



**13th Asian Aerosol Conference**  
**3 - 7 November 2024 • Sarawak**

**AAC 2024 SCIENTIFIC PROGRAMME**  
**PARALLEL SESSION**

**Aerosol and Air Pollution in South Eastern Asia Countries-I**  
**Chair: Professor Anil Namdeo, Dr. Ernie Syazween Junaidi**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-259	<i>Nandhakumar S K, Anna University, Chennai</i> Effect of Climate Forcing Parameters on Coastal Regions Due to Maritime Aerosols
<b>15:15</b>	AAC24-44	<i>Yu-Cheng Chen, National Health Research Institutes</i> Using cluster algorithms with a machine learning technique and PMF models to quantify local PM2.5 and metals in Taiwan
<b>15:30</b>	AAC24-46	<i>Shih-Yu Pan, National Yang Ming Chiao Tung University</i> The Ecological, Inhalation Cancer Risk Assessment and Source-attributed Profile of Hazardous Air Pollutants (HAPs) in Different Asian Cities
<b>15:45</b>	AAC24-58	<i>Anil Namdeo, Northumbria University</i> Ambient particulate matter levels in Tuktoyaktuk hamlet in the Canadian Arctic
<b>16:00</b>	AAC24-109	<i>Leung Chin Wai, Hong Kong Baptist University</i> Chemical characterization and source apportionment of water-soluble organic nitrogen (WSON) in PM2.5 in Hong Kong
<b>16:15</b>	AAC24-168	<i>Po-Yen Chien, National Sun Yat-Sen University</i> Chemical Characterization and Sources of Dry and Wet Deposition and Hazardous Air Pollutants in a Large Industrial Zone in Southern Taiwan.
<b>16:30</b>	AAC24-184	<i>Sarvan Kumar, Veer Bahadur Singh Purvanchal University, India</i> Variability of the optical and radiative characteristics of aerosols over the Indo-Gangetic Plain: A case study of Kanpur

Aerosol Chemistry-I		
Chair: Dr. Nurul Ashraf Razali, Dr. Noor Aniza Binti Ibrahim		
Time	Paper ID	Presenter & Title
15:00	AAC24-34	<i>Yongjie Li, University of Macau</i> Co-photolysis of mixed chromophores affects atmospheric lifetimes of brown carbon
15:15	AAC24-54	<i>Fang-Chen, Chang, National Taiwan University</i> Seasonal and diurnal variations in the optical properties of water-soluble and methanol-soluble brown carbon and analysis of water-soluble organic molecular composition in central Taiwan
15:30	AAC24-68	<i>Yu-Hsiang Cheng, Ming Chi University of Technology</i> Diurnal Variation Characteristics of PM <sub>2.5</sub> -bound Polycyclic Aromatic Hydrocarbons and their Potential Sources in Northern Taiwan
15:45	AAC24-98	<i>Wenshuai Li, Ocean University of China</i> Daytime and nighttime aerosol soluble iron formation in a coastal city in eastern China
16:00	AAC24-129	<i>Younghyun Lee, Inha University</i> Investigation of Changes in the Physicochemical Characteristics of Black Carbon Particles Using an Oxidation Flow Reactor
16:15	AAC24-132	<i>Dongwoo Kim, Inha University</i> Evaluating the Influence of Black Carbon Inclusion on the Mixing State of Atmospheric Aerosols Based on In-Situ Raman Spectroscopy
16:30	AAC24-391	<i>Debayan Mandal, IIT Bombay</i> Chemistry of water-soluble organic matter in different indoor locations inside an academic campus
16:45	AAC24-401	<i>Justin Sentian, Universiti Malaysia Sabah</i> Recent Spatial and Temporal Analysis of Aerosol Optical Depth Analysis over Malaysian Borneo

**Aerosol Exposure and Health Effects-I**  
**Chair: Dr. Noor Haziqah Kamaludin, Ainur Balqis Binti Radzi**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-43	<i>Shih-Chun Candice Lung, Academia Sinica</i>  Assessing peak PM2.5 and PM1 levels and health impacts with research-grade low-cost sensors in two Asian countries
<b>15:15</b>	AAC24-55	<i>Qianying Liu, University of Macau</i>  A Comprehensive Characterization of Empirical Parameterizations for OH Exposure in the Aerodyne Potential Aerosol Mass (PAM) Oxidative Flow Reactor (OFR)
<b>15:30</b>	AAC24-81	<i>Chueh Jung Hou, Kaohsiung Medical University</i>  Effects of indoor air purifying technology intervention on urinary heavy metals and health in asthmatic patients in an industrial area
<b>15:45</b>	AAC24-89	<i>Tan Ke Ning, Kaohsiung Medical University</i>  The Effects of Air Purifier Intervention on Cytokines in Blood of Asthma Patients in Industrial Area
<b>16:00</b>	AAC24-92	<i>Man-Yan Cheng, Kaohsiung Medical University</i>  Evaluation of air purifiers on bioaerosols in households and health effects among asthmatic patients in an industrial area
<b>16:15</b>	AAC24-105	<i>Wahyu Diah Proborini, National Health Research Institute</i>  Assessment of Associated Metal Contents on Airborne Microplastics
<b>16:30</b>	AAC24-164	<i>Doni Hikmat Ramdhan, Universitas Indonesia</i>  Size distribution of particulate matter and its health effects among adults during the forest fire in South Sumatra, Indonesia
<b>16:45</b>	AAC24-405	<i>Shoya Manabe, Keio University</i>  Development of methods for measuring endotoxins in atmospheric particles and estimation of their origins

Urban Aerosol and Air Quality-I		
Chair: Associate Professor Norhayati Mahyuddin, Dr. Norfazrin Mohd Hanif		
Time	Paper ID	Presenter & Title
15:00	AAC24-108	<i>Po-Kai Chang, National Taiwan Univeristy</i> Spatial and Temporal Variation of Traffic-Related PM in an Urban Area: Implications for Public Health
15:15	AAC24-113	<i>Lu Qi, University of Helsinki</i> Effect of secondary organic aerosol formation pathways on health effects
15:30	AAC24-154	<i>Thi-Thuy-Nghiem Nguyen, National Yang Ming Chiao Tung University</i> Big data analysis and machine learning of O3 Pollution in Taiwan
15:45	AAC24-174	<i>Atul Kumar Srivastava, Indian Institute of Tropical Meteorology</i> Source apportionment and absorption characteristics of aerosols at Delhi, an urban megacity over the western Indo-Gangetic Plain
16:00	AAC24-188	<i>Khan Alam, University of Peshawar, Pakistan</i> Anthropogenic Emissions of Aerosol over an Urban Environment of Peshawar: Air Quality and Climatic Implications
16:15	AAC24-202	<i>Moustapha Kebe, Cheikh Anta DIOP University</i> Source Apportionment and Assessment of Air Quality Index of PM <sub>2.5-10</sub> and PM <sub>2.5</sub> in at Two Different Sites in Urban Background Area in Senegal

Indoor Air - I		
Chair: Professor Ying I. Tsai, Sudarmaji		
Time	Paper ID	Presenter & Title
15:00	AAC24-26	<i>Muhamad Shahril Bin Mohd Abdullah, Universiti Tun Hussein Onn Malaysia</i>  The Effect of Periodic Preventive Maintenance on HVAC System to The Level of Indoor Air Quality Parameters in One of Public Hospital in Malaysia
15:15	AAC24-220	<i>Nur Shahidah Bt Mohd Nazri, UITM Puncak Alam</i>  Sustainability Program: Indoor Air Quality (IAQ) Assessment Inside a Selected Department at a Healthcare Facility in Kuala Lumpur, Malaysia
15:30	AAC24-97	<i>Nur Faseeha Suhaimi, Universiti Putra Malaysia</i>  Exploring the Link between Indoor Air Quality and Sick Building Syndrome Symptoms among Students in Malaysian University Classrooms
15:45	AAC24-110	<i>Corie Indria Prasasti, Public Health Faculty, Universitas Airlangga</i>  Analysis of Indoor Air Quality on Children's Allergic Rhinitis Symptoms in Surabaya City
16:00	AAC24-114	<i>Jonathan Symonds, Cambustion</i>  Studying droplet dispersion with aerosol flame photometry
16:15	AAC24-118	<i>Jun Wang, University of Cincinnati</i>  Aerosol Emissions from Desktop Laser Cutting and Engraving of Various Common Materials
16:30	AAC24-124	<i>Thaseem Thajudeen, Indian Institute of Technology Goa</i>  Understanding the spatial and temporal variation of cooking-emitted particles in distinct zones
16:45	AAC24-78	<i>Sasho Gligorovski, Chinese Academy of Sciences</i>  Chemical characterization of aerosol particles produced by ozone reactions with floor cleaning detergent

**Aerosol and Air Pollution in South Eastern Asia Countries-II**  
**Chair: Professor Ahmad Kamruzzaman Majumder, Bian Shabri Putri**  
**Irwanto**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-196	<i>Amgalan Natsagdorj, National University of Mongolia</i> Chemical composition of PM <sub>2.5</sub> and New Particle Formation in Ulaanbaatar, Mongolia
<b>10:45</b>	AAC24-21	<i>Ahmad Kamruzzaman Majumder, Stamford University Bangladesh</i> Monsoon Season Spatial Distribution of Particulates Concentration in the Road Intersection Area of Different Land Use in Major City in South Asian Countries
<b>11:00</b>	AAC24-285	<i>Saifi Izhar, IIT ISM Dhanbad</i> Effect of emission sources and size on carbonaceous aerosol optical and isotopic characteristics
<b>11:15</b>	AAC24-309	<i>Harshita Baranwal, Banaras Hindu University</i> Contrasting nature of absorbing aerosols over Indo-Gangetic Plain
<b>11:30</b>	AAC24-359	<i>Nur Syafiqah Binti Abd Hakim, Universiti Teknologi MARA (UiTM)</i> Air Pollution as a Factor Influencing Epiphytic Lichen and Algal Biodiversity in Selected Urban and Suburban Environments in Malaysia
<b>11:45</b>	AAC24-368	<i>Neha Shukla, Isabella Thoburn College, Lucknow University</i> Explore the impact of PM <sub>2.5</sub> on pre-teen schoolchildren in "Manchester of the East," Kanpur, India
<b>12:00</b>	AAC24-372	<i>Prerna Thapliyal, Indian Institute of Technology Kanpur, India</i> Land use land cover, Population distribution, and Geographic & Seasonal variations influencing Carbonaceous aerosol concentrations in the South-Asian region
<b>12:15</b>	AAC24-348	<i>Nur Syafiqah Binti Abd Hakim, Universiti Teknologi MARA (UiTM)</i> Air Pollution as a Factor Influencing Epiphytic Lichen and Algal Biodiversity in Selected Urban and Suburban Environments in Malaysia

<b>Aerosol Chemistry-II</b> <b>Chair: Professor How-Ran Chao, Dr. Wan Nurdiyana Wan Mansor</b>		
<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-237	<i>Shi-Ya Tang, China Medical University</i> Chemical Mass Closure of Hourly PM <sub>2.5</sub> and Visibility Impairment at Two Sites in Southern Taiwan
<b>10:45</b>	AAC24-243	<i>Olga B Popovicheva, Moscow State University</i> Seasonal and source-dependent biomass burning impact on the northernmost European megacity: from winter to summer
<b>11:00</b>	AAC24-251	<i>Masao Gen, Chuo University</i> Rapid hydrolysis of NO <sub>2</sub> at High Ionic Strengths of Deliquesced Aerosol Particles
<b>11:15</b>	AAC24-255	<i>Yu-Lun Tseng, National Sun Yat-Sen University, Taiwan</i> Spatiotemporal Variation and Chemical Fingerprint of PM <sub>2.5</sub> at Kaohsiung Coastal and Offshore Island Sites in Southern Taiwan
<b>11:30</b>	AAC24-269	<i>Harish Phuleria, Indian Institute of Technology Bombay</i> Polycyclic aromatic hydrocarbons from vehicles: Characteristics and associations with the browning of atmospheric organic carbon
<b>11:45</b>	AAC24-277	<i>Shahzada Amani Room, National Yang Ming Chiao Tung University</i> Chemical Composition and Oxidative Potential of Different Sized Particles in Various Regions of Taiwan
<b>12:00</b>	AAC24-279	<i>Yanlin Zhang, Nanjing University of Information Science and Technology</i> Important Contributions of Natural Gas to Atmospheric Nitrate Aerosols in China
<b>12:15</b>	AAC24-281	<i>Olga B Popovicheva, Moscow State University</i> Black carbon in the Siberian and Central Arctic



**Bioaerosol-I****Chair: Professor Jonathan Reid, Dr. Norfazrin Mohd Hanif**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-30	<i>Milad Massoudifarid, Yonsei University</i> Continuous flow aerosol-to-hydrosol electrostatic sampling with real-time microfluidic nucleic acid extraction for automated bioaerosol detection
<b>10:45</b>	AAC24-60	<i>Jonathan Reid, University of Bristol</i> Respiratory Aerosol Emission Rates and Relationship to Exhaled Carbon Dioxide Flux for Assessing Pathogen Transmission Risk in Indoor Air
<b>11:00</b>	AAC24-61	<i>Jonathan Reid, University of Bristol</i> The Microphysics of Surrogate Exhaled Aerosols and the Impact on the Airborne Survival of Viruses
<b>11:15</b>	AAC24-70	<i>Wenwen Xie, Prefectural University of Kumamoto</i> Comparison of bioaerosols concentration from Chinese coast to northwestern Pacific
<b>11:30</b>	AAC24-85	<i>Sanggwon An, Yonsei University</i> Rapid monitoring of indoor airborne virus with high air flowrate electrostatic sampling and PCR analysis
<b>11:45</b>	AAC24-87	<i>Teruya Maki, Kindai University</i> Fluorescent sensors and DNA metagenomes targeting the urban bioaerosols changed suddenly during Asian-dust season
<b>12:00</b>	AAC24-141	<i>Doheon Kim, Yonsei University</i> Deep Learning Integrated Soft Sensor Technology for Real-Time Monitoring of Culturable Indoor Bioaerosols
<b>12:15</b>	AAC24-145	<i>Jaeho Oh, Yonsei University</i> Prediction of bioaerosol number concentration from electrical currents of thermal-lyzed bioaerosol

**Aerosol Exposure and Health Effects-II****Chair: Professor Zailina Binti Hashim, Dr. Nur Azalina Suzianti Feisal**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-115	<i>Ralf Zimmermann, University of Rostock</i> Photochemical aging of emissions from EURO6 gasoline cars or from wood combustion increases the observed adverse effects in Air Liquid Interface-exposed human lung cell models
<b>10:45</b>	AAC24-148	<i>Rajasekhar Balasubramanian, National University of Singapore</i> Investigation of Cyclists' Exposure to Black Carbon in Ambient Air
<b>11:00</b>	AAC24-189	<i>Oluwagbayide Samuel Dare, Federal Polytechnic Ilaro Ogun State Nigeria</i> Impact of Indoor Air Quality on Residents Health in Ilaro, Ogun State Nigeria
<b>11:15</b>	AAC24-215	<i>Najihah Zainol Abidin, Management &amp; Science University (MSU), Shah Alam</i> Aerosol Emissions from Electronic Cigarettes: Health Risk Assessment of Aldehydes and Heavy Metals
<b>11:30</b>	AAC24-266	<i>Shreya Dubey, Indian Institute of Technology Bombay</i> Toxicity of Fine Particles of Traffic Origin: Effect of Different Driving Conditions and Fleet Characteristics
<b>11:45</b>	AAC24-392	<i>Lim Fang Lee, Universiti Tunku Abdul Rahman</i> Health Risk Assessment of Heavy Metals in Household Dust: Associations with Daily Activities among Residents in Kampar, Malaysia
<b>12:00</b>	AAC24-398	<i>Yuka Uchida, Kanazawa Kasuga Clinic</i> Research on Safe Nebulizer Inhalation Therapy Using Clean Booth - Clinical Research -

## Indoor Air - II

Chair: Professor Ying I. Tsai, Dr. Noor Aniza Binti Ibrahim

Time	Paper ID	Presenter & Title
10:30	AAC24-151	<i>Muhammad Aiman bin Mohd Nor, Shibaura Institute of Technology</i> Reconstructing three-dimensional flow from two-dimensional velocities using the predictor-corrector method
10:45	AAC24-161	<i>Imran Shahid, Qatar University</i> Exploring the Variability and Health Impacts of Air Pollutants in Indoor Microenvironments
11:00	AAC24-172	<i>Muhamad Shahril Mohd Abdullah, Universiti Tun Hussein Onn Malaysia</i> Airborne Hazards: A Comprehensive Review of Aerosol Contaminants in Hospital Environments and Their Impact on Health
11:15	AAC24-179	<i>Ying I. Tsai, Chia Nan University of Pharmacy and Science</i> Aerosol Size Distribution and Chemical Characterization Associated with Persistent Free Radicals from Incense Burning in Taiwan and Thailand
11:30	AAC24-149	<i>Rajasekhar Balasubramanian, National University of Singapore</i> Personal Exposure to Airborne Particulate Matter While Cooking: Evaluation and Mitigation Strategies
11:45	AAC24-248	<i>Sudarmaji, Faculty of Public Health, Universitas Airlangga</i> Analysis of Risk Factors in The Physical Environment and Air in The House with Cases of Pneumonia in Children
12:00	AAC24-410	<i>Norhayati Binti Mahyuddin, Universiti Malaya</i> Optimizing External Flow Domain Dimensions in CFD Simulations for Enhanced Natural Ventilation and Pollutant Control in Hospital Buildings

Nanoparticles and Nanotechnology-I		
Chair: Professor Tawatchai Charinpanitkul, Shinta Arta Mulia		
Time	Paper ID	Presenter & Title
15:00	AAC24-28	<i>Hee Dong Jang, Korea Institute of Geoscience &amp; Mineral Resources</i> Facile Fabrication of Silicon-Carbon Composites for Potential Energy Storage Materials
15:15	AAC24-39	<i>Nur Syakirah Nabilah Saipul Bahri, Hiroshima University</i> Synthesizing magnetic cellulose nanofiber using spray drying approach
15:30	AAC24-67	<i>Seungwooklee, Pusan National University</i> Capability of Single dropwise impaction for removing nanoparticle contaminants from Si wafer
15:45	AAC24-79	<i>Jicheng Feng, ShanghaiTech University</i> 3D nanoprinting of dynamic colors
16:00	AAC24-104	<i>Tawatchai Charinpanitkul, Chulalongkorn University</i> Facile Production of MWCNTs from a mixture of Methane and Ethane using NiMo/MgO Catalyst
16:15	AAC24-116	<i>Masaru Kubo, Hiroshima University</i> Spray-Synthesis of Hierarchical Porous HKUST-1 using Soft-template
16:30	AAC24-290	<i>Annisa Fillaeli, Chung Yuan Christian University</i> C-doped BiOBr Nanoparticle in Tuning High Efficiency Photocatalytic NO to NO <sub>3</sub> - Conversion
16:45	AAC24-354	<i>Muhammad Firdaus Bin Abdul Halim, Universiti Putra Malaysia</i> Performance of Nanocellulose Fibre Reinforced Starch Biopolymer Composites

**Urban Aerosol and Air Quality-II**  
**Chair: Dr Zulfa Hanan Ashari, Dr. Corie Indria Prasasti**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-244	<i>Wen-Chi Huang, National Central University</i> Weather regimes and atmospheric stability associated with high PM2.5 days in Douliu city, Taiwan
<b>15:15</b>	AAC24-256	<i>Yueh-Chen Wang, National Central University</i> Evaluation of the atmospheric boundary layer structure effect on air quality using the micro-pulse lidar
<b>15:30</b>	AAC24-340	<i>Anjanay Pandey, Indian Institute of Technology Delhi</i> PM2.5 bound chemical characterization and source apportionment analysis during stubble burning period in Punjab: Implications for Delhi's air quality
<b>15:45</b>	AAC24-353	<i>Jost Valentin Lavric, Acoem</i> Enhancing urban air quality monitoring with low footprint smart stations: an example from Bangkok, Thailand
<b>16:00</b>	AAC24-366	<i>Ram Pravesh Kumar, Jawaharlal Nehru University, India</i> Air Quality Assessment in Eastern India: A Study on Aerosols and Gaseous Pollutants Using MODIS, Sentinel-5P and In-situ Data
<b>16:15</b>	AAC24-306	<i>Anwar Khan, Delhi Pollution Control Committee, University of Minnesota</i> A Real-time PM10 and PM2.5 Monitoring System for Construction and Demolition Sites to improve Air Quality in New Delhi
<b>16:30</b>	AAC24-275	<i>Arpan Patra, Council on Energy Environment and Water</i> Are We Safe Inside Our Cars? Understanding the Toxicity of In-cabin Particulate Matter

<b>Aerosol Instrumentation-I</b>		
<b>Chair: Dr. Khairul Nizam Md Isa, Fahimah Hashim</b>		
<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-65	<i>Ralf Zimmermann, University of Rostock</i>  Wildfire Aerosols and Ship Emissions: Field-Deployable Single Particle Mass Spectrometer for Detection of Toxicants and Climate-Relevant Compounds
<b>15:15</b>	AAC24-101	<i>Yik-Sze Lau, Queensland University of Technology</i>  The Coupling of a High-efficiency Aerosol Collector with Electrospray Ionisation Orbitrap Mass Spectrometry for the Real-time Chemical Characterisation of Fine and Ultrafine Particles
<b>15:30</b>	AAC24-112	<i>Perapong Tekasakul, Prince of Songkla University</i>  Quartz Crystal Microbalance Frequency Response to Deposition of Nanoaerosols
<b>15:45</b>	AAC24-146	<i>Jaeho Oh, Yonsei University</i>  Determination of effective density of PM1 size distribution via pre-measured SMPS data
<b>16:00</b>	AAC24-213	<i>Oliver F. Bischof, TSI GmbH</i>  Harmonized Monitoring of Ultrafine Particles in Ambient Air in Europe: Achievements and Proven Solutions
<b>16:15</b>	AAC24-229	<i>Jonathan Symonds, Cambustion</i>  Improving the accuracy of particle penetration measurements through high efficiency air filter media using an Aerodynamic Aerosol Classifier
<b>16:30</b>	AAC24-276	<i>Mehrzad Roudini, Leibniz Institute for Solid State and Materials Research Dresden</i>  Developments for SAW-based aerosol generation: Miniaturized, cost-efficient, mass-producible and reproducible systems
<b>16:45</b>	AAC24-278	<i>Yusuke Fujii, Osaka Metropolitan University</i>  Development of a Gaseous Ammonia Sampling System using Counter-Current Flow Tube

<b>Airborne Microplastics-I</b>		
<b>Chair: Professor Hiroshi Okochi Dr. Norhidayah Binti Abdull</b>		
<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-120	<i>Jun Wang, University of Cincinnati</i> Airborne Plastic Emission Dynamics During High Speed FDM 3D Printing
<b>15:15</b>	AAC24-176	<i>Hiroshi Okochi, Waseda University</i> Occurrence, behavior, fate, and health impact of airborne microplastics (13) : Current status of AMPs research in Japan
<b>15:30</b>	AAC24-180	<i>Ainur Balqis Binti Radzi, University Malaysia Pahang Al-Sultan Abdullah</i> Occurrence, Physical Characteristics, and Driving Factors of Indoor Airborne Microplastics in Daycare Centers
<b>15:45</b>	AAC24-233	<i>Norhidayah Binti Abdull, University Malaysia Pahang Al-Sultan Abdullah</i> A Review of Characterization, Driving Factors, and Health Risk of Indoor Microplastics
<b>16:00</b>	AAC24-239	<i>Wang Yize, Waseda University</i> Occurrence, behavior, fate, and health impact of airborne microplastics (24): airborne microplastics in cloud water
<b>16:15</b>	AAC24-273	<i>Rain Martin Valencia, Adamson University</i> Characterization of Settled Atmospheric Microplastics Inside a University in Manila, Philippines
<b>16:30</b>	AAC24-332	<i>Zarifah Binti Shahri, University Malaysia Pahang Al-Sultan Abdullah</i> A Comprehensive Bibliometric Analysis of Airborne Microplastics: Indoor and Outdoor Environment in Industrial Area
<b>16:45</b>	AAC24-295	<i>Noor Haziqah Kamaludin, Universiti Teknologi MARA, Puncak Alam</i> Multiple Principal Component Analysis (M-PCA) of Microfiber Exposure on Lung Impairment among Textiles Workers in Selangor

## VOC and Secondary Precursors

Chair: Dr. Noor Haziqah Kamaluddin, Dr. Nur Azalina Suzianti Feisal

Time	Paper ID	Presenter & Title
15:00	AAC24-42	<i>Abdul Rohim Tualeka, Faculty of Public Health, Universitas Airlangga</i>  Relation Concentration and Risk Characterization of Toluene to Malondialdehyde, Cholesterol and Diabetes in Five Industries in Surabaya
15:15	AAC24-53	<i>Kin Fai Ho, The Chinese University of Hong Kong</i>  Quantification and Identification of VOC Emissions from Common Volatile Chemical Products
15:30	AAC24-77	<i>Sasho Gligorovski, Chinese Academy of Sciences</i>  Enhanced production of oxygenated volatile organic compounds through interfacial chemistry of SO <sub>2</sub> with sea surface microlayer
15:45	AAC24-204	<i>Wu, Hsiang-Ying, National Sun Yat-sen University</i>  Investigation of the characteristics of volatile organic compounds and ozone formation potential in the atmosphere of urban areas
16:00	AAC24-209	<i>Huang Cenyang, Zhejiang Wanli University</i>  VOCs emission characteristics and their health impacts of furniture manufacturing: A case study in central China
16:15	AAC24-288	<i>Tsai-Jung Yen, National Sun Yat-Sen University</i>  Exploring the Causes and Trends of PM <sub>2.5</sub> and O <sub>3</sub> in High Pollution Potential Areas: A Case Study of Pingtung, Linyuan, and Chaozhou
16:30	AAC24-298	<i>Meera Harara, Environment Agency - Abu Dhabi</i>  Initial Results from Regional Photochemical Modelling with CMAQ in the Abu Dhabi Emirate



<b>Filter and Control Technology</b>		
<b>Chair: Assoc. Professor Sheng-Lun Lin, Dr. Nurul Ashraf Razali</b>		
<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-75	<i>Sheng-Lun Lin, National Cheng Kung University</i> Ultralow Net PCDD/F Discharge by Ash-Sludge Reintroduction into a Novel GASMILD Treatment for Hazardous Waste Treatment
<b>10:45</b>	AAC24-99	<i>Thi-Cuc Le, National Yang Ming Chiao Tung University</i> Development of composite filtration systems for controlling secondary particle emission from vacuum street sweepers
<b>11:00</b>	AAC24-102	<i>Ralf Zimmermann, University of Rostock</i> Real-Time Detection of Hazardous Dusts from Narcotics and Explosives using Single-Particle Mass Spectrometry
<b>11:15</b>	AAC24-119	<i>Jun Wang, University of Cincinnati</i> Monitoring of Protection Factor for Aerosols Filtering Respirators Using Optical Particle Sensors
<b>11:30</b>	AAC24-152	<i>Rachmi Layina Chimayati, Chung Yuan Christian University</i> Assessing the Impact of SCR and DPF Technology on VOCs and PAHs Emissions in LDV
<b>11:45</b>	AAC24-287	<i>Yu Song, Donghua University</i> Realizing high-fidelity dust loading simulation of nonwoven filter media with advanced particle technology
<b>12:00</b>	AAC24-375	<i>Asad Abbas, IIT Delhi</i> Magnetically Tuned Graphene Oxide Nanocomposites for advanced Filtration Technology
<b>12:15</b>	AAC24-297	<i>Cindy Patricia Yosika, Universitas Indonesia</i> Effectiveness Filtering of PM2.5 With HEPA Filter and N95 Mask Filter on Fan in Motor Vehicle Testing

**Climate Change, Air Modeling, Meteorology/Bioaerosol-II**  
**Chair: Professor Charles Lo, Dr. Siti Khairunnisa Binti Yusof**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-294	<i>Charles Lo, University of Minnesota</i> Carbon Capture's Role in Net Zero Emissions
<b>10:45</b>	AAC24-264	<i>Piyush Kumar Ojha, Jawaharlal Nehru University</i> Evaluation of ERA5 datasets on atmospheric convection with Radiosonde observation over east coast of India.
<b>11:00</b>	AAC24-373	<i>Selahattin Incecik, Istanbul Technical University</i> Short term forecasting of ozone levels in rural areas of the Biga Peninsula using a photochemical model
<b>11:15</b>	AAC24-380	<i>Dinesh Kumar Yadav, Banaras Hindu University, Varanasi</i> Salinity Variability in the Indian Ocean and Its Impact on Indian Summer Monsoon Onset.
<b>11:30</b>	AAC24-232	<i>Yu Jinyan, The Hong Kong Polytechnic University</i> Less is more: Contribution of endotoxin to PM2.5 bioactivities far exceeds its negligible mass share
<b>11:45</b>	AAC24-247	<i>Siti Khairunnisa Binti Yusof, Universiti Malaysia Pahang Al-Sultan Abdullah</i> Concentration and Transport Mechanism of Fungal Aerosol in Indoor Daycare Centers
<b>12:00</b>	AAC24-286	<i>Jiahui Ma, School of Energy and Power Engineering, Beihang University</i> Insights into the impacts of haze and sandstorms on bacterial community structure and pathogenicity
<b>12:15</b>	AAC24-293	<i>Charles Lo, University of Minnesota</i> Aerosol Geoengineering for Mitigation of Global Warming

**Low cost Sensor and Sensor Network/Emission Inventory**  
**Chair: Dr. Wan Nurdiyana Wan Mansor, Fahimah Hashim**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-222	<i>Jui-Hsin Hsu, National Central University</i> Synergy of satellite, air quality station and low-cost sensor to study PM2.5 and O3 variations during the 2024 KPEX / 7-SEAS campaign
<b>10:45</b>	AAC24-371	<i>Vaishali Jain, Indian Institute of Technology, Kanpur, India</i> Fine-Gridded PM2.5 Prediction with Low-Cost Sensor Network and Machine Learning Techniques
<b>11:00</b>	AAC24-403	<i>Wan Nurdiyana Wan Mansor, Universiti Malaysia Terengganu</i> Engine Performance and Combustion of Biodiesel Produced from Local Used Frying Oil Using Potassium Hydroxide (Koh) As A Catalyst in A Single Cylinder Diesel Engine
<b>11:15</b>	AAC24-388	<i>Henrik Hof, Palas GmbH</i> Study of Aerosol size distribution - comparison of vulcanic ashes and Sahara dust and its spatial variety on La Palma island
<b>11:30</b>	AAC24-169	<i>Po-Yen Chien, National Sun Yat-Sen University</i> Study on Emission Characteristics of Static Emissions from Large Vessels
<b>11:45</b>	AAC24-171	<i>Jason Blake Cohen, China University of Mining and Technology</i> Emissions of BC Estimated using Multiple Remotely Sensed and Surface Observations in Tandem
<b>12:00</b>	AAC24-282	<i>Poong-Mo Park, INHA University</i> Integrating Filterable and Condensable Particulate Matter in Measurement and Analysis
<b>12:15</b>	AAC24-331	<i>I-Hsuan, Wu, National Sun Yat-sen University</i> Emission Characteristics of Fuels with Different Sulfur Contents

**Indoor Air-III/Local Biomass Burning**  
**Chair: Dr. Norfazrin Mohd Hanif, Dr. Noor Fatihah Mohamad Afandi**

Time	Paper ID	Presenter & Title
10:30	AAC24-250	<i>Retno Adriyani, Faculty of Public Health Universitas Airlangga</i> Indoor Air Quality Assessment of Daycare Centers in Surabaya, Indonesia
10:45	AAC24-253	<i>Chengxi Yao, Sungkyunkwan University</i> Numerical Study on Optimization of Hazardous Gas Distribution in Cleanroom during Preventive Maintenance of Semiconductor Process Equipment
11:00	AAC24-345	<i>Xin Duan, Universiti Malaya</i> The Impact of Indoor Plants on Classroom Air Quality and Student Health
11:15	AAC24-387	<i>Yu-Ting Chang, National Pingtung University of Science and Technology</i> The effects of PM2.5 and high-glucose exposure on the toxicity in A549 lung cancer cells
11:30	AAC24-106	<i>Balint Alfoldy, Aerosol Magee Scientific</i> Optical Properties of Wood Combustion Emitted Particles Determined by the New, 9 <sup>th</sup> Aethalometer
11:45	AAC24-317	<i>Wangyanyan, Saitama University</i> Effects of PAHs by Biomass Combustion on Soil
12:00	AAC24-378	<i>Shangrong Wu, Saitama University</i> Combustion emission of waste biomass pellet from spend coffee grounds

**Aerosol-climate Meteorology/Remote Sensing/ Airborne  
Microplastics-II**

**Chair: Professor Gs Ts Dr. Arnis Asmat, Azmir Md Dom**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>10:30</b>	AAC24-203	<i>Steven Soon-Kai Kong, National Central University</i> Modeling East Asian dust storm episode associated with a typhoon in Western Pacific.
<b>10:45</b>	AAC24-377	<i>Richa Singh, Banaras Hindu University</i> The Himalayan Aerosol-Climate Interplay and its Effects on Weather Patterns and Ice Mass Balance
<b>11:00</b>	AAC24-384	<i>Said Munir, National Center for Meteorology, Saudi Arabia</i> The impact of extreme weather events on atmospheric aerosols in KSA – analyzing the anomalies and their driving factors
<b>11:15</b>	AAC24-47	<i>Lei Li, Chinese Academy of Meteorological Sciences, CMA</i> Aerosol component concentration derived by the GRASP algorithm from multi-angular polarimetric satellite observations
<b>11:30</b>	AAC24-305	<i>Laili Fitria, Chung Yuan Christian University</i> Skyline to Skyfall: Mapping Taipei's Urban Sprawl and Multi-Air Pollution Risk Assessment Through Remote Sensing
<b>11:45</b>	AAC24-404	<i>Chia C. Wang, National Sun Yat-sen University</i> Water Plays Multifunctional Roles in the SOA Formation in Ozonolysis of Monoterpenes: Combined VUV Photoelectron Spectroscopy, Mass Spectrometry and DFT Studies
<b>12:00</b>	AAC24-409	<i>Arnis Asmat, Universiti Teknologi MARA</i> The Impact of Urbanisation Factors on Urban Air Quality Using Geographically Weighted Regression (GWR) Analysis
<b>12:15</b>	AAC24-299	<i>Norfazrin Mohd Hanif, Universiti Kebangsaan Malaysia</i> Airborne Microplastic in the Urban Area of Peninsular Malaysia: Abundances and Characteristics

**Aerosol Modeling/Aerosol Physics****Chair: Associate Professor Atsushi Matsuki, Shreya Dubey**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-235	<i>Maryam Rahmani, University of Lille, Inria</i> Advanced Air Quality Forecasting Using Temporal LSTM (TLSTM) Model
<b>15:15</b>	AAC24-318	<i>Hong Wang, China Meteorological Administration (CMA)</i> The application study of the revised IMPROVE atmospheric extinction algorithm in atmospheric chemistry model focusing on low visibility prediction in eastern China
<b>15:30</b>	AAC24-350	<i>Kavita Patnaik, National Atmospheric Research Laboratory</i> A 1-D model to retrieve the vertical profiles of minor atmospheric constituents for cloud microphysical modelling
<b>15:45</b>	AAC24-80	<i>Jicheng Feng, ShanghaiTech University</i> Configured Electric Fields for Programmable 3D Nanoprinting
<b>16:00</b>	AAC24-83	<i>Thaseem Thajudeen, Indian Institute of Technology Goa</i> Machine Learning based Retrieval and Prediction of Geometric Features of Aerosol Aggregates
<b>16:15</b>	AAC24-231	<i>Tomoya Tamadate, Kanazawa University</i> Modeling of the Vapor Uptake on Ion under Various Electric Fields
<b>16:30</b>	AAC24-341	<i>Alok Sagar Gautam, Hemvati Nandan Bahuguna Garhwal University</i> Key Characteristics of New Particle Formation Events at a High-Altitude Site in Tehri Garhwal, Uttarakhand, in the Western Himalayan Region, India
<b>16:45</b>	AAC24-339	<i>Hyungjin Cho, Gwangju Institute of Science and Technology</i> Characteristics of new particle formation and cloud condensation nuclei in the Arctic

### Aerosol Exposure and Health Effects-III/Urban Aerosol and Air Quality-III Chair: Professor How-Ran Chao, Amrendra Kumar Singh

Time	Paper ID	Presenter & Title
15:00	AAC24-411	<i>Nur Faseeha Suhaimi, Universiti Putra Malaysia</i> DNA Methylation as an Epigenetic Signature of Children's Exposure to Traffic-Related Air Pollution in Klang Valley, Malaysia
15:15	AAC24-302	<i>How-Ran Chao, National Pingtung University of Science and Technology</i> The Negative Impact of High PM2.5 and Glucose Levels on Wound Healing and Antioxidant Genes in Lung Epithelial Cells and the Potential Effects After Intervention of the Chinese Herbal Medicine, Guilu Erxian Jiao
15:30	AAC24-313	<i>Norhidayah Binti Abdull, University Malaysia Pahang Al-Sultan Abdullah</i> Prediction of PM2.5 Emission and Health Impact from Cooking Activity
15:45	AAC24-320	<i>Ki-Joon Jeon, INHA University</i> Airborne Nanoplastics and Their Potential Toxicity
16:00	AAC24-334	<i>Amrendra Kumar Singh, Netaji Subhas University of Technology, India</i> Assessing Air Pollution and Health Risks: A Five-Year Study of Particulate Matter Deposition in Delhi
16:15	AAC24-338	<i>Ernie Syazween Junaidi, Universiti Putra Malaysia</i> Application of Multiple-Path Particle Dosimetry (MPPD) Model in Aged-Specify Schoolchildren Airways Exposed to Ambient Particulate Matters in Malaysia
16:30	AAC24-389	<i>Henrik Hof, Palas GmbH</i> Product Manager Environment

**Aerosol Chemistry-III/Nanoparticles and Nanotechnology-II**  
**Chair: Professor Weijun Li, Glynn Dexter Andreas**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-284	<i>Weijun Li, Zhejiang University</i> Microscopic analysis of phase separation in fine ambient aerosol particles
<b>15:15</b>	AAC24-289	<i>Kan Huang, Fudan University</i> Compositions, sources and formation processes of atmospheric aerosols in the marine atmosphere of coastal China
<b>15:30</b>	AAC24-300	<i>Fang Cao, Nanjing University of Information Science and Technology</i> The Impact of Forest Fires in the Eastern European Plain on Light-Absorbing Carbonaceous Aerosols in Moscow's Atmosphere
<b>15:45</b>	AAC24-333	<i>Barlin Das, Dibrugarh University</i> Spatial heterogeneity in aerosols chemical composition and implications to physico-optical properties over North East India
<b>16:00</b>	AAC24-356	<i>Shumin Liang, The Hong Kong University of Science &amp; Technology</i> Multidimensional Insights into the Formation of C2-3 Organosulfates in Ambient PM2.5
<b>16:15</b>	AAC24-271	<i>Dwi Rasy Mujiyanti, Chung Yuan Christian University</i> Enhancement of The Plasma-Catalytic for CO2 Conversion over Monometallic Catalyst Deposited on Zeolite
<b>16:30</b>	AAC24-283	<i>Weijun Li, Zhejiang University</i> Microphysical Properties of Atmospheric Black Carbon particles: Measurements, Modeling, and Impacts



**Aerosol Instrumentation-II/Nanoparticles and Nanotechnology-III**  
**Chair: Professor JingKun Jiang, Po-Kai Chang**

<b>Time</b>	<b>Paper ID</b>	<b>Presenter &amp; Title</b>
<b>15:00</b>	AAC24-312	<i>Arantzazu Eiguren-Fernandez, Aerosol Dynamics Inc</i> Field Evaluation of An Affordable Community Condensation Particle Counter
<b>15:15</b>	AAC24-335	<i>Jose Carlos Caroca Vasquez, AVL List GmbH</i> Ultrafine Particle Measurement Campaign in the City of Graz using an AVL CPC
<b>15:30</b>	AAC24-336	<i>Muhammad Aiman bin Mohd Nor, Shibaura Institute of Technology</i> The Effect of Fluid Compressibility on the Flow Behavior in a Small Cyclone Separator
<b>15:45</b>	AAC24-357	<i>Jonathan Symonds, Cambustion</i> A particle counter for both nano and multi-micron sized particles
<b>16:00</b>	AAC24-365	<i>Anssi Arffman, Dekati Ltd.</i> Characterization and field testing of a new oxidation flow reactor (DOFR)
<b>16:15</b>	AAC24-355	<i>Yusuf Jameel, Universiti Putra Malaysia</i> Novel Approach to Sustainable Material Fabrication: Graphene-filled Green Epoxy Nanocomposites
<b>16:30</b>	AAC24-394	<i>JingKun Jiang, Tsinghua University</i> A convertible condensation particle counter using alcohol or water as the working fluid

### Air Pollution Sources and Mitigation Technologies

Chair: Assoc. Professor Sheng-Lun Lin, Ajit Kumar

Time	Paper ID	Presenter & Title
15:00	AAC24-27	<i>Panuganti China Sattilingam Devara, Amity University Haryana (AUH), Gurugram, India</i>  Influence of Biomass Burning and Fossil Fuel Emissions on Black Carbon Aerosol in Rural Haryana, India
15:15	AAC24-314	<i>Sheng-Hsiu Huang, National Taiwan University</i>  Development of a Smart Respirator
15:30	AAC24-315	<i>Chih-Wei Lin, National Taiwan University</i>  Study on Performance Test Methods of Air Cleaners
15:45	AAC24-316	<i>Chih-Wei Lin, National Taiwan University</i>  Experimental Study on Optimal CADR Filter Thickness of Air Purifiers