR TRAINING A MACHINE LEARNING MODEL TO PREDICT AEROSOL LIQUID WATER AND CLOUD CONDENSATION NUCLEI

Aydan Phillip Gibbs[1], James Sherman[1], Lifei Yin[2]

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Large-scale Saharan dust episode in March-April 2024: study of desert aerosol loads over Potenza, southern Italy, using remote sensing and in-situ measurements

Teresa Laurita, Caterina Mapelli, Benedetto De Rosa, Francesco Cardellicchio, Michail Mytilinaios, Emilio Lapenna, Davide Amodio, Aldo Giunta, Canio Colangelo, Serena Trippetta, Nikolaos Papagiannopoulos, Aldo Amodeo, Lucia Mona
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Ultra-high resolution identification methods of organosulfates in atmospheric nanoparticles from the CERN CLOUD chamber experiments

Mario Simon[1], Jenna E. DeVivo[2], Florian Ungeheuer[1], Nirvan Bhattacharyya[2], Markus Thoma[1], Felix Möller[1], Lucia Caudillo-Plath[1], Alexandria J. Stinchfield[2], Alexander L. Vogel[1], Neil M. Donahue[2], Joachim Curtius[1]

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A selective electrochemical sensor for determination of H2O2 in atmospheric samples

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Comparative Study of Aerosol Optical/Chemical Characteristics by ChAMBRe and field Campaigns.

Muhammad Irfan[1], Dario Massabò[1,2], Federico Mazzei[1,2], Paolo Prati[1,2], Tommaso Isolabella[1,2], Virginia Vernocchi[2], Marco Bunoldi[1], Elena Gatta[1]

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Comparison of different bioaerosol sampling techniques for qualitative analysis of poultry house microbiota using next generation sequencing (NGS)

Rafal Gorny[1], Anna Lawniczek-Walczyk[1], Malgorzata Golofit-Szymczak[1], Marcin Cyprowski[1], Agata Stobnicka-Kupiec[1], Jose Luis Perez Diaz[2]

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Ensuring the worldwide equivalence of measurements of nanoparticle number concentration and charge concentration: an international comparison

Andrew Brown[1], Andreas Nowak[2], Jordan Tompkins[1], Mamatha Tomson[1], Anza Waheed[2], David Godau[2], Jinsang Jung[3], Hyeongrae Kim[3], Kevin Auderset[4], Konstantina Vasilatou[4], Junjie Liu[5], Yue Liu[5], Thomas Wu[6], Lemuel Kuehsamy[7], Hiromu Sakurai[7], Yoshiko Murashima[7], Timothy Sipkens[8], Holger Gerwig[9], Wilma Travnicek[9], Sabrina Unglert[9], Kay Weinhold[10], Maik Merkel[10], Ali Wiedensohler[10]

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High-resolution mapping of urban ultrafine particle (UFP) and CO2 fluxes

Tobias Bitz, Stephan Weber

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Field intercomparison of absorption measurements at the suburban Demokritos station in Athens

Maria Gini[1], Konstantinos Granakis[1], Stergios Vratolis[1], Evaggelia Diapouli[1], Luka Drinovec[2,3], Jesús Yus-Díez[2], Grisa Močnik[2,3], Tobias Hammer[4], Thomas Müller[5], Robin Lewis Modini[6], Jorge Saturno[7], Konstantina Vasilatou[4], Konstantinos Eleftheriadis[1]

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Emissions of cooking stoves and indoor air pollution levels

Henna Rinta-Kiikka[1], Juho Louhisalmi[1], Antti Karjalainen[1], Antti Väisänen[1], Marko Hyttinen[1], Nabin Subedi[1], Rejina Maskey Byanju[2], Sunil Prasad Lohani[3], Bhupendra Das[2], Ramesh Sapkota[2], Enna Mool[2], Sarvesh Pandey[3], Smika Sharma[3], Charan Bhattarai[2], Bal Krishna Paudel[2], Jarkko Tissari[1]

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Mass concentration intercomparison of soot generated with Mini-Cast

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Real-time quantification of refractory brown-carbon “tarballs” using SP2

Joel C. Corbin, Fengshan Liu, Brett Smith, Timothy A. Sipkens, Alireza Moallemi, Rym Mehri, John Liggio, Jalal Norooz Oliaee

Metrology Research Centre, National Research Council Canada, Canada

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Liqing Hao, Aki Nissinen, Angela Buchholz, Siegfried Schobesberger, Annele Virtanen

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High-Resolution Air Quality Surveillance and Emission Source Tracking with Scanning LiDAR

Seong-min Kim[1], Kwanchul Kim[1], Gahye Lee[1], Jeong-min Park[1], Sea-ho Oh[1], Min-kyung Sung[1], Sung-Jo Kim[1], Sangcheol Kim[2], Kyoungho Kim[3], Youndae Jung[3], Ilkwon Yang[3], Byung-Jin Choi[3], Sungchul Choi[4], Changgi Choi[4]

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Long-time-series of high-time resolution carbonaceous aerosol measurements with different in-situ measurement techniques vs. offline analysis at two background monitoring sites in Germany.

Franziska Bachmeier[1], Michael Elsasser[1,2], Julian Rüdiger[1], Cedric Couret[1,2], Olaf Bath[1], Maik Schütze[1], Bryan Hellack[1]

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Understanding the Generation and Removal of Primary Particulate Matter: Insights from Diesel, Oil, and Metal Emissions

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Aerosol Particle Classification using Single-Particle Mass Spectrometry and Deep Learning for the Detection of Ship Emissions

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Revised IMPROVE-A OC/EC Protocol Permits Gas/Diesel Analyses

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Online Oxidative Potential Measurements of Soluble and Insoluble Particulate Matter

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Catalytic stripper with plate Electrostatic Aerosol Classifier for reducing thermophoretic loss

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Initial results from the first long term integrated study of aerosol liquid water content and cloud condensation nuclei in the southeastern U.S.

James Patrick Sherman[1], Pengfe Liu[2], Lifei Yin[2]

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Electric system's insulators: a two-year Italian study on saline pollution

Mattia Borelli[1], Giorgio Santucci de Magistris[2], Claudia Schianchi Betti[2], Chiara Andrea Lombardi[1], Andrea Bergomi[1], Paola Fermo[1], Anna Maria Toppetti[3], Lucio Fialdini[3], Paolo Omodeo[3], Alessandra Balzarini[3], Irene Gini[3], Guido Pirovano[3]

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Assessing the impact of urban greenspaces on PM2.5 spatiotemporal variability in Riga, Latvia, via citizen science and low-cost sensors

Maria Kimourtzi[1], Georgios Grivas[1], Charalambos Chatzidiakos[1], Nora Gāgane[2], Sabīne Skudra[2], Aija Zučika[2], Gerid Hager[3], Todd Harwell[3], Inian Moorthy[3], Evangelos Gerasopoulos[1]

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Improved Aerosol Eddy Covariance Fluxes using the ELPI+ (Electrical Low-Pressure Impactor): Preliminary Road Traffic and Sea-Spray Emission Fluxes

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Scattering of light with orbital angular momentum from singly trapped spherical particles

Matthew Hart, Shawn Divitt, Vasanthi Sivaprakasam

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Synergies between ACTRIS and ICOS: combination of aerosol and GHS's first campaign measurements for the characterization of atmospheric composition at CIAO observatory in Tito, Potenza, Southern Italy

Antonella Buono[1], Isabella Zaccardo[1,2], Emilio Lapenna[1], Teresa Laurita[1], Francesco Cardellicchio[1], Davide Amodio[1], Canio Colangelo[1], Gianluca Di Fiore[1], Carmela Cornacchia[1], Serena Trippetta[1], Lucia Mona[1]

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Two Motion-Correction Approaches for Turbulent Particle Flux Measurements from a Moving Vessel in the Arctic

Florian Fröhlich[1], Theresa Mathes[1], Sabine Lüchtrath[1], Philipp Oehlke[2], Holger Siebert[2], Birgit Wehner[2], Andreas Held[1]
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Update of the Walking in Chamber of the Polytechnic University of Catalonia for ad hoc Aerosols studies

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From Reference Materials to Real Filters: Mapping Water Content in PM Using KF Titration

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Integrated study of $\delta^{13}C$-CH_4 and $\delta^{13}C$-CO2 signatures and aerosol properties as tracers of Wildfire Events: Insights from the ACTRIS-ICOS CIAO Observatory

Isabella Zaccardo[1,2], Antonella Buono[1], Emilio Lapenna[1], Teresa Laurita[1], Francesco Cardellicchio[1], Davide Amodio[1], Canio Colangelo[1], Gianluca Di Fiore[1], Serena Trippetta[1], Lucia Mona[1]
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Global calibration as a possible alternative to conventional collocation calibration strategy for air quality low-cost sensor networks: Review and experience from long-term deployments

Miloš Davidović[1], Saverio De Vito[2], Maitane Iturrate-Garcia[3], Milena Davidović[4], Maja Jovanović[1], Danka Stojanović[1], Milena Jovašević-Stojanović[1], Shahin Tabandeh[5]
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Challenges in interpreting black carbon data from national air quality monitoring in the UK

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Fast analysis tool for temporal aerosol particle size and fluorescence response data tested with indoor measurements at EAC 2024 in Tampere

Yanick Zeder, Elias Graf, Philipp Burch, Erny Niederberger
Swisens AG, Switzerland

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Urban Air Quality Monitoring: Measurement Campaigns and Key Findings

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An open toolkit for particle size distribution analysis

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Optical Properties of Black Carbon Aerosols and Their Climate Implications in Guadalajara, Jalisco

Ernesto Reyes Villegas
Tecnologico de Monterrey, Mexico

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Annual variations and long-term air quality trends in a low-pollution, northern city

Veera Blankenstein[1], **Ville Silvonen**[1], **Laura Salo**[1], **Ari Elsilä**[2], **Kati Skippari**[2], **H. Timonen**[3], **Topi Rönkkö**[1]
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Chemical, Physical and Microbial Characteristics of PM10 and PM2.5 in Urban Region of India

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Developing an emissions inventory for metallic aerosols in London, UK

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Simulation and sampling of human respiratory emission in a laboratory environment

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Assessing Influenza A Virus Aerostability: Insights from a Novel Bioaerosol Technology

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Predicting the pulmonary toxicity induced by repeated exposures to a mixture of alumina nanoparticles and HClg using in vitro air-liquid interface exposures

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Increased PM Levels Enhance Minimum Leaf Conductance and Modify Transpiration Dynamics Through Stomatal Density Adjustments

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Drosophila melanogaster as a bioindicator of PM-induced oxidative stress effects

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Alveolar in vitro model at air-liquid-interface

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In vitro dioxin- and PAH-like activities of particulate residential wood burning emissions: influence of appliances, combustion conditions and fuel composition

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Oxidative Potential of PM1, PM2.5, and PM10 in Car and Tram Tunnels: Evaluating Public Health Risks

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Oxidative potential of urban aerosol and related elements in three simulated lung fluids

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Association between particle-bound reactive oxygen species and in-vitro oxidative responses induced by traffic-related urban nanoparticles

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Anti-oxidant and anti-inflammatory properties of nanoalgosomes in a co-culture of airway bronchial cells and macrophages at the Air-Liquid Interface

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Ex-Vivo Respiratory Pharmacokinetics Model for Inhaled Therapies Using Negative Pressure Ventilation and Perfusion: A Proof-of-Concept

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Assessment of Polycyclic Aromatic Hydrocarbon concentrations and Black carbon levels in primary schools and residences in urban and rural Barcelona

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PM10 chemical profiling of vehicles emissions in a Lisbon road tunnel (Portugal)

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Seasonal variability of airborne particles in Lisbon during natural phenomena events and a climatic atypical year

Alexandra Nunes, S. M. Almeida, Vânia Martins
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Study in the atmospheric simulation chamber CHARME of the reactivity of monoterpenes first-generation oxidation products: Implications on air quality and climate

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Investigation of the Internal Flow Dynamics of Conical Diffuser Chambers

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Chemical analysis of limonene secondary organic aerosols under high reactive nitrogen conditions for varying humidities

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Unraveling 2,5-Dimethylfuran Autoxidation by Ozone and OH radical: Experimental Insights from MION Orbitrap Mass Spectrometry

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Peroxy radical and oxidation product formation in monoterpene oxidation by nitrate radicals: insights from free-jet flowtube experiments

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Photochemical degradation of gaseous naphthalene/benzene and secondary organic aerosol formation for typical atmospheric conditions

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Current chemical ionization mass spectrometry (CIMS) techniques for measuring early generation peroxy radicals from monoterpene ozonolysis are prone to mischaracterization due to an artifact

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Computational study on HOM formation from 2,5-Dimethylfuran oxidation initiated by ozone and OH radical

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The Atmospheric Autoxidation of Mesitylene

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The Atmospheric Autoxidation Process of Pseudocumene

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Microbial Ice Nucleation in Polar and Atmospheric Environments: Insights from Antarctic Precipitation and Metagenomic Datasets

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A DLCA methodology for simulating Brownian agglomeration of nanowire aerosols

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Single-droplet techniques for analysis of evaporation kinetics and particle morphology in spray dryers

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Controlling the Morphology of Microparticles Formed by Evaporation of Aerosol Droplets Containing Polymer Nanoparticles

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Roles of Mucin and Albumin in Exhaled Respiratory Droplet Evaporation and Rehydration: Implications for Airborne Disease Transmission

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New cleaning model to predict the removal efficiency of 10-130 nm contaminant particles on Si wafers using microdroplet impaction

Seungwook Lee, Donggeun Lee
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Sea spray aerosol emissions (1940-2023) subject to climate change: trends and variation, based on new source parameterizations, the cases of the North Sea and the Baltic Sea

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Stiff kinetics parameter estimation using neural ordinary differential equation and collocation training

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Development of a particle categorization for the broad representation of atmospheric measurement data with the SwisensPoleno Jupiter

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Experimental study of homogeneous nucleation in bismuth vapor

Maksim Shilikhin, Einar Kruis, Ramin Rishmawi
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Iron's impact on SOA formed from Monoterpenes.

Sacha Fallah, Jens Top, Natasha M. Garner, Imad El Haddad, Markus Ammann, David M. Bell
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Carbonaceous fine aerosol in Sarajevo, Bosnia and Herzegovina: Elevated concentrations and highly polluted winter episodes

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On Thermionic Emission Channel of Heat Transfer between Nanoparticles and Gas

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Ecotoxicity of PM10 from heating appliances using different biomass fuels in two dwellings

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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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Thin continuous polytetrafluoroethylene coatings by electrospray

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Formation of trioxy acid via OH-initiated aldehyde oxidation in the atmosphere

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A case study of the strengths and limitations of using the isotopic composition of Carbon (d13C) and Nitrogen (d15N) to partition the sources of C and N in Particulate Matter collected over Naples (Italy)

Mauro Rubino[1], Carmina Sirignano[2], Elena Chianese[3], Miguel Angel Hernández-Ceballos[4], Anikò Angyal[5], Marzaioli Fabio[1], Davide Di Rosa[1], Giuseppe Caso[1], Angelo Riccio[3]
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Additive Fingerprints of Micro- and Nano-plastics in PM10 from Occupational Environments

Benedetta Giannelli Moneta, Catia Balducci, Marina Cerasa, Tommaso Rossi, Silvia Mosca, Marco Giusto, Tiziana Sargolini, Adriana Pietrodangelo
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Characterisation of Long-Range Transported Aerosols at Barbados during EUREC4A: Insights from Single-Particle Mass Spectrometry

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Comparative characterisation of indoor aerosols from salt atomisation and pan frying: size distribution and ventilation impact in a naturally ventilated townhouse

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Development and characterisation of a new aerosol sampling system and preliminary investigations regarding the composition of organic aerosol

David Wasserzier, Niklas Karbach, Thorsten Hoffmann
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Development and Evaluation of a Fanless In-Vehicle Electrostatic Precipitator for Urban PM Reduction

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Effects of Chamber Configurations on the Nanoparticle Output of Spark Discharge Generators: A Combined CFD, Particle Tracing and Experimental Study

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LOAC-S, a new space-borne OPC for planetary aerosols

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Temporal Variation of Tire Wear Particles in Ambient Air: Development of Analytical Techniques and Seasonal Trends

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The Angstrom coefficient (Aerosol) evaluation through wide-field stellar photometry

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Using online chemical ionisations high-resolution mass spectrometry for the characterisation of size-dependent reactions in aerosol particles

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LungVis 1.0 – AI-enhanced 3D imaging for spatially resolved dosimetry and biokinetics of inhaled nanoparticles throughout the entire murine lung

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New particle formation from alpha pinene and trace sulfuric acid

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Particulate Matter: multi-sample analysis protocol for Oxidative Potential determination

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Particulate-loaded filters analysis via Laser-Induced Breakdown Spectroscopy

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Quantifying short-term intervention-associated source contributions to air quality using a causal machine learning approach

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Seasonal variability of PM2.5 major chemical components and source tracers in the Mediterranean urban background atmosphere

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Source apportionment of PM in Campania during high tourist season: an integrated analytical and modeling approach

Giuseppe Caso[1], Fabio Marzaioli[1], Mauro Rubino[1], Miguel A. Hernández-Ceballos[2], Francesca Barone[3], Enikő Papp[4], Zsófia Kertész[4], Anikó Angyal[4]

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The Effect of Explicit Many-Water Molecules on Dimethyl Sulfide Oxidation

Wilin Julian Sari, Nanna Myllys
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Understanding the sources of PM10 and PM2.5 in an underground train station in Ile de France (Paris metropolitan area)

Juanita Rausch[1], Sylvie Ngo[2], David Jaramillo Vogel[1], Sébastien Perseguers[3], Gaelle Uzu[4], Jean-Luc Jaffrezo[4], Heidi Carrilho[2]

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Characterization of PM2.5 and its oxidative potential in three regions of the South Italy

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Aging of Wildfire Particulate Matter and Its Impacts on Toxicity and Biological Responses

Melanie Stegmann[1], Jeroen Buters[1], Hendryk Czech[2], Abdulghani Ebtini[2], Olga Popovicheva[3], D. Cernov[4], Alexander Kozlov[5], Ralf Zimmermann[2], Carsten Schmidt-Weber[1], Inga Wessels[1]

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The Impact of COVID-19 Restrictions on Airborne Concentrations of Contaminants of Emerging Concern in Milan (Italy): The Case of Cocaine

Giovanna Mazzi[1], Elena Barbaro[2], Matteo Feltracco[1], Marco Roman[1], Cristina Colombi[3], Eleonora Favaro[1], Andrea Gambaro[1,2]

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Data-Driven Modeling of Ultrafine Particles in Northern France: An XGBoost Approach Using ATOLL Observations

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