

PL-01 09:00-10:00**Plenary Lecture-01** *Lecture Hall*

Chair: Kuei-Hsien Chen (Academia Sinica, Taiwan)

We Do Not Have Much Time Left

– Yuan-Tseh Lee (Academia Sinica, Taiwan)

CS 10:15-12:35**Commemorative Session** *Lecture Hall*

Chair: Chuen-Jinn Tsai (National Yang Ming Chiao Tung University, Taiwan)

CS-01 10:25-10:55**Reflection on 50 Years of Friendship and Collaboration on Aerosol Science and Technology**– David Y.H. Pui* (University of Minnesota, United States)**CS-02 10:55-11:10****Friendship Creates Intercontinental Cooperation in Aerosol Research**– Heinz Fissan* (Universität Duisburg-Essen, Germany)**CS-03 11:10-11:25****From Aerosols to Friendship**– Wladyslaw (Vladek) W. Szymanski* (University of Vienna, Austria)**CS-04 11:30-11:45****Emissions and Secondary Formation of Air Pollutants from Modern Heavy-Duty Vehicles in Real-World Traffic**– Liyuan Zhou (City University of Hong Kong, Hong Kong); Christian M. Salvador, Michael Priestley, Mattias Hallquist, (University of Gothenburg, Sweden); Qianyun Liu, Chak K. Chan* (City University of Hong Kong, Hong Kong); Åsa M. Hallquist (IVL Swedish Environmental Research Institute, Sweden)**CS-05 11:45-12:00****Improving the Sensors for Airborne SARS-CoV-2 Detection**– Guangyu Qiu, Fuze Jiang, Bei Liu, Yang Yue, Yile Tao, Yile Tao, Jiukai Tang, Martin Spillmann, Jing Wang* (ETH Zurich, Switzerland)**CS-06 12:00-12:15****Measuring Size Distributions of Atmospheric Aerosols Using Natural Air Ions**– Yiran Li (Tsinghua University, China); Xiaotong Chen, Jingkun Jiang* (Tsinghua University, China)**CS-07 12:15-12:30****Design of a Medium Scale Ambient PM Cleaning System**– Sheng-Chieh Chen* (Virginia Commonwealth University, United States); Qingfeng Cao, Thomas H. Kuehn, Charles Lo (University of Minnesota, United States); Yelia S. Mayya, Manoranjan Sahu (Indian Institute of Technology Bombay, India); David Y.H. Pui (University of Minnesota, United States)**PL-02 13:30-14:30****Plenary Lecture-02** *Lecture Hall*

Chair: Huey-Jen Su (National Cheng Kung University, Taiwan)

The Roles of Aerosol Inhalation in SARS-CoV-2 Transmission– Yuguo Li* (The University of Hong Kong, Hong Kong)**OS-01 15:00-16:30****Urban Aerosol and Air Quality-I** *Lecture Hall*

Chair: Otto Klemm (Universität Münster, Germany)/ Hing-Cho Cheung (Academia Sinica, Taiwan)

OS01-1 15:00-15:15**Black Carbon Emission Factors from Diesel Sources and Wood Burning – From Roadside to Urban Background Sites**– Asta Gregorič*, Balint ALFÖLDY, Matic Ivančič, Irena Ježek (Aerosol d.o.o., Slovenia); Katarina Pogačnik (Envirodual d.o.o., Slovenia); Luka Herman, Borut Jereb (Faculty of Logistics, University of Maribor, Slovenia); Gregor Pretnar, Katja Miklič, Martin Rigler (PNZ d.o.o., Slovenia)**OS01-2 15:15-15:30****Sources Apportionment of Atmospheric Visibility Degradation in Central Taiwan**– Jun-Fa Yeh, Ta-Chih Hsiao*, Yu-Ting Chen, Pei-Te Chiueh (National Taiwan University, Taiwan); Li-Hao Young (China Medical University, Taiwan); Wen-Yinn Lin (National Taipei University of Technology, Taiwan); Shui-Jen Chen (National Pingtung University of Science and Technology, Taiwan)

OS-01 15:00-16:30**Urban Aerosol and Air Quality-I** *Lecture Hall*

Chair: Otto Klemm (Universität Münster, Germany)/
Hing-Cho Cheung (Academia Sinica, Taiwan)

OS01-3 15:30-15:45**Detection Ship Plumes from the Distance with Novel Ionization Methods in Single-Particle Mass Spectrometry**

– Johannes Passig* (University of Rostock and Helmholtz Centre Munich, Germany); Julian Schade (University of Rostock and Bundeswehr University, Germany); Robert Irsig (Photonion GmbH, Germany); Lei Li, Xue Li, Zhen Zhou (Jinan University and Hexin Instrument Co., Ltd, China); Thomas Adam (Bundeswehr University, Germany); [Ralf Zimmermann](#) (University of Rostock and Helmholtz Centre Munich, Germany)

OS01-4 15:45-16:00**Source Identification and Quantification of Air Pollution Episodes Using Positive Matrix Factorization with On-Line Monitoring Measurements**

– [Chun-Sheng Huang](#), Ho-Tang Liao, Chang-Fu Wu* (National Taiwan University, Taiwan); Ming-Lone Liou (Taipei City Government, Taiwan); Shao-Hao Lu (LE & DER Instrument Co. Ltd., Taiwan)

OS01-5 16:00-16:15**Application of an ISCST3 Air Quality Model for Predicting Air Pollutant Emissions and Chemical Components from a Night Market in Kaohsiung City, Taiwan**

– [Kassian T.T. Amesho](#), Yuan-Chung Lin*, Feng-Chih Chou, Pei-Cheng Cheng, Kang-Shin Chen, Zhou-Wei Gong, Ken-Lin Chang (National Sun Yat-Sen University, Taiwan); Tsu-Nai Wang, Pei-Shih Chen, Chien-Hung Lee (Kaohsiung Medical University, Taiwan)

OS01-6 16:15-16:30**European Aerosol Phenomenology-8: Harmonised Source Apportionment of Organic Aerosol Using 22 Year-Long ACSM/AMS Datasets**

– [Gang Chen](#), André S.H. Prévôt* (Paul Scherrer Institute, Switzerland); María Cruz Minguillón (Institute of Environmental Assessment and Water Research, Spain); whole COLOSSAL Team (COST Action CA16109 Chemical On-Line cOmpoSition and Source Apportionment of fine aerosol, Belgium)

OS-02 15:00-16:30**Aerosol and Air Pollution in Southeast Asia Countries-I** *Room 301*

Biomass burning pollution over Southeast Asia: aerosol properties and environmental impacts

Chair: Neng-Huei Lin (National Central University, Taiwan) / Shantanu Kumar Pani (National Central University, Taiwan)

OS02-1 15:00-15:30**[Keynote Speaker]****Transboundary Smoke Haze in Southeast Asia: Environmental and Health Impacts**

– [Rajasekhar Balasubramanian*](#) (National University of Singapore, Singapore)

OS02-2 15:30-15:45**PM2.5 Species Contribution over East Coast Peninsular Malaysia for 2019 Case Study**

– Nur [Nazmi Liyana Mohd Napi](#), Maggie Chel Gee Ooi*, Mohd Latif Talib, Juneng Liew, Mohd Shahrul Mohd Nadzir (Universiti Kebangsaan Malaysia, Malaysia)

OS02-3 15:45-16:00**PM2.5-Bound Polycyclic Aromatic Hydrocarbons (PAHs) in Southern Thailand: Characteristics, Risk Assessment and Sources**

– [Racha Dejchanchaiwong*](#), Perapong Tekasakul, Preyapon Promsiri (Prince of Songkla University, Thailand)

OS02-4 16:00-16:15**Temporal Variation of PM2.5 Concentration over Various Terrain in Chiang Mai, Thailand During Peak Biomass Burning Season in 2019 Using Low Cost Sensors and Its Relation with AOD**

– [Amit Bhujel](#), Sheng-Hsiang Wang*, Chiao-Ling Pan, Kun-Hsu Wu (National Central University, Taiwan); David M. Giles (NASA Goddard Space Flight Center, United States); Wan Wiriya (Chiang Mai University, Thailand)

OS02-5 16:15-16:30**Trans-Boundary Air Pollution in a Southeast Asian Megacity: Synoptic Meteorological Mechanisms and Impacts on Surface Air Quality**

– [Ly Sy Phu Nguyen*](#) (VNUHCM- University of Science, Vietnam); Jackson Hian-Wui Chang, Stephen M. Griffith, Steven Soon-Kai Kong, Hsiang-Yu Huang, Guey-Rong Sheu, Neng-Huei Lin (National Central University, Taiwan); To Thi Hien (VNUHCM- University of Science, Vietnam); Hoai Nam Le (South Center for Environmental Monitoring, Vietnam)

OS-03 15:00-16:30**Indoor Air** *Room 302*

Chair: Lenggoro Wuled (Tokyo University of Agriculture and Technology, Japan) / Ming-Yeng Lin (National Cheng Kung University, Taiwan)

OS03-1 15:00-15:15**The Benefit of Air Cleaners in Reducing the COVID-19 Infection Risk**

— [Christof Asbach*](#), Heinz Fissan, Stefan Schumacher (Institute of Energy and Environmental Technology, Germany)

OS03-2 15:15-15:30**The Difference Analysis of Indoor Air Quality Prediction Model in the Field**

— [Yi-Chen Tsai](#), Chih-Hui Cheng, Chao-heng Tseng* (Taipei University of Technology, Taiwan)

OS03-3 15:30-15:45**Unveiling the Effect of Human Occupancy on Indoor Air Quality through Secondary Reactions of OH and O₃ with the Primary Emitted Pollutants**

— [Sasho Gligorovski*](#), Huifan Deng, Jinli Xu, Gwendal Loisel, Hongwei Pang, Jiafa Zeng, Xue Li (Chinese Academy of Science, China)

OS03-4 15:45-16:00**Metagenomics Analysis of Fungi in Dust and the Effect on Allergy Diseases among School Children**

— [Khairul Nizam Mohd Isa](#), Juliana Jalaludin*, Saliza Mohd Elias (Universiti Putra Malaysia, Malaysia); Jamal Hisham Hashim (Universiti Selangor, Malaysia); Zailina Hashim (Universiti Putra Malaysia, Malaysia)

OS03-5 16:00-16:15**Using Bioassay to Investigate Dioxin-Like and Inflammatory Responses in Indoor Dust and Associated Health Effects**

— [Szu-Han Lien](#), How-Ran Chao*, En-Tzu Lin (National Pingtung University of Science and Technology, Taiwan)

OS03-6 16:15-16:30**The Potential Impact of Particulate Matter Concentrations by Using Detergents**

— [Ting-Chi Hsu*](#), Chin-Yu Hsu (Ming Chi University of Technology, Taiwan)

OS-04 15:00-16:30**Filter and Control** *Room 403***Technology-I***Incinerator*

Chair: Moo-Been Chang (National Central University, Taiwan) / Kai-Hsien Chi (National Yang-Ming Chiao Tung University, Taiwan)

OS04-1 15:00-15:15**An Investigation of Carbonaceous Materials in PM₁ and PM_{2.5} in Taichung, Taiwan**

— Shun-Jung Liao, [Hsiang-Chao Liu](#), Yung-Ya Chang (Environment Protection Bureau of Taichung Government, Taiwan); Wan-Li Cheng, Chueh-Ling Pai* (Green Science Technology Co. Ltd., Taiwan)

OS04-2 15:15-15:30**Formation and Control of PCDD/Fs from Waste Incineration: Application of Catalytic Filtration**

— [Moo-Been Chang*](#), Minh Man Trinh (National Central University, Taiwan)

OS04-3 15:30-15:45**Study on PCDD/F Removal Performance by Mn-based Catalyst Depositing on Filter Fibers**

— [Shengyong Lu*](#), Minghui Tang, Yaqi Peng (Zhejiang University, China)

OS04-4 15:45-16:00**Air Pollution Caused by Organic Pollutants in Vietnam: A Comprehensive and Updated Review**

— [Tu Binh Minh*](#), Hoang Quoc Anh (Vietnam National University, Vietnam); Shin Takahashi (Ehime University, Japan); Tri Manh Tran, Ha Manh Nguyen, Giang M.H. Dang, Hue Thi Chu (Vietnam National University, Vietnam)

OS04-5 16:00-16:15**Characteristics of Particle-Bound Pahs in Ambient Air and Road Dust Collected from Ho Chi Minh City, Vietnam**

— [Ngo Thu Thuan](#) (International University, VNU-HCM, Vietnam); Nguyen Duy Dat* (Ho Chi Minh City University of Technology and Education, Vietnam); Kai-Hsien Chi (National Yang Ming Chiao Tung University, Taiwan); Moo-Been Chang (National Central University, Taiwan)

OS-04 **15:00-16:30****Filter and Control Technology-I***Room 403**Incinerator*

Chair: Moo-Been Chang (National Central University, Taiwan) / Kai-Hsien Chi (National Yang-Ming Chiao Tung University, Taiwan)

OS04-6 **16:15-16:30****Investigating of Particulate PCDD/Fs Size Distributions in the Gas Stream within a Hazardous Waste Treatment System**

— Wei Tang (Beijing Institute of Technology, China); Yen-Yi Lee (Cheng Shiu University, Taiwan); Jhong-Lin Wu (National Cheng Kung University, Taiwan); Sheng-Lun Lin* (Beijing Institute of Technology, China)

OS-05 **16:30-18:00****Aerosol Chemistry-I***Lecture Hall*

Chair: Yong Pyo Kim (Ewha Womans University, Korea) / Yu-Chieh Ting (National Taiwan University, Taiwan)

OS05-1 **16:30-16:45****Photochemical Reactions of Glyoxal during Particulate Nitrate Photolysis**

— Ruifeng Zhang (City University of Hong Kong, China); Masao Gen (Kanazawa University, Japan); Tzung-May Fu (Southern University of Science and Technology, China); Zhancong Liang (City University of Hong Kong, China); Yongjie Li (University of Macau, China); Chak K. Chan* (City University of Hong Kong, China)

OS05-2 **16:45-17:00****Characteristics and Seasonal Variations of Secondary Aerosols during Visibility Degradation**

— Chun-Chen Lu, Ta-Chih Hsiao*, Yu-Ting Chen, Pei-Te Chiueh (National Taiwan University, Taiwan); Li-Hao Young (China Medical University, Taiwan); Wen-Yinn Lin (National Taipei University of Technology, Taiwan); Shui-Jen Chen (National Pingtung University of Science and Technology, Taiwan)

OS05-3 **17:00-17:15****Aqueous Secondary Organic Aerosol from Cloud Processing of Residential Wood Burning Emission**

— Tiantian Wang, Houssni Lamkaddam, Kun Li, David Bell, Jun Zhang, Tianqu Cui, Imad El Haddad, Slowik Jay Gates, Andre Prevot* (Paul Scherrer Institute, Switzerland)

OS05-4 **17:15-17:30****Light Absorbing Properties of Water/Methanol-Soluble Organic Carbon in PM_{2.5} at an Urban Site in Northern Taiwan**

— Yi-Ru Ko, Chuan-Hsiu Huang (National Taiwan University, Taiwan); Yu-Hsiang Cheng (Ming Chi University of Technology, Taiwan); Chuo-Hsi Huang, Yu-Ming Chu, Yu-Chieh Ting* (National Taiwan University, Taiwan)

OS05-5 **17:30-17:45****Ionic Strength Effects on Multiphase Chemistry: Clouds/Fog versus Aerosol Particles**

— Sasho Gligorovski*, Yiqun Wang, Huifan Deng, Pan Li, Jinli Xu, Hongwei Pang (Chinese Academy of Science, China)

OS05-6 **17:45-18:00****Scavenging and Deposition Fluxes of PCDD/Fs and PCBs by Cloud/Fog Water at Mt. Bamboo, Taiwan during Northeastern Monsoon**

— Latonia Nur Adyanis (Chung Yuan Christian University, Taiwan); Neng-Huei Lin (National Central University, Taiwan); Lin-Chi Wang* (Chung Yuan Christian University, Taiwan)

OS-06 **16:30-18:00****Aerosol and Air Pollution in Southeast Asia Countries-II***Room 301*

Chair: Noor Zaitun Yahaya (Universiti Malaysia Terengganu, Malaysia) / Ying-I Tsai (Chia Nan University of Pharmacy and Science, Taiwan)

OS06-1 **16:30-16:45****Ambient Nano-Aerosol in Thailand and Impacts on Human Health**

— Perapong Tekasakul*, Racha Dejchanchaiwong, Thammasin Ingviya (Prince of Songkla University, Thailand); Thunyapat Thongyen (Kasetsart University, Thailand); Panwadee Suwattiga (King Mongkut's University of Technology North Bangkok, Thailand); Thaneeya Chetiyakornkul (Chiang Mai University, Thailand); Masami Furuuchi, Mitsuhiko Hata (Kanazawa University, Japan); Nobchonnee Nim (Prince of Songkla University, Thailand); Chaiyoth Sresawasd (Prince of Songkla University, Thailand)

OS-06 16:30-18:00**Aerosol and Air Pollution in Southeast Asia Countries-II**

Room 301

Chair: Noor Zaitun Yahaya (Universiti Malaysia Terengganu, Malaysia) / Ying-I Tsai (Chia Nan University of Pharmacy and Science, Taiwan)

OS06-2 16:45-17:00**Applying Model Simulation and Photochemical Indicators to Evaluate Ozone Sensitivity in Kao Ping Air Quality Basin**

— Hsing-Yun Tsai, Yi-Ching Lin (National Sun Yat-sen University, Taiwan); Chia-Hsiang Lai (National Formosa University, Taiwan); Yen-Ping Peng* (National Sun Yat-sen University, Taiwan)

OS06-3 17:00-17:15**Characterization and Principle Sources of PM2.5 in Jakarta**

— Puji Lestari*, Seny Damayanti, Khafid Maulana (Bandung Institute of Technology, Indonesia); Yusuke Fujii (Osaka Perfecture University, Japan)

OS06-4 17:15-17:30**Meteorological Influence on Temporal PM10 and Physicochemical Analysis on PM2.5 in The Klang Valley, Malaysia**

— Hanashriah Hassan (Malaysian Meteorological Department, Malaysia); Md Firoz Khan (University of Malaya, Malaysia); Mohd Talib Latif* (Universiti Kebangsaan Malaysia, Malaysia)

OS06-5 17:30-17:45**Prediction of PM2.5 Concentrations in Ho Chi Minh City, Vietnam Using Univariate Time Series Models**

— Tuyet Nam Thi Nguyen (Saigon University, Vietnam); Vu Tuan Hai (University of Information Technology, Vietnam); Pham The Bao* (Saigon University, Vietnam)

OS06-6 17:45-18:00**Evaluation of Air Pollution Control Strategies during Air Quality Deterioration in Southern Taiwan**

— Hsin-Chih Lai, Li-Wei Lai, Bo-Han Pan (Chang Jung Christian University, Taiwan); Min-Chuan Hsiao* (Chang Jung Christian University, Taiwan)

OS-07 16:30-18:00**Aerosol Exposure and Health Effects-I**

Room 302

Chair: Manabu Shimada (Hiroshima University, Japan) / Tsun-Jen Cheng (National Taiwan University, Taiwan)

OS07-1 16:30-16:45**Seasonal Pattern of Influenza and Associated Environmental Risk Factors in Chiang Mai, Thailand from 2011-2020**

— Chalita Jainonthee (Chiang Mai University, Thailand); Colin Chenwangkun* (Southeast Bangkok College, Thailand)

OS07-2 16:45-17:00**Temperature-Medicated PM2.5 Associated with Emphysema Severity in COPD**

— Huan-Minh Tran (Taipei Medical University, Taiwan & Da Nang University of Medical Technology and Pharmacy, Vietnam); Yueh-Hsun Lu (Taipei Medical University, Taiwan); Chih-Da Wu (National Cheng Kung University & National Health Research Institutes, Taiwan); Kang-Yun Lee, Hsiao-Chi Chuang* (Taipei Medical University, Taiwan)

OS07-3 17:00-17:15**Association between Air Pollutants and Students' Current Airway Infection in an Urban and Industrial Area**

— Mohammad Adam Adman* (Universiti Malaysia Pahang, Malaysia); Jamal Hisham Hashim (Universiti Selangor, Malaysia); Mohd Rizal Abdul Manaf (Universiti Kebangsaan Malaysia Medical Centre, Malaysia); Dan Norback (Uppsala University, Sweden)

OS07-4 17:15-17:30**The Impact of Atmospheric Process on Oxidative Potential of Submicron Particles in Taichung Urban Area**

— Li-Ti Chou (National Taiwan University, Taiwan); Kai-Hsien Chi, Kai-Ting Huang, Wei-Hsu Kao (National Yang Ming Chiao Tung University, Taiwan); Ta-Chih Hsiao* (National Taiwan University, Taiwan)

OS-07 16:30-18:00**Aerosol Exposure and Health Effects-I** *Room 302*

Chair: Manabu Shimada (Hiroshima University, Japan) / Tsun-Jen Cheng (National Taiwan University, Taiwan)

OS07-5 17:30-17:45**Examining Diurnal Variability in Oxidative Potential of Respirable Particulate Matter at an Urban Background Location**

— [Shreya Dubey*](#), Avik Kumar SAM (Indian Institute of Technology Bombay, India); Sumit Kumar Dey (JSS Academy of Higher Education and Research, Mysuru, India); Ujjawal Arora, Suman Yadav (Indian Institute of Technology Bombay, India); Rajesh Kumar Thimmulappa (JSS Academy of Higher Education and Research, Mysuru, India); Harish Chandra Phuleria (Indian Institute of Technology Bombay, India)

OS07-6 17:45-18:00**Atmospheric Ageing and Aerosol Toxicity: Differential Toxicological Impacts in Air-Liquid Interface Exposed Lung Cell Models of Secondary Organic Aerosols from Biogenic and Anthropogenic Precursors**

— Offer, S., Hartner, E., Di Bucchianico, S., Panzke, J., Binder, S., Huber, A. (Helmholtz Zentrum München, CMA, Germany); Hu, Y. (Weizmann Institut, Israel); Hohaus, T. (Forschungszentrum Jülich, Germany); Kalberer, M. (University of Basel, Switzerland); Hu, Y. (Helmholtz Zentrum München, ICB, Germany); [Zimmermann, R*](#) (Helmholtz Zentrum München, CMA, Germany) & Further AeroHEALTH Co-Workers

OS-08 16:30-18:00**Bioaerosol-I** *Room 403*

Chair: Maosheng Yao (Peking University, China) / Pei-Shih Chen (Kaohsiung Medical University, Taiwan)

OS08-1 16:30-16:45**Inactivation of Escherichia Coli in Droplets at Different Ambient Relative Humidity: Effects of Phase Transition, Solute and Cell Concentrations**

— [Zhancong Liang](#), Wing Lam Chan, Xiaomeng Tian, Patrick. K. H. Lee*, Chak K. Chan* (City University of Hong Kong, Hong Kong)

OS08-2 16:45-17:00**Ambient avian Influenza Virus in the Stopover Sites of Migratory Birds**

— [Jia-Lin Zhang](#), Zi-Yu Chen, Pei-Shih Chen* (Kaohsiung Medical University, Taiwan)

OS08-3 17:00-17:15**Mathematical Model for Bioaerosol Disinfection in Photocatalytic Disinfection**

— [Chinmoy Mandal*](#), Vartika Nishad, Manoranjan Sahu (Indian Institute of Technology, India)

OS08-4 17:17-17:30**Aqueous-Phase Photochemistry of Bioaerosols under Cloud-Like Conditions**

— [Yushuo Liu](#), Theodora Nah*, Patrick Lee (City University of Hong Kong, Hong Kong)

PL-03 **09:00-10:00****Plenary Lecture-03** *Lecture Hall*

Chair: Chak K. Chan (City University of Hong Kong, Hong Kong)

Aerosol Science and Technology: Enabling Applications in Energy, Environment and Medicine

— Pratim Biswas (University of Miami, United States)

OS-09 **10:30-12:00****Aerosol Chemistry-II** *Lecture Hall*

Chair: Jianzhen Yu (The Hong Kong University of Science and Technology, Hong Kong) / Stephen M. Griffith (National Central University, Taiwan)

OS09-1 **10:30-11:00****[Keynote Speaker]**

Heterogeneous Oxidation of Isoprene Epoxydiol (IEPOX)-Derived Secondary Organic Aerosol: Products, Kinetics, and Role of Oligomers

— N. Cazimir Armstrong, Jin Yan, Yuzhi Chen, Yue Zhang, Tianqu Cui, Nicolas A. Buchenau (University of North Carolina, United States); Ziying Lei (University of Michigan, United States); Zhenfa Zhang (University of North Carolina, United States); Andrew T. Lambe (Aerodyne Research Inc., United States); Man Nin Chan (The Chinese University of Hong Kong, Hong Kong); Barbara J. Turpin, Avram Gold (University of North Carolina, United States); Andrew P. Ault (University of Michigan, United States); Jason D. Surratt* (University of North Carolina & University of North Carolina, United States)

OS09-2 **11:00-11:15**

Spatial-Temporal Characterization of PM_{2.5} Nitrate (NO₃-) and Sulfate (SO₄²⁻) Using Artificial Neural Network

— Yi-Tsung Yang, Guan-Yu Lin*, Wei-Jen, Hsiao (Tunghai University, Taiwan)

OS09-3 **11:15-11:30**

Seasonal and Spatial Contrasts of Organosulfates Derived from Biogenic Volatile Organic Compounds at Four Sites in China

— Yuchen Wang (Hong Kong University of Science and Technology, Hong Kong); Yingge Ma (Shanghai Academy of Environmental Sciences, China); Binyu Kuang (Hong Kong University of Science and Technology, Hong Kong); Yongmei Liang (China University of Petroleum, China); Cheng Huang (Shanghai Academy of Environmental Sciences, China); Jian Zhen Yu* (Hong Kong University of Science and Technology, Hong Kong)

OS09-4 **11:30-11:45**

Sampling Methods and Characteristics of Atmospheric Microplastic in Taiwan

— Wei Hsu Kao (National Yang Ming Chiao Tung University, Taiwan), Yu Cheng Chen (National Health Research Institutes, Taiwan), Kai Hsien Chi* (National Yang Ming Chiao Tung University, Taiwan)

OS09-5 **11:45-12:00**

The Influence of Acidity on Brown Carbon Formation from the Aqueous-Phase Nitrate-Mediated Photooxidation of Phenolic Compounds

— Junwei Yang, Wing Chi Au, Haymann Law, Chun Hei Leung, Chun Ho Lam, Theodora Nah* (City University of Hong Kong, Hong Kong)

OS-10 **10:30-12:00****Bioaerosol-II** *Room 301*

Chair: Chang-Yu Wu (University of Florida, United States) / Pei-Chih Wu (Chang Jung Christian University, Taiwan)

OS10-1 **10:30-10:45**

Emission of Bioaerosols during Manure Spreading Operations in Controlled Environment

— Mahsa Baghdadi (Université Laval, Canada); Patrick Brassard, Stéphane Godbout (Institut de Recherche et de Développement en Agroenvironnement, Canada); Valérie Létourneau, Nathalie Turgeon, Florent Rossi, Marc Veillette, (Université Laval, Canada); Vincent Desbiens (Institut de Recherche et de Développement en Agroenvironnement, Canada); Marie-Lou Gaucher (Université de Montréal, Canada); Caroline Duchaine* (Université Laval, Canada)

OS-10 10:30-12:00**Bioaerosol-II** *Room 301*

Chair: Chang-Yu Wu (University of Florida, United States) / Pei-Chih Wu (Chang Jung Christian University, Taiwan)

OS10-2 10:45-11:00**Insights into the Profile of Human Expiratory Microbiota and Their Associations with Indoor Microbiotas**

– Yin Zhang, [Fangxia Shen](#)* (Beihang University, China)

OS10-3 11:00-11:15**Applications of Molecular Biology Techniques and Real-Time Instrumentation to Probe the Indoor and Outdoor Bioaerosols**

– Patrick K. H. Lee*, You Zhou, Marcus H. Y. Leung, Xinzhao Tong, Justin Y. Y. Lee, Yanhao Miao, Yanhao Miao, Ricky L. T. Chau (City University of Hong Kong, Hong Kong)

OS10-4 11:15-11:30**Modeling Aerosol Route Transmissibility of Corona Virus Variants**

– Y S Mayya* (IIT Bombay, India); S Anand (Bhabha Atomic Research Centre, India); Jayant Krishan, B Sreekanth (Bhabha Atomic Research Centre, India)

OS10-5 11:30-11:45**Development of a Small Droplet Remover for Infectious Disease Control**

– Masafumi Akiyoshi*, Satoru Watano (Osaka Prefecture University, Japan); Tsuyoshi Ochiai (Kanagawa Institute of Industrial Science and Technology, Japan)

OS-11 10:30-12:00**Urban Aerosol and Air Quality-II** *Room 302*

Source Apportionment of Urban Atmospheric Aerosols-I

Chair: L.-W. Antony Chen (University of Nevada, United States) / Yee-Lin Wu (National Cheng Kung University, Taiwan)

OS11-1 10:30-10:45**Light-Absorbing Properties and Source Apportionment of Atmospheric Organic Aerosol in Two Southern and Northern Cities of China**

– Yue Lin, Yuemei Han*, Guohui Li, Qiyuan Wang, Xin Zhang, Zhiyu Li, Lijuan Li (Key Laboratory of Aerosol Chemistry and Physics & Chinese Academy of Sciences, China); André S. H. Prévôt (Paul Scherrer Institute, Switzerland); Junji Cao (Chinese Academy of Sciences, China)

OS11-2 10:45-11:00**Contribution of Non-Exhaust Vehicle Emissions to Near-Road PM_{2.5} and PM₁₀: A Chemical Mass Balance Study**

– L.-W. Antony Chen* (University of Nevada, United States); Xiaoliang Wang (Desert Research Institute, United States); Brenda Lopez, Heejung Jung (University of California, United States)

OS11-3 11:00-11:15**Evolution and Chemical Characteristics of Organic Aerosols during Wintertime PM_{2.5} Episodes in Shanghai, China: Insights Gained from Online Measurements of Organic Molecular Markers**

– Shuhui Zhu (Hong Kong University of Science and Technology, Hong Kong), Min Zhou, Dandan Huang, Liping Qiao (Shanghai Academy of Environmental Sciences, China); Qiongqiong Wang, Shan Wang (Hong Kong University of Science and Technology, Hong Kong); Shengao Jing, Qian Wang, Yaqin Gao, Shengrong Lou, Cheng Huang, (Shanghai Academy of Environmental Sciences, China); Jian Zhen Yu* (Hong Kong University of Science and Technology, Hong Kong)

OS11-4 11:15-11:30**Characteristics of Particulate Matters during Locally- Accumulated, Regionally-Transported, and Dust-Affected Pollution Episodes**

– Lulu Zeng (University of Macau, Macao); Dandan Huang (Shanghai Academy of Environmental Sciences, China); Yong Jie Li* (University of Macau, Macao)

OS-12 10:30-12:00**Aerosol Instrumentation-I** *Room 403*

Chair: Tawatchai Charinpanitkul (Chulalongkorn University, Thailand) / Liang-Yi Lin (National Chiao Tung University, Taiwan)

OS12-1 10:30-10:45**Analyses of Ambient Aerosol Size Distribution Using Optical Particle Counter**

— Phanatchakorn Mala, [Yoshio Otani](#) (JSPS Bangkok Office, Thailand); Perapong Tekasakul (Prince of Songkla University, Thailand); Toshiyuki Fujimoto (Muroran Institute of Technology, Japan); Masato Mizuno (Particlesplus, Japan); Tawatchai Charinpanitkul* (Chulalongkorn University, Thailand)

OS12-2 10:45-11:00**Correcting for Biases in Filter Based Aerosol Light Absorption Measurements at the ARM Southern Great Plains Site**

— [Joshin Kumar](#), Theo Paik, Nishit J. Shetty (Washington University in St. Louis, United States); Patrick Sheridan (NOAA Global Monitoring Laboratory, United States); Allison Aiken, Manvendra Dubey (Los Alamos National Laboratory, United States); Rajan K. Chakrabarty* (Washington University in St. Louis, United States)

OS12-3 11:00-11:15**Development of a PM Electrostatic Monitor (PEM)**

— [Wen-Cheng Gong](#) (Nation Chiao Tung University, Taiwan & Université Paris-Saclay, France); Yang Ray Li, Chun-Hsuan Lin (Nation Chiao Tung University, Taiwan); Nicolas Jidenko, Jean-Pascal Borra (Université Paris-Saclay, France); Chuen-Jinn Tsai* (Nation Chiao Tung University, Taiwan)

OS12-4 11:15-11:30**Performance Evaluations and Assessment for the Reliability of an Air Quality Data Collections: CPC Case Study**

— [Noor Zaitun Yahaya](#)* (Universiti Malaysia Teerengganu, Malaysia); Miles R. Tight (University of Birmingham, United Kingdom); James Edward Tate (University of Leeds, United Kingdom)

OS12-5 11:30-11:45**Low-Cost Simultaneous Low Volume Air Sampler Controlled with Sonic Venturi**

— [Zikrilla Alimov](#), Hikaru Kusakari, Tomoaki Okuda* (Keio University, Japan)

OS12-6 11:45-12:00**Dust Monitor EDM264 in the Field (City Science, Research, etc.)**

— Volker Ziegler, Markus Pesch, Friedhelm Schneider (GRIMM Aerosol Technik Ainring GmbH & CO.KG, Germany)

OS-13 15:00-16:30**Aerosol Exposure and Health Effects-II** *Lecture Hall*

Petrochemical-Related Air Pollution and Health Effect Studies

Chair: Pau-Chung Chen / Yu-Cheng Chen (National Health Research Institutes, Taiwan)

OS13-1 15:00-15:15**Spatiotemporal Variation and Source Apportionment of Vocs Surrounding the Petrochemical Complexes in Yunlin and Kaohsiung**

— Yu-Chuan Yen, Tzu-Yu Lin (National Health Research Institutes, Taiwan); Chin-Yu Hsu (Ming Chi University of Technology, Taiwan); Chih-Da Wu (National Cheng Kung University, Taiwan); [Yu-Cheng Chen](#)* (National Health Research Institutes, Taiwan); Peng-Jy Tsai (National Cheng Kung University, Taiwan)

OS13-2 15:15-15:30**Using Land-Use Regression and XGboost in Estimating Heavy Metal Concentration Variations in Petrochemical Industrial Parks at High Spatiotemporal Resolution**

— [Chih-Da Wu](#)*, Pei-Yi Wong, Yu-Ting Zeng (National Cheng Kung University, Taiwan); Yu-Cheng Chen, Pau-Chung Chen (National Institute of Environmental Health Sciences & National Health Research Institutes, Taiwan)

OS13-3 15:30-15:45**Identifying Volatile Organic Compounds of High Concern through an Integrated Study Using Long-Term Data**

— [Yi-Jun Lin](#) (National Yang Ming Chiao Tung University & National Health Research Institutes, Taiwan); Chin-Yu Hsu (Ming Chi University of Technology, Taiwan, Taiwan); Pei-Yu Wu, Yu-Cheng Chen (National Health Research Institutes, Taiwan); Pau-Chung Chen, Yue-Leon Guo (National Health Research Institutes & National Taiwan University, Taiwan); Pin-Pin Lin* (National Yang Ming Chiao Tung University & National Health Research Institutes, Taiwan)

OS-13 **15:00-16:30****Aerosol Exposure and Health Effects-II** *Lecture Hall**Petrochemical-Related Air Pollution and Health Effect Studies*

Chair: Pau-Chung Chen / Yu-Cheng Chen (National Health Research Institutes, Taiwan)

OS13-4 **15:45-16:00****Development of a New Filter Materials with Effective VOCs Adsorption and Particulate Filtration**— [Chia-Tien Chang](#), Che-Yung Kuan, Ching-Yun Chen, Zhi-Yu Chen, I-Hsuan Yang (National Health Research Institutes, Taiwan); Chih-Chieh Chen, Chih-Wei Lin, Yue-Leon Guo (National Taiwan University, Taiwan); Chi-Hsien Chen (National Taiwan University Hospital, Taiwan); Feng-Huei Lin* (National Health Research Institutes, Taiwan)**OS13-5** **16:00-16:15****PM2.5 Exposure and Risk of Lung Adenocarcinoma in Women of Taiwan: A Case-control Study with Density Sampling**— [Szu-Chun Yang](#), Fang-Yu Lin, Tzu-I Wu, Chih-Da Wu, Jung-Der Wang* (National Cheng Kung University, Taiwan)**OS13-6** **16:15-16:30****The Association between Petrochemical Exposure and Maternal-Fetal Health**— [Shih-Chun Pan](#) (National Health Research Institute, Taiwan); Ching-Chun Huang, Wei-Shan Chin (National Taiwan University & NTU Hospital, Taiwan); Yu-Cheng Chen (National Health Research Institute, Taiwan); Chih-Da Wu (National Cheng Kung University, Taiwan); Chin-Yu Hsu, Pau-Chung Chen (Ming Chi University of Technology, Taiwan); Pin-Pin Lin (National Health Research Institute, Taiwan); Yue-Leon Guo* (National Taiwan University & NTU Hospital, Taiwan)**OS-14** **15:00-16:30****Aerosol and Air Pollution in Southeast Asia Countries-III** *Room 301*

Chair: Eric N. Liberda (Ryerson University, Canada) / Wen-Yinn Lin (National Taipei University of Technology, Taiwan)

OS14-1 **15:00-15:15****Enhanced Estimation of Impacts of Biomass Burning Smoke: Intermediates of Levoglucosan Photodegradation**— [Xiaorui Wu](#), Liming Yang, Laura-Hélène Rivellini, Liya E. Yu* (National University of Singapore, Singapore)**OS14-2** **15:15-15:30****Carbonaceous and Trace Element Bound to Airborne Ultrafine Particulate Matter (PM0.1) in Bangkok, Thailand and Characterization of Their Source**— [Worradorn Phairuang*](#) (Chiang Mai University, Thailand); Muanfun Inerb (Prince of Songkla University, Thailand); Panwadee Suwattiga (King Mongkut's University of Technology, Thailand); Masami Furuuchi, Mitsuhiko Hata (Kanazawa University, Japan)**OS14-3** **15:30-15:45****Carbon Composition of Particulate Matter from Residential and Roadside Area in Bangkok**— [Thanaphum Manjantrarat](#) (Chulalongkorn University, Thailand); Wachiraya Rattanawongsa, Rattaporn Saenmuangchin, Wiyong Kangwansupamonkon (National Science and Technology Development Agency, Thailand); Thunyapat Thongyen (Kasetsart University, Thailand); Prapat Pongkiatkul (King Mongkut's University of Technology Thonburi, Thailand); Sirima Panyametheekul* (Chulalongkorn University, Thailand)**OS14-4** **15:45-16:00****Radiocarbon-Based Source Apportionment Reveals Diurnal Cycles of Carbonaceous Aerosols in Delhi, India**— [Jan Strähl*](#) (University of Bern, Switzerland); Yufang Hao, Peeyush Khare (Paul Scherrer Institute, Switzerland); Deepika Bhattu (Indian Institute of Technology Jodhpur, India); Gaëlle Uzu (Université Grenoble Alpes, France); Neeraj Rastogi (Physical Research Laboratory, India); Dilip Ganguly (Indian Institute of Technology Delhi, India); Sachchida Nand Tripathi (Indian Institute of Technology Kanpur, India); Jean-Luc Jaffrezo (Université Grenoble Alpes, France); Kaspar R. Daellenbach, André S.H. Prévôt (Paul Scherrer Institute, Switzerland); Sönke Szidat (University of Bern, Switzerland)**OS14-5** **16:00-16:15****Carbonaceous and Ionic Components in Ultrafine Particles and Fine Particles Measured in Different Microenvironments in an Urban Area, Vietnam**— [Truong Thi Huyen](#), Sekiguchi Kazuhiko* (Saitama University, Japan)

OS-14 15:00-16:30**Aerosol and Air Pollution in Southeast Asia Countries-III** *Room 301*

Chair: Eric N. Liberda (Ryerson University, Canada) / Wen-Yinn Lin (National Taipei University of Technology, Taiwan)

OS14-6 16:15-16:30**Explosive Secondary Aerosol Formation Driven by Photochemistry and Aqueous Chemistry and Their Optical Property**

— Chin-Yu Chan, Ta-Chih Hsiao*, Yu-Ting Chen, Pei-Te Chiueh (National Taiwan University, Taiwan); Wen-Yinn Lin (National Taipei University of Technology, Taiwan); Li-Hao Young (China Medical University, Taiwan); Shui-Jen Chen (National Pingtung University of Science and Technology, Taiwan)

OS-15 15:00-16:30**Aerosol Modeling** *Room 302*

Chair: Andy Chan (University of Nottingham Malaysia, Malaysia) / Ming-Tung Chuang (Academia Sinica, Taiwan)

OS15-1 15:00-15:15**Simulating Nitrate Formation Mechanism during PM2.5 Events in Taiwan**

— Ming-Tung Chuang*, Charles C.-K. Chou, Chuan-Yao Lin, Wei-Che Lin, Kuan-yu Lin (Academia Sinica, Taiwan)

OS15-2 15:15-15:30**Development of a PM2.5 Dispersion Model for Chulalongkorn University Area**

— Thammaluck Ratanavalachai, Katathikan Laungdumrongsak (Chulalongkorn University, Thailand); Win Trivitayanurak* (Chulalongkorn University, Thailand)

OS15-3 15:30-15:45**Simulation of PM2.5 Concentrations using WRF-Chem Model with FINN Fire Emission in Southern Thailand during the 2019 Haze Event**

— Laddawan Novnoo, Thanathip Limna, Perapong Tekasakul, Racha Dejchanchaiwong*, Perapong Tekasakul (Prince of Songkla University, Thailand)

OS15-4 15:45-16:00**Using Machine Learning Models to Explore the Relationship between Particulate Air Pollutants and Perceived Visibility**

— Tzu-Chi Lin*, Ta-Chih Hsiao, Pei-Te Chiueh (National Taiwan University, Taiwan)

OS15-4 15:45-16:00**Using Machine Learning Models to Explore the Relationship between Particulate Air Pollutants and Perceived Visibility**

— Tzu-Chi Lin*, Ta-Chih Hsiao, Pei-Te Chiueh (National Taiwan University, Taiwan)

OS15-5 16:00-16:15**Using Deep Learning to Estimate PM2.5 Concentration by Images**

— Cheng-Ru Lin, Chin-Yu Hsu* (Ming Chi University of Technology, Taiwan)

OS15-6 16:15-16:30**Comparison of Multiple Air Pollution Modelling Methods in Estimating Diurnal PM2.5 Concentration Variations**

— Pei-Yi Wong, Huey-Jen Su (National Cheng Kung University, Taiwan); Yue-Leon Guo, Pau-Chung Chen (National Taiwan University College of Public Health, Taiwan), Yu-Cheng Chen (National Health Research Institutes, Taiwan), Shih-Chun Candice Lung (Academia Sinica, Taiwan), Chih-Da Wu (National Cheng Kung University, Taiwan)*

OS-16 15:00-16:30**Urban Aerosol and Air Quality-III** *Room 403*

Source Apportionment of Urban Atmospheric Aerosols-II

Chair: Junji Cao / Yuemei Han (Chinese Academy of Sciences, China)

OS16-1 15:00-15:15**New Insights into Online Molecular Characterization of Organic Aerosol in China Using Extractive Electrospray Ionization and Ultrahigh Resolution Mass Spectrometry**

— Lu Qi*, Yuen Ka Cheung, Chuan Ping Lee, Dongyu Wang (Paul Scherrer Institute, Switzerland); Yuemei Han, Qiyuan Wang, Zifa Wang, Yele Sun (Chinese Academy of Sciences, China); Imad El Haddad (Paul Scherrer Institute, Switzerland); Junji Cao (Chinese Academy of Sciences, China), Andre S.H. Prevot, Jay G. Slowik (Paul Scherrer Institute, Switzerland)

OS16-2 15:15-15:30**Real-Time Approaches for the Source Apportionment of Fine Organic and Inorganic Atmospheric Aerosols in Urban Areas in China**

— Manousos Manousakas*, Lu Qi (Paul Scherrer Institute, Switzerland); Qiyuan Wang (Chinese Academy of Sciences, China); Tainqu Cui (Paul Scherrer Institute, Switzerland); Jie Tian (Chinese Academy of Sciences, China); Yang Chen (Chongqing Institute of Green and Intelligent Technology, China); Yuemei Han (Chinese Academy of Sciences, China); Markus Furger, Jay G. Slowik, Kaspar Daellenbach (Paul Scherrer Institute, Switzerland); Junji Cao (Chinese Academy of Sciences, China); Andre Prevot (Paul Scherrer Institute, Switzerland)

OS-16 15:00-16:30**Urban Aerosol and Air Quality-III** *Room 403*

Source Apportionment of Urban Atmospheric Aerosols-II
Chair: Junji Cao / Yuemei Han (Chinese Academy of Sciences, China)

OS16-3 15:30-15:45**Molecular Composition, Sources, and Oxidative Potential of Water-Soluble Organic Aerosol in Two Megacities in Western China**

– [Tianqu Cui](#), Manousos Manousakas (Paul Scherrer Institute, Switzerland); Qiyuan Wang (Institute of Earth Environment, China); Gaëlle Uzu (Institut des Géosciences de l'Environnement, France); Lu Qi, Jay Slowik, Markus Furger (Paul Scherrer Institute, Switzerland); Jean-Luc Jaffrezo (Institut des Géosciences de l'Environnement, France); Yuemei Han, Junji Cao (Chinese Academy of Sciences, China); Kaspar Daellenbach, André Prevot* (Paul Scherrer Institute, Switzerland)

OS16-4 15:45-16:00**Emission Updates by Combination of Source-Oriented and Receptor Source Apportionment Models**

– [Xiaole Zhang](#), Xiaoxiao Feng (ETH Zürich, Switzerland); Qiyuan Wang, Jie Tian, Zhiyu Li, Yong Zhang, Junji Cao (Chinese Academy of Sciences, China); Jing Wang* (ETH Zürich, Switzerland)

OS16-5 16:00-16:15**High-Time Resolution Source Apportionment of Winter PM_{2.5} in a Heavily Polluted Urban Area of China**

– Yong Zhang, [Qiyuan Wang*](#), Jie Tian, Weikang Ran, Junji Cao (Chinese Academy of Sciences, China)

OS16-6 16:15-16:30**The Importance of Biomass Burning in Light Extinction and Direct Radiative Effect of Urban Aerosol during the COVID-19 Lockdown in Xi'an, China**

– [Jie Tian](#), Qiyuan Wang*, Huikun Liu, (Chinese Academy of Sciences, China); Yongyong Ma (Meteorological Institute of Shaanxi Province, China); Suixin Liu, Yong Zhang, Weikang Ran, Yongming Han, Junji Cao (Chinese Academy of Sciences, China)

OS-17 16:30-18:00**VOC and Secondary Precursors** *Lecture Hall*

Chair: Theodora Nah (City University of Hong Kong, Hong Kong) / Chung-Shin Yuan (National Sun Yat-sen University, Taiwan)

OS17-1 16:30-16:45**Effect of Aqueous Phase pH on the Nitrate-Mediated Photooxidation of cis-Pinonic Acid and Small Organic Acids**

– [Yuting Lyu](#), Jany Ting Chun Chow, Theodora Nah* (City University of Hong Kong, Hong Kong)

OS17-2 16:45-17:00**Quantifying the Effect of NO₃ aging on Toluene Photooxidation Products**

– [Qi Yuan](#) (The Hong Kong Polytechnic University, Hong Kong); Kin Fai Ho (The Chinese University of Hong Kong, Hong Kong); Shun-cheng Lee* (The Hong Kong Polytechnic University, Hong Kong)

OS17-3 17:00-17:15**Hydrogen Production and VOC Analysis from Red Macroalgae via Plasma Pyrolysis**

– Raynard Christianson Sanito, [Wen-Hsien Yang](#), Sheng-Jie You, Ya-Fen Wang* (Chung Yuan Christian University, Taiwan)

OS17-4 17:15-17:30**Tracking of Key Petrochemical HAPs by Enhanced PAMS Functionality**

– [Chi-Pei Li*](#), Yen-Ting Lu, Tzu-Hao Kuo (Sinotech Engineering services, Ltd, Taiwan); Cheng-Hsing Wang (Executive Yuan (retired), Taiwan); Chung-Laing Tai, Jen-Shuo Hsieh (Executive Yuan, Taiwan)

OS17-5 17:30-17:45**Spatiotemporal Characterization and Source Apportionment of VOCs at the Industrial Port of Southern Taiwan**

– [Thi-Hieu Le](#), Chitsan Lin* (National Kaohsiung University of Science and Technology, Taiwan); Chung-Shin Yuan (National Sun Yat-Sen University, Taiwan)

OS-18 16:30-18:00**Aerosol and Air Pollution in Southeast Asia Countries-IV** *Room 301*

Chair: Tawatchai Charinpanitkul (Chulalongkorn University, Thailand) / Tsrong-Yi Wen (National Taiwan University of Science and Technology, Taiwan)

OS18-1 16:30-16:45**The Association of COVID-19 Related Factors and PM2.5: Cluster Analysis and Generalized Additive Mixed Model**

– Wong Ming Wong* (Krirk University, Thailand); Hao-Fan Mo (Baise University, China); Shian-Yang Tzeng (Guangdong University of Finance and Economics, China)

OS18-2 16:45-17:00**Impact of Level-3 Alert on Chemical Compositions in PM2.5 during the Outbreak of COVID-19 Epidemic in Taipei, Taiwan**

– Chuan-Hsiung Huang, Yi-Ru Ko, (National Taiwan University, Taiwan), Yu-Hsiang Cheng (Ming Chi University of Technology, Taiwan), Yu-Xuan Zou, Yu-Chieh Ting* (National Taiwan University, Taiwan)

S18-3 17:00-17:15**Characteristics of Airborne Ultrafine Particles (PM0.1) during the COVID-19 Outbreaks in Jambi City, Indonesia**

– Muhammad Amin, Rizki Andre Saputra, Mitsuhiro Hata, Furuuchi Masami* (Kanazawa University, Japan)

OS18-4 17:15-17:30**The Assessment of Source Emission at Idle Speed from RV Discovery**

– Wan Nurdiyana Wan Mansor*, Mohammad Nor Khasbi Jarkoni, Samsuri Abdullah, Sheikh Alif Ali (Universiti Malaysia Terengganu, Malaysia); How Ran Chao (National Pingtung University of Science and Technology, Taiwan) Anuar Abu Bakar (Universiti Malaysia Terengganu, Malaysia)

OS18-5 17:30-17:45**Annual Variations of PM2.5 in Ho Chi Minh City, Vietnam Including the COVID-19 Outbreak Period**

– Ngoc Tran*, Yusuke Fujii (Osaka Prefecture University, Japan); TO Thi Hien (Vietnam National University, Vietnam); Hiroshi OKOCHI (Waseda University, Japan); Norimichi Takenaka (Osaka Prefecture University, Japan)

OS-19 16:30-18:00**Emission Inventory-I** *Room 302*

Chair: Zoran Ristovski (Queensland University of Technology, Australia) / Lin-Chi Wang (Chung Yuan Christian University, Taiwan)

OS19-1 16:30-16:45**Engine Emission Characteristics of Plastic Fuel and Its Blends with Diesel-On- A Single Cylinder Diesel Engine**

– Priyanka Arora*, Alireza Taghipour (Queensland University of Technology, Australia); Doug Stuart (Suncoast renewables, Australia); Puneet Verma, Thomas Rainey, Richard Brown, Zoran Ristovski (Queensland University of Technology, Australia)

OS19-2 16:45-17:00**Emissions of Polycyclic Aromatic Hydrocarbons Emitted from a Portable Two-stroke Gasoline Engine**

– Jen-Hsiung Tsai* (National Pingtung University of Science and Technology, Taiwan)

OS19-3 17:00-17:15**The Influence of Particle Oxidation Catalyst (POC) on PM and PCDD/Fs Emitted from Construction Equipment**

– Aulia Nur Mustaqiman, Chen-Yu Lin, Lin Chi Wang* (Chung Yuan Christian University, Taiwan)

OS19-4 17:15-17:30**Characteristics of Aerosol Emissions from Field Burning of Crop Residue in Western India**

– Taveen Singh Kapoor*, Anuarg Gupta, Navinya Chimurkar, Chandra Venkataraman, Harish C. Phuleria (Indian Institute of Technology Bombay, India)

OS19-5 17:30-17:45**Emission Factors of Fine and Ultrafine Particles-Bound Polycyclic Aromatic Hydrocarbons from Peat Swamp Forest Fires**

– Nobchonnee Nim, Perapong Tekasakul*, Racha Dejchanchaiwong (Prince of Songkla University, Thailand)

OS-20**16:30-18:00****Aerosol Chemistry-III***Room 403*

Chair: Jianmin Chen (Fudan University, China) /
Li-Hao Young (China Medical University, Taiwan)

OS20-1**16:30-16:45****Why Nitrate Becomes the Major Species in PM_{2.5} Episodes in Taiwan?**

— Ming-Tung Chuang* (Academia Sinica, Taiwan); Chung-Te Lee (National Central University, Taiwan); Charles C.-K. Chou, Kuan-yu Lin, Wei-Che Lin (Academia Sinica, Taiwan)

OS20-2**16:45-17:00****Effects of Temperature and Relative Humidity on the Partitioning of Atmospheric Oxidized Mercury at a High-Altitude Mountain Background Site in Taiwan**

— Ly Sy Phu Nguyen* (VNUHCM-University of Science, Vietnam); Guey-Rong Sheu (National Central University, Taiwan); Shuenn-Chin Chang (Environmental Protection Administration, Taiwan); Neng-Huei Lin (National Central University, Taiwan)

OS20-3**17:00-17:15****Source Apportionment of Atmospheric Visibility Using Hourly Chemical Composition of PM_{2.5} in Urban Taichung of Taiwan**

— Kuan-Lin Lai, Hsin-Ju Hsieh, Yen-Chin Li, Li-Hao Young*, Ta-Chih Hsiao, Wen-Yinn Lin (China Medical University, Taiwan)

OS20-4**17:15-17:30****Chemical Transformation of α -Pinene Derived Organosulfate via Heterogeneous OH Oxidation: Implications for Sources and Environmental Fates of Atmospheric Organosulfates**

— Rongshuang Xu, Sze In Madeleine Ng, (The Chinese University of Hong Kong, Hong Kong); Wing Sze Chow, Yee Ka Wong, Yuchen Wang (The Hong Kong University of Science and Technology, Hong Kong); Donger Lai (The Chinese University of Hong Kong, Hong Kong); Zhongping Yao, Pui-Kin So (The Hong Kong Polytechnic University, Hong Kong); Jian Zhen Yu (The Hong Kong University of Science and Technology, Hong Kong); Man Nin Chan* (The Chinese University of Hong Kong, Hong Kong)

OS20-5**17:30-17:45****Spatiotemporal Variation, Chemical Fingerprints, and Source Apportionment of PM_{2.5} at the Port Area of Kaohsiung Harbor**

— Kwok-Wai Wong, Yu-Lun Tseng, Chung-Shin Yuan* (National Sun Yat-Sen University, Taiwan)



COVID-19**10:30-13:00**

Chair: Huey-Jen Su (National Cheng Kung University, Taiwan)

10:35-11:15

Aerosol Science Informs Transmission of Covid-19 and Other Respiratory Infections

- Moderator: Huey-Jen Su (National Cheng Kung University, Taiwan)
- Speaker: Linsey Marr (Virginia Tech, USA)

11:15-11:55

Assessing Exposures and Health Effects of Particle Radioactivity: An Emerging Research Field

- Moderator: Chih-Da Wu (National Cheng Kung University, Taiwan)
- Speaker: Petros Koutrakis (Harvard University, United States)

12:05-12:45

Experiments and Modelling Suggest Low Risk of COVID-19 Transmission During Outdoor Running Races and Athletic Events

- Moderator: Hsiao-Chi Chuang (Taipei Medical University, Taiwan)
- Speaker: Michael Riediker (The Swiss Centre for Occupational and Environmental Health, Switzerland)

12:45-13:25

Airborne Transmission of Respiratory Viruses and Necessity of Paradigm Shift to Mitigate COVID-19

- Moderator: Kin-Fai Ho (The Chinese University of Hong Kong, Hong Kong)
- Speaker: Chia-Chen Wang (National Sun Yat-sen University, Taiwan)

13:25-13:30

Panel Discussion & Concluding Remark

Sustainability/Climate Change

15:00-18:00

Chair: Ching-Hua Lo (National Taiwan University, Taiwan)

15:10-15:50

Simulation of Aerosol-Induced Climate Change Due to Emission Change by Composition Using a Coupled Atmosphere-Ocean Model

- Moderator: Shih-Chun Candice Lung (Academia Sinica, Taiwan)
- Speaker: Toshihiko Takemura (Kyushu University, Japan)

16:00-16:40

Aerosol Effects on Weather and Climate through Interaction with Clouds

- Moderator: Nobuyuki Takegawa (Tokyo Metropolitan University, Japan)
- Speaker: Jen-Ping Chen (National Taiwan University, Taiwan)

16:50-17:30

Measuring Atmospheric Black Carbon, Its Optical Properties and Mixing State

- Moderator: Yu-Chieh Ting (National Taiwan University, Taiwan)
- Speaker: James Allan (University of Manchester, United Kingdom)

17:30-18:00

Panel Discussion & Concluding Remark

PL-04 09:00-10:00**Plenary Lecture-04** *Lecture Hall*

Chair: Wen-Jhy Lee (National Cheng Kung University, Taiwan)

Face Masks and Prevention of Respiratory Viral Infections: An Overview

– Chiu-Sen Wang (National Taiwan University, Taiwan)

OS-21 10:30-12:00**Filter and Control Technology-II** *Lecture Hall*

Chair: Da-Ren Chen / Sheng-Chieh Chen (Virginia Commonwealth University, United States)

OS21-1 10:30-10:45**Study on Ultra Clean Filter Material on Flue Gas for Carbon Capture Process**

– [Jingxian Liu*](#) (Northeastern University, China)

OS21-2 10:45-11:00**Aerosol Migration and Filtration Characteristics of Gaseous Effluents in Sampling System of Nuclear Facilities**

– [Zhen Liu*](#), Shaoqing An, Guangyao Lin, Zhongli Ji (China University of Petroleum, China)

OS21-3 11:00-11:15**Optimization of Electret Filter Media for PM2.5 Removal**

– [De-Qiang Chang](#) (Northeastern University, China); Yu Zhang, Jie Zhang, Sheng-Chieh Chen* (Virginia Commonwealth University, United States)

OS21-4 11:15-11:30**Effect of Flow Oscillation on the Loading Performance of Respirator Filter Media**

– [Peng Wang](#), Sheng-Chieh Chen, Da-Ren Chen* (Virginia Commonwealth University, United States)

OS21-5 11:30-11:45**Self-Supporting Smart Air Filters based on PZT/PVDF Electrospun Nanofiber Composite Membrane**

– Weidong He, Yinghe Guo, Yi-Bo Zhao, Fuze Jiang, Jean Schmitt, Yang Yue (ETH Zurich, Switzerland); Jingxian Liu (Northeastern University, China); Junji Cao (Chinese Academy of Sciences, China); [Jing Wang*](#) (ETH Zurich, Switzerland)

OS21-6 11:45-12:00**Experimental Study on Filter Quality of Dust Cake**

– [Han-Sheng Huang](#), Chih-Wei Lin, Sheng-Hsiu Huang, Chih-Chieh Chen* (National Taiwan University, Taiwan)

OS-22 10:30-12:00**Aerosol and Air Pollution in Southeast Asia Countries-V** *Room 301*

Chair: Panuganti C.S. Devara (Amity University Haryana, India) / How-Ran Chao (National Pingtung University of Science and Technology, Taiwan)

OS22-1 10:30-10:45**Long-Term (1993-2018) Particulate Polycyclic Aromatic Hydrocarbons (Pahs) Concentration Trends in the Atmosphere of Seoul: Changes in Major Sources and Health Effects**

– [Eunlak Choi](#), JiYi Lee, Yong Pyo Kim* (Ewha Womans University, Korea)

OS22-2 10:45-11:00**Degradation of PAHs during Long Range Transport based on Simultaneous Measurements at Tuoji Island, China, and at Fukue Island and Cape Hedo, Japan**

– [Kojiro Shimada](#) (University of the Ryukyus, Japan), Masayuki Nohchi (Waseda University, Japan); Xiaoyang Yang* (Chinese Research Academy of Environmental Sciences, China); Taichi Sugiyama (Kyoto University, Japan); Kaori Miura (Tokyo University of Agriculture and Technology, Japan); Akinori Takami, Kei Sato (National Institute for Environmental Studies, Japan); Xuan Chen (Chinese Research Academy of Environmental Sciences, China); Shungo Kato (Tokyo Metropolitan University, Japan); Yoshizumi Kajii (Kyoto University, Japan); Fan Meng (Chinese Research Academy of Environmental Sciences, China); Shiro Hatakeyama (Asia Center for Air Pollution Research, Japan)

OS22-3 11:00-11:15**Toxicity and Mutagenic Risk Assessment of Atmospheric PM2.5 Bound Polycyclic Aromatic Hydrocarbons during Different Scenarios in Asia Mega Cities**

– [Shih-Yu Pan](#), Jia-En Lin, Ya-Syuan Wu, Yu-Ting Huang, Chien-Kuo Lien (National Yang Ming Chiao Tung University, Taiwan); Ta- Chih Hsiao (National Taiwan University, Taiwan); Sheng-Hsiang Wang (National Central University, Taiwan), Chih-Chung Chang, Ming-Tung Chuang, Mao-Chang Liang (Academia Sinica, Taiwan); Kai-Hsien Chi* (National Yang Ming Chiao Tung University, Taiwan)

OS-22 **10:30-12:00****Aerosol and Air Pollution in Southeast Asia Countries-V** *Room 301*

Chair: Panuganti C.S. Devara (Amity University Haryana, India) / How-Ran Chao (National Pingtung University of Science and Technology, Taiwan)

OS22-4 **11:15-11:30****Urban Air Pollution in Schools and Residences: A Cross-Sectional Study among School Children in the Klang Valley, Malaysia**

— Nur Faseeha Suhaimi, Juliana Jalaludin*, Eliani Ezani (Universiti Putra Malaysia, Malaysia)

OS22-5 **11:30-11:45****Depression of Ammonia Uptake to Sulfuric Acid Aerosols in Siem Reap, Cambodia**

— Kojiro Shimada*, Hiroshi Okochi, Sho Ishikawa, Tomoki Kajikawa, Asaka Hasegawa, Shuhei Murakami, Takonori Nakano, Etsuo Uchida, Takeshi Nakagawa (Waseda University, Japan); Toshiya Matsui (University of Tsukuba, Japan); Mitsumasa Ishizaki (JAPAN-APSARA Safeguarding Angkor, Cambodia); Toyoaki Arai (Transtech Inc, Japan)

OS22-6 **11:45-12:00****Size Distribution of Carbonaceous Components in Medan City, Indonesia**

— Rahmi Mulia Putri, Muhammad Amin (Kanazawa University, Japan); Fumikazu Ikemori (Nagoya City Institute for Environmental Science, Japan); Masashi Wada (Agriculture and Fisheries, Japan); Perapong Tekasakul (Prince of Songkla University, Thailand); Masami Furuuchi, Mitsuhiro Hata* (Kanazawa University, Japan)

OS-23 **10:30-12:00****Bioaerosol-III** *Room 302*

Chair: Patrick K. H. Lee (City University of Hong Kong, Hong Kong) / Jungho Hwang (Yonsei University, Korea)

OS23-1 **10:30-10:45****Culturing Tetracycline Resistant Bacteria from Swine Barn Bioaerosols**

— Joanie Lemieux*, Eve Bérubé, Maurice Boissinot, Caroline Duchaine (Université Laval, Canada)

OS23-2 **10:45-11:00****Intracellular and Extracellular Antibiotic Resistance Genes in Airborne PM2.5 for Respiratory Exposure in Urban Areas**

— Tangtian He*, Ling Jin, Jiawen Xie, (The Hong Kong Polytechnic University, Hong Kong); Siyao Yue (Chinese Academy of Sciences, China); Pingqing Fu (Tianjin University, China); Xiangdong Li (The Hong Kong Polytechnic University, Hong Kong)

OS23-3 **11:00-11:15****Airborne Antibiotic Resistance Genes Emitted from an Urban Wastewater Treatment Plant**

— Jui-Hung Yen, Ta-Chih Hsiao*, Hsin-hsin Tung, Wan-Ru Chen, Kai-Hsien Chi (National Taiwan University, Taiwan)

OS23-4 **11:15-11:30****SARS-CoV-2 Aerosols in Homes of COVID-19 Infected Adults: Presence and Control in a Real-world Scenario**

— Gediminas Mainelis*, Nirmala T. Myers, Robert J. Laumbach, Kathleen G. Black, Pamela Ohman-Strickland, Shahnaz Alimokhtari, Alicia Legard, Adriana de Resende, Leonardo Calderon, Frederic T. Lu, Howard M. Kipen (Rutgers University, United States)

OS23-5 **11:30-11:45****Development of a Standard Fine Particle Matter Index for Performance Comparison of Biomass Cookstoves**

— Aiswarya A Kumar, Manoranjan Sahu* (Indian institute of technology, India)

OS-24 **10:30-12:00****Aerosol Exposure and Health Effects-III** *Room 403*

Chair: Chaolong Qi (National Institute for Occupational Safety and Health, United States) / Perng-Jy Tsai (National Cheng Kung University, Taiwan)

OS24-1 **10:30-10:45****The Effect of Particle Size on XRD intensity: Implication on Crystalline Silica Measurement**

— Bon Ki Ku*, Kabir Rishi, Pramod Kulkarni, Chen Wang (National Institute for Occupational Safety and Health, United States)

OS-24 10:30-12:00**Aerosol Exposure and Health Effects-III** *Room 403*

Chair: Chaolong Qi (National Institute for Occupational Safety and Health, United States) / Perng-Jy Tsai (National Cheng Kung University, Taiwan)

OS24-2 10:45-11:00**Engineering Controls of Silica Exposure during Stone Countertop Fabrication**

– [Chaolong Qi](#)* (National Institute for Occupational Safety and Health, United States)

OS24-3 11:00-11:15**Characterization of Dust Generated from the Grinding of Natural and Engineered Stones**

– [Drew Thompson](#)* (Centers for Disease Control and Prevention, United States)

OS24-4 11:15-11:30**Effects of Air Pollution on Cardiovascular Morbidity: Case study of Megacity Karachi, Pakistan**

– [Haider A. Khwaja](#)* (University at Albany, United States); Daniel Malashock (George Washington University, United States); Zafar Fatmi (The Aga Khan University, Pakistan); David O. Carpenter (University at Albany, United States); Azhar Siddique (Hamad Bin Khalifa University, Qatar)

OS24-5 11:30-11:45**Lithium-Ion Battery Explosion Aerosols**

– [Teresa Barone](#)*, Thomas Dubaniewicz, Aleksandar Bugarski (National Institute for Occupational Safety and Health, United States)

OS24-6 11:45-12:00**The Emission of Particulate Matter and Volatile Organic Compounds in Material-Extrusion and Vat-Photopolymerization 3D Printing Workplace**

– [Yung-Sheng Chuang](#)*, Hsuan-Yu Hsu, Ho-Sheng Wei, Wen-Cheng Gong, Abiyu Kerebo Berekute (National Yang Ming Chiao Tung University, Taiwan); Yu-Wun Chen, Li-Wen Liu, Ya-Yuan Hsu (Ministry of Labor, Taiwan), Chuen-Jinn Tsai, Kuo-Pin Yu (National Yang Ming Chiao Tung University, Taiwan)

PL-05 13:30-14:30**Plenary Lecture-05** *Lecture Hall*

Chair: Christof Asbach (Institute of Energy and Environmental Technology, Germany)

Aerosol Technology for Controlling Airborne Nanoparticles

– Takafumi Seto (Kanazawa University, Japan)

OS-25 15:00-16:30**Emission Inventory-II** *Lecture Hall*
Taipower

Chair: Nicky Y. F. Lam (The University of Hong Kong, Hong Kong) / Fang-Yi Cheng (National Central University, Taiwan)

OS25-1 15:00-15:15**Nitrated Polycyclic Aromatic Hydrocarbons Emissions from Stationary Sources- A Review**

– Yen-Yi Lee, [Justus Kavita Mutuku](#)*, Guo-Ping Chang-Chien (Cheng Shiu University, Taiwan)

OS25-2 15:15-15:30**PAHs Emission Characteristics in Motorcycle Exhaust with Different Emission Control Devices**

– [Hongjie Zhang](#) (Beijing Institute of Technology, China); Lin-Chi Wnag (Chung Yuan Christian University,); Yen-Yi Lee (Cheng Shiu University, Taiwan); Sheng-Lun Lin* (Beijing Institute of Technology, China)

OS25-3 15:30-15:45**A Comprehensive Survey of PM2.5 Emission Characteristics in Thermal Power Plants**

– Huan-Cheng Wen, Cheng-Hung Wu, Yu-Huei Wang, Ting-Po Chen (Taipower Company, Taiwan), Yi-Lin Chen, [Shan-Wen Wu](#)* (Sinotech Engineering Services, LTD., Taiwan)

OS25-4 15:45-16:00**Major and Trace Elements Emission and Mass Balance of the Coal Power Stations in Taiwan**

– Huan-Cheng Wen, Cheng-Hung Wu, Yu-Huei Wang, Ting-Po Chen (Taipower Company, Taiwan); Yi-Lin Chen, Shan-Wen Wu, [Bing-Ci Chen](#)* (Sinotech Engineering services, Ltd, Taiwan)

OS-25 15:00-16:30**Emission Inventory-II** *Lecture Hall*
Taipower

Chair: Nicky Y. F. Lam (The University of Hong Kong, Hong Kong) / Fang-Yi Cheng (National Central University, Taiwan)

OS25-5 16:00-16:15**Impact of an Ultra-Supercritical Coal-Fired Power Plant on PM_{2.5} Concentrations in Taiwan**

— Yi-Cheng Lin (National Central University, Taiwan); Chuen-Jinn Tsai (National Yang-Ming Chiao Tung University, Taiwan); Fang-Yi Cheng* (National Central University, Taiwan)

OS-26 15:00-16:30**Aerosol Instrumentation-II** *Room 301*

Chair: Zhi Ning (The Hong Kong University of Science and Technology, Hong Kong) / Tse-Lun Chen (National Taiwan University, Taiwan)

OS26-1 15:00-15:15**Mass Spectrometry (MS) in Thermal-Optical Carbon Analysis (TOCA)**

— Hendryk Czech (University of Rostock and Helmholtz Zentrum München, Germany); Marco Schmidt (University of Rostock, Germany); Dumitru Duca (Photonion GmbH, Germany); Patrick Martens (University of Rostock, Germany); Sven Ehlert (Photonion GmbH, Germany); Johannes Passig, Ralf Zimmermann* (University of Rostock and Helmholtz Zentrum München, Germany)

OS26-2 15:15-15:30**Hyper-Fast Gas Chromatography Photoionisation Time-of-Flight Mass Spectrometry for Advanced Online VOC-Speciation**

— Hendryk Czech (University of Rostock and Helmholtz Zentrum München, Germany); Christian Gehm, Kevin Schnepel (University of Rostock, Germany); Sven Ehlert, Andreas Walte (Photonion GmbH, Germany); Ralf Zimmermann* (University of Rostock and Helmholtz Zentrum München, Germany)

OS26-3 15:30-15:45**Key Compounds for Biological Effects in Aerosols and Their Detection with Novel Ionization Methods for Single-Particle Mass Spectrometry**

— Johannes Passig* (University of Rostock and Helmholtz Centre Munich, Germany); Julian Schade (University of Rostock and Bundeswehr University, Germany); Robert Irsig, Sven Ehlert (Photonion GmbH, Germany); Ellen Iva Rosewig, Thomas Kröger-Badge (University of Rostock, Germany); Hendryk Czech (University of Rostock and Helmholtz Centre Munich, Germany); Thomas Adam (Bundeswehr University Munich, Germany); Ralf Zimmermann (University of Rostock and Helmholtz Centre Munich, Germany)

OS26-4 15:45-16:00**Monitoring aerosol size distributions from 1 – 55 nm with the GRIMM-AIRMODUS PSMPS**

— Gerhard Steiner* (Grimm Aerosol Technik Airring GmbH & Co KG, Germany); Joonas Vanhanen (Airmodus Ltd., Finland); Lothar Keck (Grimm Aerosol Technik Airring GmbH & Co KG, Germany)

OS26-5 16:00-16:15**Characterisation of the Aerodynamic Aerosol Classifier Transfer Function for Particle Sizes Up to 5 Micrometres Using a Tandem Classifier Set-Up**

— Simon Payne* (Cambustion Ltd, United Kingdom); Tyler Johnson (University of Cambridge, United Kingdom); Jonathan Symonds (Cambustion Ltd, United Kingdom)

OS-27 15:00-16:30**Nanoparticles and Nanotechnology-I** *Room 302*

Chair: Jingkun Jiang (Tsinghua University, China) / Chang-Fu Wu (National Taiwan University, Taiwan)

OS27-1 15:00-15:15**Non-Bouncing Inertial Impactor for Nanoparticle Classification with High Particle Loading Concentration**

— Thi-Cuc Le, Chun-Hsuan Lin, Wen-Cheng Gong, Chuen-Jinn Tsai* (National Yang Ming Chiao Tung University, Taiwan)

OS-27 15:00-16:30**Nanoparticles and Nanotechnology-I**

Room 302

Chair: Jingkun Jiang (Tsinghua University, China) / Chang-Fu Wu (National Taiwan University, Taiwan)

S27-2 15:15-15:30**Investigation of the Functional Water Effect on the Ceria Nanoparticle in Buff CMP Cleaning**

— [Yuna Nam](#), Pengzhan Liu, Eungchul Kim, Kihong Park, Sanghuck Jeon, Sanghwan Choi, SangHyeon Park (Sungkyunkwan university, Korea); Seokjun Hong (Samsung Electronics, Korea); Taesung Kim* (Sungkyunkwan University, Korea)

OS27-3 15:30-15:45**A Two-Dimensional Nanoparticle Characterization Method Combining Differential Mobility Analyzer and Single-Particle Inductively Coupled Plasma-Mass Spectrometry with an Atomizer-Enabled Sample Introduction (ATM-DMA-spICP-MS): Characterization**

— [Yi-Chin Hsieh](#) (National Cheng Kung University, Taiwan); Jing-Wen Wang, Yi-Pin Lin, Ta-Chih Hsiao (National Taiwan University, Taiwan); Wen-Che Hou* (National Cheng Kung University, Taiwan)

OS27-4 15:45-16:00**Factors Affecting of Particles Diffusion Loss in a PM0.1 Real-Time Quartz Crystal Microbalance Detector**

— [Nichakran Vichayaron](#) (Prince of Songkla University, Thailand); Kata Jaruwongrangsri (National Electronics and Computer Technology Center, Thailand); Panich Intra (Rajamangala University of Technology Lanna, Thailand); Perapong Tekasakul, Racha Dejchanchaiwong* (Prince of Songkla University, Thailand)

OS27-5 16:00-16:15**Au Nanoparticle Decorated ZnO-TiO₂ Core-Shell Nanowires : Sustainable Photoanode for Photoelectrochemical Water Splitting**

— Jinse Park, P. R. Deshmukh, [Weon Gyu Shin](#)* (Chungnam National University, Korea)

OS27-6 16:15-16:30**The Removal of Nano-Particles Using Jet Spray Method: Comparison of Experiment and Simulation**

— [Seungwook Lee](#), Jeonggeon Kim, Donggeun Lee* (Pusan National University, Korea)

OS-28 15:00-16:30**Filter and Control Technology-III**

Room 403

Chair: Shun Cheng Lee (The Hong Kong Polytechnic University, Hong Kong) / Hsing-Cheng Hsi (National Taiwan University, Taiwan)

OS28-1 15:00-15:15**Filtration Characteristic of Charged Fiber Filter Blended with Dielectric Material**

— [Yan-Ru Chen](#)*, Yu-Rou Jhong, Wen-Yinn Lin (National Taipei University of Technology, Taiwan)

OS28-2 15:15-15:30**Oxygen Vacancies Engineering Photocatalytic Technology for Air Pollution Control**

— [Xinwei Li](#) (The Hong Kong Polytechnic University, Hong Kong); Yu Huang (Chinese Academy of Sciences, China); Shuncheng Lee* (The Hong Kong Polytechnic University, Hong Kong)

OS28-3 15:30-15:45**Destruction of Hexachlorobenzene over Commercial V2O5-WO3/TiO₂ Catalyst**

— [Thanh Truc Pham](#), Minh Man Trinh, Moo Been Chang* (National Central University, Taiwan)

OS28-4 15:45-16:00**Performance of Various Respiratory Face Mask Against Sub-Micron Particles**

— [Zainul Alim Ali Murtadlo](#), Cho Hee-Joo, Park Hyun-Seol* (Korea Institute of Energy Research, Korea)

OS28-5 16:00-16:15**Development of Brake Pad Wear Particles Collector**

— [Chaeyeon Jo](#), Dongho Shin, Gunhee Lee, Bangwoo Han* (Korea Institute of Machinery & Materials, Korea); Jungo Hwang (Yonsei University, Korea)

OS28-6 16:15-16:30**The Evaluation of Formaldehyde Removal for Various Indoor Air Cleaner Mechanism**

— [Ru-En Hsu](#), Yi-Cheng Lo, Chao-Heng Tseng* (National Taipei University of Technology, Taiwan)

OS-29 **16:30-18:00**

Urban Aerosol and Air Quality-IV *Lecture Hall*

Chair: Liya Yu (National University of Singapore, Singapore) / Chung-Te Lee (National Central University, Taiwan)

OS29-1 **16:30-16:45**

Vertical Characteristics of Potential Sources of PM2.5 in Taipei Metropolis

— Ho-Tang Liao, Yu-Chi Lai, Hsing Jasmine Chao, Chang-Fu Wu* (National Taiwan University, Taiwan)

OS29-2 **16:45-17:00**

Urban Aerosol Particles Studies Using a Mobile Platform: The Roles of Traffic and Meteorology

— Otto Klemm*, David F. Berger, Bettina Breuer, Sophia Buchholz, Laura Ehrnsperger, Bastian Paas, Carsten Schaller (University of Münster, Germany)

OS29-3 **17:00-17:15**

Characterizing the Evolution of Urban Ultrafine Particles with Ambient Measurement Coupled with Chamber Study

— Yu-Ting Chen, Che-An Wu, Yi-Da Li, Ta-Chih Hsiao* (National Taiwan University, Taiwan)

OS29-4 **17:15-17:30**

Size Distribution of Particulate-Bound Polycyclic Aromatic (PAHs) and Characteristics of (PAHs) during Rice Straw Burning Period in Hanoi

— Chau Thuy Pham* (Vietnam National University, Vietnam)

OS29-5 **17:30-17:45**

Continuous Particle Number Concentration Determination of Ambient Air in Measurement Networks

— Markus Pesch, Friedhelm Schneider (Grimm Aerosol Technik Ainring GmbH & Co KG, Germany); Torsten Bayer, Michael Schüler, Katharina Roloff (Environmental Agency Saxony-Anhalt, Germany); Gerhard Steiner* (Grimm Aerosol Technik Ainring GmbH & Co KG, Germany)

OS29-6 **17:45-18:00**

PM2.5 Chemical Composition and Air Quality Improvement in Taiwan Urban Area from 2017 to 2021

— Wei Wang (National Central University, Taiwan); Charles C.-K. Chou (Academia Sinica, Taiwan); Shih-Yu Chang (Chung Shan Medical University, Taiwan); Chung-Te Lee* (National Central University, Taiwan)

OS-30 **16:30-18:00**

Aerosol-Climate Meteorology-I *Room 301*

Study on the Physicochemical Properties of Atmospheric Aerosols in Northeast Asia by International Intensive Measurement Campaign of FRIEND Project

Chair: Ji-Yi Lee (Ewha Womans University, Korea) / Atsushi Matsuki (Kanazawa University, Japan)

OS30-1 **16:30-16:45**

Difference of Chemical Compositions in PM2.5 during the Winter and Summer Period in Northeast Asia

— N. K. Kim, Y. P. Kim (Ewha Womans University, Korea); M. J. Song (Jeonbuk National University, Korea); C. H. Kim (Pusan National University, Korea); K. S. Jang (Korea Basic Science Institute, Korea); K. Y. Lee, H. J. Shin (National Institute of Environmental Research, Korea); J. S. Jung (Korea Research Institute of Standards and Science, Korea); Z. Wu (Peking University, China); A. Matsuki (Kanazawa University, Japan); A. Natsagdorj (National University of Mongolia, Mongolia); J. Y. Lee* (Ewha Womans University, Korea)

OS30-2 **16:45-17:00**

Seasonal and Regional Variation of Formation of Atmospheric PM2.5 in Northeast Asia

— Yoonkyeong Ha, Jiyoung Shin, Jeongbeen Kim (Pusan National University, Korea); Mijung Song (Jeonbuk National University, Korea); Jiye Lee (Ewha Womans University, Korea); Kyoung Soon Jang (Korea Basic Science Institute, Korea); Kwangyul Lee, Seungmyung Park (National Institute of Environmental Research, Korea); Atsushi Matsuki (Kanazawa University, Japan); Amgalan Natsagdorj (National University of Mongolia, Mongolia); Zhijun Wu (Peking University, China); Changhyuk Kim* (Pusan National University, Korea)

OS-30 16:30-18:00**Aerosol-Climate
Meteorology-I** *Room 301*

Study on the Physicochemical Properties of Atmospheric Aerosols in Northeast Asia by International Intensive Measurement Campaign of FRIEND Project

Chair: Ji-Yi Lee (Ewha Womans University, Korea) / Atsushi Matsuki (Kanazawa University, Japan)

OS30-3 17:00-17:15**Characteristics of Atmospheric Aerosols under the Influence of Different Monsoon Settings at the Tip of Noto Peninsula, Japan**

– [Atsushi Matsuki*](#), Seiji Kubota, Nanako Hayashi, Kohei Ono, Nozomu Tsuchiya, Ping Shao, Ning Tang (Kanazawa University, Japan); Shungo Kato (Tokyo Metropolitan University, Japan); Yasuhiro Sadanaga (Osaka Prefecture University, Japan); Yoko Iwamoto (Hiroshima University, Japan); Naoki Kaneyasu (National Institute of Advanced Industrial Science and Technology, Japan)

OS30-4 17:15-17:30**Local Secondary Aerosol Formation Dominates the Particulate Matter Pollution in the Megacities over East Asia**

– [Zhijun Wu*](#), Anting Qiu, Xiangxinyue Meng, Taomou Zong, Ruiqi Man, Jingchuan Chen (Peking University, China), Mijung Song, Changhyuk Kim (Chonbuk National University, Korea); Kwangyul Lee (National Institute of Environmental Research, Korea); JiYi Lee (Ewha Womans University, Korea)

OS30-5 17:30-17:45**Investigation of Regional Contribution of SOA Formation in PM2.5 Collected during Wintertime in Northeast Asia**

– Min Sung Kim, Gyu Young Lee, Mira Choi (Korea Basic Science Institute, Korea); Mijung Song (Jeonbuk National University, Korea); Changhyuk Kim (Pusan National University, Korea); Kwangyul Lee (National Institute of Environmental Research, Korea); Zhijun Wu (Peking University, China); Atsushi Matsuki (Kanazawa University, Japan); Amgalan Natsagdorj (National University of Mongolia, Mongolia); Ji Yi Lee (Ewha Womans University, Korea); [Kyoung-Soon Jang*](#) (Korea Basic Science Institute, Korea)

OS30-6 17:45-18:00**Source and Health Risks of Heavy metals in PM2.5 in Ulaanbaatar, Mongolia**

– [Amgalan Natsagdorj*](#), Soyol-Erdene Tseren-Ochir (National University of Mongolia, Mongolia); JiYi Lee (Ewha Womans University, Korea)

OS30-7 18:00-18:15**Physical State of PM2.5 during Pollution Events in Urban and Agricultural Areas**

– [Mijung Song*](#), Sanjit Gaikwad, Rani Jeong (Jeonbuk National University, Korea)

OS-31 16:30-18:00**Low Cost Sensor and
Sensor Network** *Room 302*

Chair: Guy Coulson (National Institute of Water and Atmospheric Research, New Zealand) / Yen-Ping Peng (National Sun Yet-Sen University, Taiwan)

OS31-1 16:30-16:45**Performance Evaluation of Low Cost Air Quality Sensors: A Review**

– Ye Kang, [Victor W-C Chang*](#), Jenny Zhou (Monash University, Australia)

OS31-2 16:45-17:00**Exposure Measurements by a Low-Cost PM Sensor Network in an Electroplating Facility**

– [Christof Asbach*](#), Martin Nothhelfer, Ana Maria Todea (Institute of Energy and Environmental Technology, Germany)

OS31-3 17:00-17:15**Indoor PM2.5 in a Woodburning Town in New Zealand**

– Ian Longley, Elizabeth Somervell, Gustavo Olivares, [Guy Coulson*](#) (National Institute of Water and Atmospheric Research, New Zealand)

OS31-4 17:15-17:30**Dynamically Tuning the Emissions for Real-Time Forecast: Applying Micro-Sensor Measurements**

– Kuan-Yu Lin, Wei-Che Lin, Charles C.-K. Chou, Ming-Tung Chuang* (Academia Sinica, Taiwan)

OS31-5 17:30-17:45**Comparison of Isoprene and Ground Ozone from Low-Cost Air Quality Sensor and Reference Instrument: A Case Study in Urban Area of Kuching, Sarawak**

– [Hartini Binti Mahidin*](#), Mohd Talib Latif, Mohd Shahrul Mohd Nadzir, Juneng Liew, Maggie Chel Gee Ooi (Universiti Kebangsaan Malaysia, Malaysia); Doreena Dominick (University of Wollongong, Australia)

OS-32

16:30-18:00

**Aerosol Exposure and
Health Effects-IV**

Room 403

Chair: Wei-Hsin Chen (National Cheng Kung University, Taiwan) / Ya-Fen Wang (Chung Yuan Christian University, Taiwan)

OS32-1

16:30-16:45

Impacts of Various Household PM2.5 Exposures on Heart Rate Variability in Healthy Adults Living in the Metropolitan Area of Taipei

– [Mark Ming-Chien Tsou*](#), Shih-Chun Candice Lung (Academia Sinica, Taiwan)

OS32-2

16:45-17:00

Real-time Chemical Composition of PM1 and Their Cytotoxicity in Hong Kong

– [Xinyi Niu](#) (Xi'an Jiaotong University, China); Kin Fai Ho* (The Chinese University of Hong Kong, Hong Kong)

OS32-3

17:00-17:15

The Health Effect after the Intervention of Air Purifier for Asthma Patients in the Household

– [Jue-Long Chen](#), Jia Lin Zhang, Guan-Yu Liao, Pei-Shih Chen* (Kaohsiung Medical University, Taiwan)

OS32-4

17:15-17:30

Polycyclic Aromatic Hydrocarbons (PAHs) Exposure Assessment and Inhalation Health Risks among School Children Nearby Urban Traffic Area, Malaysia

– [Nur Hazirah Hisamuddin](#), Juliana Jalaludin* (Universiti Putra Malaysia), Mohd Talib Latif (Universiti Kebangsaan Malaysia)

OS32-5

17:30-17:45

Development of Indoor Air Quality Management Evaluation System by Analytic Hierarchy Process (AHP)

– [Pang-Wen Chen](#), Yueh-Lin Tsai, Chao-heng Tseng* (Taipei University of Technology, Taiwan)

June 15

Atmospheric Chemistry **10:30-13:00**

Chair: Jim Jr-Min Lin (Academia Sinica, Taiwan)
Co-Chair: Hiroshi Tanimoto (National Institute for Environmental Studies, Japan)

10:40-11:20

Asian Aerosols as Air Pollutants and SLCFs: IPCC AR6 Report and Beyond

– Moderator: Hiroshi Tanimoto (National Institute for Environmental Studies, Japan)
– Speaker: Yugo Kanaya (Japan Agency for Marine-Earth Science and Technology, Japan)

11:30-12:10

Photodissociation of Particulate Nitrate as a Source of Cl₂ and Impact on Air Quality in a Polluted Coastal Area

– Moderator: Hing-Cho Cheung (Academia Sinica, Taiwan)
– Speaker: Tao Wang (The Hong Kong Polytechnic University, Hong Kong)

12:20-13:00

Transport and Transformation of Urban Air Pollutants

– Moderator: Jim Jr-Min Lin (Academia Sinica, Taiwan)
– Speaker: Charles C.-K. Chou (Academia Sinica, Taiwan)

13:00-13:30

Panel Discussion & Concluding Remark

Aerosol and Air Pollution in Southeast Asia **15:00-18:00**

Chair: Jhy-Chern Liu (National Taiwan University of Science and Technology, Taiwan)

15:10-15:40

Patterns of Size-fractionated PMs and PAHs in Urban and Rural Areas of Northern Thailand

– Moderator: Puji Lestari (Institut Teknologi Bandung, Indonesia)
– Speaker: Somporn Chantara (Chiang Mai University, Thailand)

15:40-16:10

Identification of Metal Pollutants in Ambient Air (Case Study: West Surabaya, East Java, Indonesia)

– Moderator: Puji Lestari (Institut Teknologi Bandung, Indonesia)
– Speaker: Arie Dipareza Syafei (Institut Teknologi Sepuluh Nopember, Indonesia)

16:30-17:00

Exposure of Malaysian School Children to Air Pollutants and Health Risk and Impact Assessment

– Moderator: Ying-I Tsai (Chia Nan University of Pharmacy & Science, Taiwan)
– Speaker: Juliana Binti Jalaludin (Universiti Putra Malaysia, Malaysia)

17:00-17:30

Emissions and Reduction at the Source of Air Contaminants from Charcoal Making Process - A Case Study in the Vietnamese Mekong Delta

– Moderator: Ying-I Tsai (Chia Nan University of Pharmacy & Science, Taiwan)
– Speaker: Toan Pham Van (Can Tho University, Vietnam)

17:30-18:00

Panel Discussion & Concluding Remark

PL-06 **09:00-10:00**

Plenary Lecture-06 *Lecture Hall*

Chair: Min Hu (Peking University, China)

Three Dimensional Nanoprinting via Charged Aerosols

– Mansoon Choi (Seoul National University, Korea)

OS-33 **10:30-12:00**

Aerosol Physics *Lecture Hall*

Chair: Alvin C.K. Lai (City University of Hong Kong, Hong Kong) / Kuo-Lun Tung (National Taiwan University, Taiwan)

OS33-1 **10:30-10:45**

Development of Aerosol Optical and Microphysical Inversion: Application at the Lulin Atmospheric Background Station

– Hsiang-Yu Huang, Wei-Ru Chen, Sheng-Hsiang Wang*, Neng-Huei Lin (National Central University, Taiwan)

OS33-2 **10:45-11:00**

A Study on the Hygroscopicity of Atmospheric PM2.5 in South Korea

– Jeongbeen Kim, Yoonkyeong Ha, Kyungil Cho, Giwon Kang, Jiyoung Shin, Soodong Lee (Pusan National University, Korea); Seung-Bok Lee, Jinsang Jung (Korea Institute of Science and Technology, Korea); Mijung Song (Jeonbuk National University, Korea); Jiye Lee (Ewha Womans University, Korea); Kwangyul Lee (National Institute of Environmental Research, Korea); Changhyuk Kim* (Pusan National University, Korea)

OS33-3 **11:00-11:15**

Spray-Dried Encapsulated Iron for Food Fortification

– Alberto Baldelli*, Yigong Guo, Diana Yumeng Liang, Anubhav Pratpa-Singh (The University of British Columbia, Canada)

OS33-4 **11:15-11:30**

3D Modeling for the Air Filtration Process of Ultrafine Particles using Nanofiber Based Filters

– Sher-Ling Lee, Frank Lin, Kuo-Lun Tung* (National Taiwan University, Taiwan)

OS33-5 **11:30-11:45**

Numerical Study of Fine Particulate Matter Deposition in 3D quadruple bifurcation airways

– Chun-Chih Chuang, Justus Kavita Mutuku, Chih-Che Chueh (National Chung Kung University, Taiwan); Wei-Hsin Chen* (National Chung Kung University & National Chin-Yi University of Technology, Taiwan)

OS33-6 **11:45-12:00**

A Study on the Relationship between Structural Properties of Nanoparticle Deposits and Deposition Conditions Using Monte Carlo Simulation

– Jeonggeon KIM, Donggeun Lee* (Pusan National University, Korea)

OS-34 **10:30-12:00**

Aerosol-Climate Meteorology-II *Room 301*

Chair: Renjian Zhang (Chinese Academy of Sciences, China) / Pen-Chi Chiang (National Taiwan University, Taiwan)

OS34-1 **10:30-10:45**

Aerosol-Cloud-Climate-Interactions: Site-Specific Feedbacks

– Panuganti C.S. Devara* (Amity University Haryana, India); K.Vijyakumar (Sri Venkateswara University, India); S.M. Sonbawne, P.R.C. Rahul (IITM, India); M.G.Manoj (Cochin University of Science and Technology, India)

OS34-2 **10:45-11:00**

Quantifying the Increasing Importance of Absorbing Aerosols: From Atmospheric Aerosol Loading to Climate

– Jason Blake Cohen* (China University of Mining and Technology, China)

OS34-3 **11:00-11:15**

The Role of Ecosystem Services in Realizing Agriculture Carbon Neutrality and Enhanced Carbon Sinks: An Overview

– Kuan-Ting Lin (National Taiwan University, Taiwan); Chien-Hui Syu (Taiwan Agricultural Research Institute, Taiwan), I-Ting Chang, Ling-Yi Guo, Tsang-Sen Liu, Horng-Yuh Guo (Taiwan Agricultural Research Institute, Taiwan); Shu-Yuan Pan* (National Taiwan University, Taiwan)

OS34-4 **11:15-11:30**

Economic Shock in a Climate Scenario and Its Impact on Surface Temperatures

– Qi Ran, Shao-Yi Lee (Sun Yat-sen University, China), John C. Moore (University of Lapland, Finland); Chao Min, Wenjie Dong* (Sun Yat-sen University, China)

OS-34 **10:30-12:00****Aerosol-Climate** *Room 301***Meteorology-II**

Chair: Renjian Zhang (Chinese Academy of Sciences, China) / Pen-Chi Chiang (National Taiwan University, Taiwan)

OS34-5 **11:30-11:45****The Development of the Impact Model and Warning System of Climate Change Effect on Air Quality**– Kai-Lan Huang, [Bill Kao](#), Chao-Heng Tseng* (National Taipei University of Technology, Taiwan)**OS34-6** **11:45-12:00****Assessment of the Impact of Dual-Carbon Targets on Future Changes in Air Pollution and Climate in China**– [Beiyao Xu](#), Tijian Wang*, Shu Li, Bingliang Zhuang, Min Xie, Mengmeng Li (Nanjing University, China); Xiaodong Xie (Nanjing University of Information Science and Technology, China)**OS-35** **10:30-12:00****Nanoparticles and** *Room 302***Nanotechnology-II**

Chair: Donggeun Lee (Pusan National University, Korea) / De-Hao Tsai (National Tsing Hua University, Taiwan)

OS35-1 **10:30-10:45****Visible-Light Photocatalytic Performance of Cuxo Loaded Anatase- Or Rutile-Tio2 Fabricated By Gas Phase Method**– [Medittha Hudandini](#), Dianping Jiang (Hiroshima University, Japan); Kusdianto Kusdianto (Institut Teknologi Sepuluh Nopember, Indonesia); Masaru Kubo, Manabu Shimada* (Hiroshima University, Japan)**OS35-2** **10:45-11:00****Ag-doped TiO2 Composite Films Prepared Using Aerosol-Assisted, Plasma-Enhanced Chemical Vapor Deposition**– [Jianghua Lang](#), Kazuma Takahashi, Masaru Kubo, Manabu Shimada* (Hiroshima University, Japan)**OS35-3** **11:00-11:15****Spray-Assisted Fabrication of HKUST-1 MOF Thin Film and MWCNT/HKUST-1 Nanocomposite Film**– [Masaru Kubo](#)*, Takuya Sugahara, Manabu Shimada (Hiroshima University, Japan)**OS35-4** **11:15-11:30****Preliminary Experiments on Carbon Dioxide (CO₂) Capture Using Magnesium Oxide Nanoparticles Synthesized through Aerosol Process**– [Kyungil Cho](#), Yearyeong Kang (Pusan National University, Korea); Sukbyung Chae (Korea University of Technology and Education, Korea); Changhyuk Kim* (Pusan National University, Korea)**OS35-5** **11:30-11:45****Photocatalytic Degradation of Toluene Using Electrospun ZnO/PAN Nanofibers**– [Giang T. T. Le](#), Wuttichai Manoi, Tanapat Rodruangnon, Rittikiat Wandaw, Ketsarin Ariya, Phisit Thairattananon, Pimlapas Bunwichian, Tawatchai Charinpanitkul* (Chulalongkorn University, Thailand)**OS35-6** **11:45-12:00****Characterization of SRO Nano Aerosols Generated by Optimized Thermal Plasma Torch Aerosol Generator**– [Amit Kumar](#)*, Usha P., Sujatha P. N., Subramanian V., Athmalingam S., Venkatraman B. (Indra Gandhi Center for Atomic Research, India)**OS-36** **10:30-12:00****Remote Sensing** *Room 403*

Chair: Sheng-Lun Lin (Beijing Institute of Technology, China) / Cih-Da Wu (National Cheng Kung University, Taiwan)

OS36-1 **10:30-10:45****Seasonal Variation and Spatial Distribution of Atmospheric Fluorides Nearby the Fiberglass Process Plant Area**– [Chiang Chueabunyu](#)en* (Chia Nan University of Pharmacy and Science, Taiwan)

OS-36 10:30-12:00**Remote Sensing** *Room 403*

Chair: Sheng-Lun Lin (Beijing Institute of Technology, China) / Chih-Da Wu (National Cheng Kung University, Taiwan)

OS36-2 10:45-11:00
Evaluation of Random Forest Technique with Remote Sensing Datasets in Estimating PM_{2.5} across Malaysia

– Kasturi Devi Kanniah, [Nurul Amalin Fatimah Kamarul Zaman*](#) (Universiti Teknologi Malaysia, Malaysia), Dimitris.G Kaskaoutis (National Observatory of Athens, Greece)

OS36-3 11:00-11:15
A Satellite-Based SO₂ Estimation Model Using Sentinel-5 P TROPO OMI Data and Machine Learning in Central Taiwan

– Chih-En Hsu, [Chau-Ren Jung*](#) (China Medical University, Taiwan)

OS36-4 11:15-11:30
Spatiotemporal Dispersion of Local Scale Dust from the Erdenet Mine, Mongolia detected by Himawari-8 Geostationary Satellite

– [Chultem Batbold](#) (Kanazawa University, Japan), Keiya Yumimoto, Itsushi UNO (Kyushu University, Kasuga, Japan); Sonomdagva Chonokhuu, Batdelger Byambaa (National University of Mongolia, Mongolia); Shuukhaaz Ganbat, Kenji Taniguchi, Atsushi Matsuki* (Kanazawa University, Japan)

OS36-5 11:30-11:45
AOD Spatio-Temporal Distribution over Maritime Continent over Last Two Decades

– [Aulia Nisa'ul Khoir](#), Maggie Chel Gee Ooi*, Juneng Liew, Fredolin Tangang (University Kebangsaan Malaysia, Malaysia)

OS36-6 11:45-12:00
An Investigation of Aerosol Optical Properties during the Dry Season (2019) over Northern Thailand Using a Regional Chemical Transport Model

– [Sherin Hassan Bran*](#), Ronald Macatangay, Vanisa Surapipith (National Astronomical Research Institute of Thailand, Thailand); Chakrit Chotamonsak, Somporn Chantara (Chiang Mai University, Thailand); Somjet Pattarapanitchai, Sumaman Buntoung, Serm Janjai (Silpakorn University, Thailand)

Closing Ceremony 13:30-13:45**Closing Speech** *Lecture Hall*
Development of a Worldwide Aerosol Community– from GAeF to IARA

– Heinz Fissan (Universität Duisburg-Essen, Germany)