



The 7th Asian Aerosol Conference

Technical Program



Xi'an China
August 17-20, 2011

Organized by
Asian Aerosol Research Assembly
Chinese Association of Aerosol Science & Technology
Institute of Earth Environment, Chinese Academy of Sciences
Xi'an Jiaotong University
Institute of Atmospheric Physics, Chinese Academy of Sciences

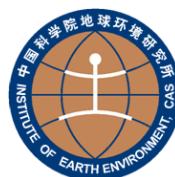
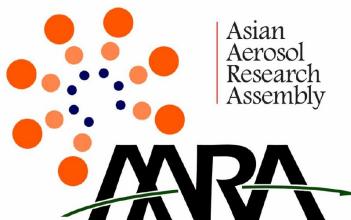


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Welcome

Welcome to the seventh Asian Aerosol Conference (AAC 2011) under the auspices of Asian Aerosol Research Assembly (AARA, <http://www.aaraonline.org/>). Beginning in 1999, the successive Asian Aerosol Conferences (AACs) have grown in terms of the spectrum of international participation and the depth of the specialized topics covering every aspects of aerosol science. The AAC2011 continues its tradition in providing an essential and outstanding forum for the latest achievements and future developments in the fields of Aerosol Science and Technology.

With the increasing public awareness and knowledge in different aspects of environment, climate, health and energy, the research of aerosol science has grown rapidly in recent years. In most Asian countries, the management strategies and investments are still in the explorative stage. Therefore, it is of great importance to host this international conference for our intimate communication in order to make us understand the advanced technology more effectively and efficiently.

The 433 abstracts from 22 countries were edited in the Conference Proceeding. The selected 354 abstracts will be presented in this Technical Program and the conference will cover five major topics:

- Ambient Measurements
- Aerosol Instrumentation
- Aerosol Modeling
- Effects on Climate, Health, Visibility, and Ecosystems
- Pollution Control and Management

On behalf of the Scientific Steering Committee, we warmly welcome all participants and representatives from scientific communities, governmental agencies, and enterprises to share and exchange our experiences at multiple scales and disciplines of Aerosol Science and Technology in the historic city Xi'an.

Junji Cao, Ph. D.
Technical Program Chair



Tawatchai Charinpanitkul, Ph. D.
Scientific Steering Committee Chair



Renjian Zhang, Ph. D.
General Conference Chair



Congratulations

From the President of the Chinese Academy of Sciences



"As President of the Chinese Academy of Sciences (CAS), with many of CAS institutes involving in aerosol and particle research, I would like to congratulate Professor Junji Cao for organizing this successful Asian Aerosol Conference with more than 500 attendees. This conference helps Chinese researchers connect with aerosol researchers not only in Asia but internationally with twenty or so other countries. As I reviewed the program with topics like aerosol modeling, measurement, optical properties, visibility, pollution control, health effects, dust storm, indoor air quality, nanoparticle technology, metrology, they are all of interest to me and my CAS colleagues. I wish all of you have a productive meeting and enjoy the culture and historical sites of Xian, the old capital of China."

**Prof. Chunli BAI,
President of the Chinese Academy of Sciences**

Venue Floor Plan

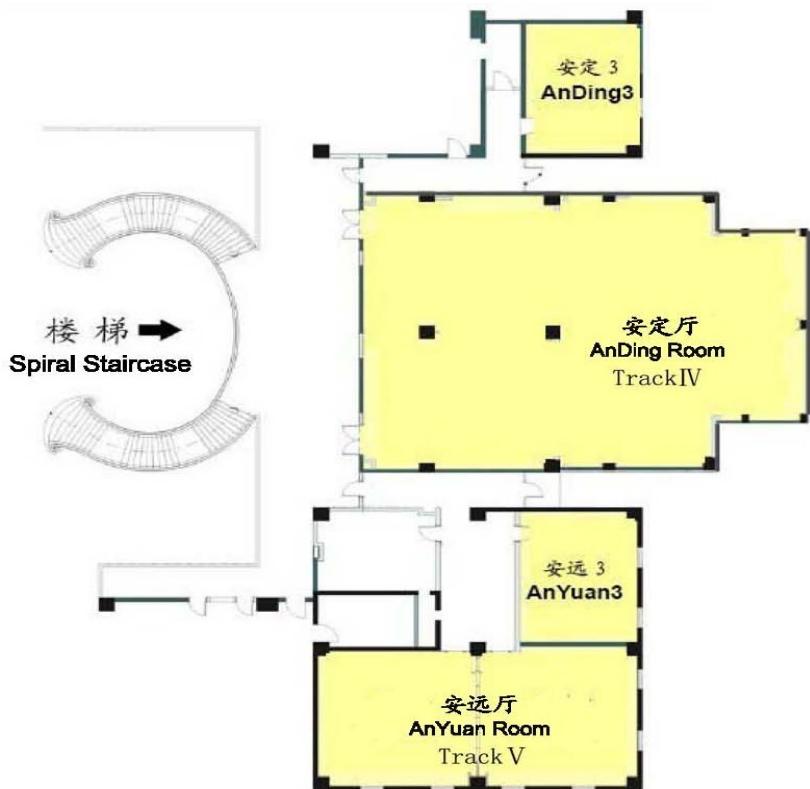


西安君樂城堡酒店
GRAND PARK
— XIAN —

First Floor



Second Floor



Schedule of Events

Time	Event	Page/Location
Tuesday, August 16, 2011		
15:00 — 20:00	Registration Desk Open.....	Lobby
18:00 — 21:00	Welcome Reception (ticket required).....	YongNing Ballrooms
Wednesday, August 17, 2011		
7:00 — 18:00	Registration Desk Open.....	Lobby
9:00 — 10:00	Welcome Address and Plenary Session.....	YongNing Ballrooms
10:00 — 10:30	Coffee Break.....	Pre-function Foyer
10:30 — 12:00	Technical Sessions.....	Pages 18-19
12:00 — 13:30	Buffet Lunch (ticket required).....	Lobby and Veranda Café
12:00 — 13:30	Poster Presentation I Set-up.....	Second Floor Foyer
13:30 — 15:00	Technical Sessions.....	Pages 20-21
15:00 — 15:30	Coffee Break.....	Pre-function Foyer
15:30 — 16:30	Technical Sessions.....	Pages 22-23
16:30 — 18:00	Poster Presentation I.....	Second Floor Foyer
18:00 — 19:30	Dinner (sponsored by Institute of Earth Environment, Chinese Academy of Science and Xi'an Jiaotong Univer- sity) (name badge required).....	Lobby and Veranda Café
19:30 — 21:00	AARA Meeting (invited).....	AnYuan 3
Thursday, August 18, 2011		
7:00 — 18:00	Registration Desk Open.....	Lobby
8:30 — 10:00	Plenary Session.....	YongNing Ballrooms
10:00 — 10:30	Coffee Break.....	Pre-function Foyer
10:00 — 10:30	Removal of Poster Presentation I.....	Second Floor Foyer
10:30 — 12:00	Technical Sessions.....	Pages 24-25
12:00 — 13:30	Buffet Lunch (ticket required).....	Lobby and Veranda Café
12:00 — 13:30	Poster Presentation II Set-up.....	Second Floor Foyer
13:30 — 15:00	Technical Sessions.....	Pages 26-27
15:00 — 15:30	Coffee Break.....	Pre-function Foyer
15:30 — 17:00	Poster Presentation II.....	Second Floor Foyer
Friday, August 19, 2011		
7:00 — 18:00	Registration Desk Open.....	Lobby
8:30 — 10:00	Plenary Session.....	YongNing Ballrooms
10:00 — 10:30	Coffee Break.....	Pre-function Foyer
10:00 — 10:30	Removal of Poster Presentation II.....	Second Floor Foyer
10:30 — 12:00	Technical Sessions.....	Pages 28-29
12:00 — 13:30	Buffet Lunch (ticket required).....	Lobby and Veranda Café
13:30 — 15:00	Technical Sessions.....	Pages 30-31
15:00 — 15:30	Coffee Break.....	Pre-function Foyer

Time	Event	Page/Location
15:30 — 16:30	Technical Sessions.....	Pages 32-33
18:00 — 20:30	Closing ceremony, Banquet and Show (ticket required).....	YongNing Ballrooms

Saturday, August 20, 2011

7:30 — 8:00	Bus departure from the Lobby to Terra-cotta Warriors and Horses Museum (ticket required).....	Lobby
9:00 — 12:30	Visiting Terra-cotta Warriors and Horses Museum	
13:00 — 13:45	Lunch	
15:00 — 16:30	Visiting HanYangLing Museum	
16:30 — 17:30	Return to Grand Park Hotel.....	Lobby

Pre-conference & Companion Tour Schedule

Assembly Point : Lobby, Grand Park Hotel

Date	Time	Event
Tuesday, August 16,2011	9:00-17:00	Pre-conference Tour: Big Wild Goose Pagoda and Shaanxi History Museum
Wednesday, August 17, 2011	8:30-18:00	Companion Tour: International Horticultural Exposition 2011 Xi'an China
Thursday, August 18, 2011	8:00-19:00	Companion Tour: Famen Temple and Qianling Mausoleum
Friday, August 19, 2011	7:00-18:30	Companion Tour: Mount Huashan

Exhibition Schedule (Pre-function Foyer)

Date	Time	Event
Tuesday, August 16,2011	13:00-18:00	Exhibition Move-in
Wednesday, August 17, 2011	10:00-18:00	Exhibition Hours
Thursday, August 18, 2011	10:00-18:00	Exhibition Hours
Friday, August 19, 2011	10:00-15:30	Exhibition Hours
Friday, August 19, 2011	15:30-17:30	Exhibitor Move-out

Conference Committee

General Conference Chairs

Prof. Renjian Zhang, Institute of Atmospheric Physics, Chinese Academy of Sciences, China
Prof. Xiaodong Liu, Institute of Earth Environment, Chinese Academy of Sciences , China

Technical Program Chairs

Prof. Junji Cao, Institute of Earth Environment, Chinese Academy of Sciences, China
Academician Zhisheng An , Chinese Academy of Sciences, China

Scientific Steering Committee

Chair: Prof. Tawatchai Charinpanitkul, President, Asian Aerosol Research Assembly, Thailand
Co-chair: Prof. Chuen-Jinn Tsai, Chiao Tung University, Taiwan

Prof. Mark Adams, University of Sydney, Australia
Dr. Shankar G. Aggarwal, National Physical Laboratory(NPL), CSIR, India
Prof. Kang Ho Ahn, Hanyang University, Korea
Dr. May Antoniette Ajero, CAI-Asia Center, Philippines
Prof. Zhipeng Bai, Naikai University, China
Prof. Helene Cachier, CEA-CNRS, France
Prof. Catherine F. Cahill, University of Alaska Fairbanks, USA
Prof. C.K. Chan, Hong Kong University of Science & Technology, Hong Kong
Prof. Jianmin Chen, Fudan University, China
Prof. Judith C. Chow, Desert Research Institute, USA
Prof. P.C.S. Devara, Indian Institute of Tropical Meteorology, India
Academician Congbin Fu, Nanjing University, China
Prof. Kaarle Hameri, University of Helsinki, Finland
Prof. Masahiko Hayashi, Fukuoka University, Japan
Prof. Kebin He, Tsinghua University, China
Prof. Min Hu, Peking University, China
Prof. Jung Ho Hwang, Yonsei University, Korea
Prof. S. Gerard Jennings, National University of Ireland, Ireland
Prof. Sang-Soo Kim, Korea Advanced Institute of Science and Technology, South Korea
Dr. Yong Jin Kim, Korea Institute of Machinery & Materials, Korea
Dr. Eladio Knipping, Electric Power Research Institute, USA
Prof. Shuncheng Lee, The Hong Kong Polytechnic University, Hong Kong
Prof. Wen-Jhy Lee, Cheng Kung University, Taiwan
Dr. Wuled Lenggoro, Tokyo University of Agriculture and Technology, Japan
Prof. Neng-Huei Lin, Central University, Taiwan
Prof. Ching-Ho Lin, Fooyin University, Taiwan

Prof. Shaw Liu, Institute of Earth Sciences, Taiwan
Prof. Y.S. Mayya, Bhabha Atomic Research Centre, India
Prof. Lidia Morawska, Queensland University of Technology, Australia
Prof. Varong Pavarajarn, Chulalongkorn University, Thailand
Prof. Olga Popovicheva, Moscow State University, Russia
Prof. Ulrich Poschl, Max Planck Institute for Chemistry, Germany
Prof. David YH Pui, University of Minnesota, USA
Prof. Hiromu Sakurai, National Institute of Advanced Industrial Science and Technology, Japan
Prof. Takashi Shibata, Nagoya University, Japan
Dr. Xuexi Tie, National Center of Atmospheric Research, USA
Dr. Wladyslaw W. Szymanski, University of Vienna, Austria
Prof. Nattaporn Tonanon, Chulalongkorn University, Thailand
Prof. Mingxing Wang, Institute of Atmospheric Physics, Chinese Academy of Sciences, China
Prof. Tao Wang, The Hong Kong Polytechnic University, Hong Kong
Prof. John G. Watson, Desert Research Institute, USA
Dr. Liya E. Yu, National University of Singapore, Singapore
Prof. Chung-Shin Yuan, Sun Yat-sen University, Taiwan
Prof. Chandra Venkataraman, Indian Institute of Technology, India
Prof. Xiao-Ye Zhang, Chinese Academy of Meteorological Sciences, China

Local Organizing Committee

Chair: Prof. Zhaolin Gu, Xi'an Jiaotong University, China
Prof. Zhenxing Shen, Xi'an Jiaotong University, China
Mr. Jun Tao, South China Institute of Environmental Sciences, MEP, China
Prof. Gehui Wang, Institute of Earth Environment, Chinese Academy of Sciences, China
Prof. Meigen Zhang, Institute of Atmospheric Physics, Chinese Academy of Sciences, China

Exhibition co-chairs

Annie Chen, Beijing Saak-Mar Environment Instrument Ltd., China
Tom Merrifield, BGI Incorporated, USA

Conference Secretariat

Ms. Jiamao Zhou, Email: zjm@ieecas.cn
Mr. Eric Tian, Email: aac2011@ieecas.cn
No. 10 Fenghui South Road, High-Tech Zone, Xi'an 710075, China
Telephone:+86-29-88326128
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Plenary Sessions (YongNing Ballroom 1&2)

Date and Time	August 17, 9:00-10:00
Plenary Session Chair	Prof. Junji Cao (Institute of Earth Environment. Chinese Academy of Sciences, China) Prof. Judith Chow (Desert Research Institute, USA)

8:30—9:00 (YongNing Ballrooms 1 and 2)	
9:00—9:30 (YongNing Ballrooms 1 and 2)	Welcome address and opening ceremony
9:30—10:00 (YongNing Ballrooms 1 and 2)	<p>Plenary: Recent Developments in Nanoparticle Filtration Research</p> <p>Prof. David Y.H. Pui, Director of the Particle Technology Laboratory, Mechanical Engineering Department, University of Minnesota, USA</p>
10:00—10:30 (Pre-function Foyer)	Coffee Break

August 18, 8:30-10:00	August 19, 8:30-10:00
<p>Prof. Chuen-Jinn Tsai (Chiao Tung University, Taiwan)</p> <p>Prof. Sang Soo Kim (Korea Advanced Institute of Science and Technology, Korea)</p>	<p>Prof. Tawatchai Charinpanitkul (Chulalongkorn University, Thailand)</p> <p>Prof. Takashi Shibata (Nagoya University, Japan)</p>
<p>Plenary: Weight of Evidence Approach for Source Apportionment Studies</p> <p>Prof. John G. Watson, Desert Research Institute, USA</p>	<p>Plenary: Application of electrical means to aerosol technologies</p> <p>Prof. Jung Ho Hwang, Yonsei University, Korea</p>
<p>Plenary: The present and potential future atmospheric environment issues in China</p> <p>Prof. Xuexi Tie, Institute of Earth Environment, Chinese Academy of Sciences, China</p>	<p>Plenary: Aerosol-Cloud-Precipitation-Climate Interactions: Evidences and Challenges</p> <p>Prof. Panuganti C.S. Devara, Indian Institute of Tropical Meteorology, India</p>
<p>Plenary: Estimation of the impact of natural and anthropogenic aerosols on air quality and climate change in East Asia using a regional model</p> <p>Prof. Masayuki Takigawa, Japan Agency for Marine-Earth Science and Technology, Japan</p>	<p>Plenary: Aerosol-based Process Technologies for Nano-Materials</p> <p>Prof. Bernd Sachweh, Vice President, BASF-The Chemical Company, Germany</p>
Coffee Break	Coffee Break

Technical Session, Wednesday, August 17, 2011

Time and Location	Track I (YongNing Ballroom 1)	Track II (YongNing Ballroom 2)
	Ia: Aerosol Chemistry: Field Measurements I	IIa: Aerosol Modeling I
10:30-12:00	Session Co-chairs: Catherine F Cahill, Geophysical Institute University of Alaska Fairbanks, USA Zhaoyang Meng, Chinese Academy of Meteorological Sciences, China	Session Co-chairs: Rushan Gao, National Oceanic and At- mospheric Administration, USA Meigen Zhang, Institute of Atmospheric Physics Chinese Academy of Sciences, China
	Page 18	Page 18
12:00-13:30		Lunch
	Ib: Aerosol Chemistry: Field Measurements II	IIb: Black Carbon
13:30-15:00	Session Co-chairs: Yili Wang, Beijing Forestry University, China Hong Li, Chinese Research Academy of Environmental Sciences, China	Session Co-chairs: Yongming Han, Institute of Earth Envi- ronment Chinese Academy of Sciences, China Ignacio Pisso, JAMSTEC , Japan
	Page 20	Page 20
15:00-15:30		Coffee Break
	Ic: CCN and and Meteorology	IIc: Aerosol Modeling II
15:30-16:30	Session Co-chairs: Lei Zhang, Lanzhou University, China Seong Soo Yum, Yonsei University, Ko- rea	Session Co-chairs: Xuejiao Deng, Institute of Tropical and Marine Meteorology China Meteorologi- cal Administration Guangzhou, China Hua Zhang, National Climate Center China Meteorological Administration , China
	Page 22	Page 22
16:30-18:00		Poster Presentation I on Second Floor Foyer Pages 34-36
19:30-21:00		AARA Meeting at AnYuan 3 (Invited)

Track III (ChangLe Room)	Track IV (AnDing Room)	Track V (AnYuan Room)
IIIa: Aerosol Instrumentation I	Iva: Advanced Measurement Methods I	Va: Aerosol Optical Properties
Session Co-chairs: Takashi Shibata, Graduate School of Environmental Studies Nagoya University, Japan Ping Chen, Droplet Measurement Technologies, USA	Session Co-chairs: Jingkun Jiang, Tsinghua University, China Jianmin Chen, Fudan University, China	Session Co-chairs: J.A. Ogren, NOAA Earth Systems Research Laboratory, USA Wu Zhang, College of Atmospheric Science Lanzhou University, China
Page 19	Page 19	Page 19
Lunch		
IIIb: Aerosol Instrumentation II	IVb: Advanced Measurement Methods II	Vb: AMS I
Session Co-chairs: Xin Yang, Fudan University, China Kathleen A. Erickson, TSI, USA	Session Co-chairs: Wladyslaw W. Szymanski, University of Vienna, Austria Yu-Mei Hsu Wood Buffalo Environmental Association, Canada	Session Co-chairs: Jesse H. Kroll, Massachusetts Institute of Technology, USA Xiaofeng Huang, Peking University Shenzhen Graduate School, China
Page 21	Page 21	Page 21
Coffee Break		
IIIc: Pollution Control Technology	IVc: Aerosol and Climate Change	Vc: AMS II
Session Co-chairs: Shun-cheng Lee, The Hong Kong Polytechnic University, HongKong Zhenxing Shen, Xi'an Jiaotong University, China	Session Co-chairs: Zhiwei Han, Institute of Atmospheric Physics Chinese Academy of Sciences, China Jie Tang, China Meteorological Administration, China	Session Co-chairs: Junying Sun, Chinese Academy of Meteorological Sciences, China John Jayne, Aerodyne Research Inc, USA
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Technical Session, Thursday, August 18, 2011

Time and Location	Track I (YongNing Ballroom 1)	Track II (YongNing Ballroom 2)
	Id: Urban Air Pollution I	IId: Air Pollution Health Effects I
10:30-12:00	Session Co-chairs: Jiun-Horng Tsai, Cheng-Kung University, China Jian Zhen Yu, Hong Kong University of Science & Technology, Hong Kong	Session Co-chairs: Rong-Ming Hu, University of Hertfordshire, United Kingdom Lianzhong Zhang School of Physics Nankai University, China
	Page 24	Page 24
12:00-13:30	Lunch	
	Ie: Secondary Organic Aerosol	IIe: Air Pollution Health Effects II
13:30-15:00	Session Co-chairs: Zhongming Chen, Peking University, China Junfeng Liu, Princeton University, USA	Session Co-chairs: Haidong Kan, Fudan University, China Lin Tian, State University of New York at Canton, USA
	Page 26	Page 26
15:00-15:30	Coffee Break	
15:30-17:00	Poster Presentation II on Second Floor Foyer Pages 37-39	

Track III(ChangLe Room)	Track IV (AnDing Room)	Track V (AnYuan Room)
IIIId: Carbonaceous Aerosol	IVd: Aircraft and Satellite Measurement	Vd: Source Apportionment I
Session Co-chairs: Yingjun Chen, Yantai Institute of Coastal Zone Research CAS, China Kochy K. Fung, AtmAA Inc., USA	Session Co-chairs: Anthony D. A. Hansen, Magee Sci- entific, USA Panuganti C.S. Devara, Indian Insti- tute of Tropical Meteorology, India	Session Co-chairs: Chung-Shin Yuan, Institute of Envi- ronmental Engineering, Sun Yat-sen University, Taiwan Jialiang Feng, Shanghai University, China
Page 25	Page 25	Page 25
Lunch		
IIIe: Bio-aerosols, biodefense, inactivation of bioagents I	IVe: Upper air measurements by UAV, balloon, remote sensor, and microsensor	Ve: Aerosol Emissions
Session Co-chairs: Maosheng Yao, Peking Univer- sity, China Yiping Chen, Institute of Earth Environment, Chinese Academy of Sciences. China	Session Co-chairs: Ching-Ho Lin, Fooyin University, Taiwan N.M. Sitnikov, Central Aerological Observatory, Russia	Session Co-chairs: Hiroshi Hara Tokyo University of Agriculture and Technology, Japan Erkki Lamminen, Dekati Ltd, Finland
Page 27	Page 27	Page 27
Coffee Break		

Technical Session, Friday, August 19, 2011

Time and Location	Track I (YongNing Ballroom 1)	Track II (YongNing Ballroom 2)
	If: Indoor pollution and air quality I	IIIf: Haze and dust storm
10:30-12:00	Session Co-chairs: Chuen-Jinn Tsai , Chiao Tung University, Taiwan Rongbiao Xiang, Huazhong agricultural University, China	Session Co-chairs: Min Hu, Peking University, China Guangli Xiu , East China University of Science & Technology, China
	Page 28	Page 28
12:00-13:30	Lunch	
	Ig: Indoor pollution and air quality II	IIg: Nanoparticle and nanoaerosol technology
13:30-15:00	Session Co-chairs: Hong Huang, School of Environmental and Chemical Engineering Nanchang University, China Jungang Dong, Xi'an University of Architecture and Technology, China	Session Co-chairs: Y. Matsui, Kyoto University, Japan Zhaolin Gu, Xi'an Jiaotong University, China
	Page 30	Page 30
15:00-15:30	Coffee Break	
	Ih: Aerosol Metrology	IIh: Ultrafine Particle and Nanoparticle
15:30-16:30	Session Co-chairs: Shankar G. Aggarwal, National Physical Laboratory, India Daizhou Zhang, Prefectural University of Kumamoto, Japan	Session Co-chairs: Yan Yin, Nanjing University of Information Science and Technology, China Kyung Hwan Kim, Saitama University, Japan
	Page 32	Page 32



Track III (ChangLe Room)	Track IV (AnDing Room)	Track V (AnYuan Room)
IIIIf: Urban Air Pollution II	IVf: Ambient Measurement	Vf: Fundamentals of aerosol physics and chemistry I
Session Co-chairs: Darrel Baumgardner, Universidad Nacional Autonoma de Mexico, Ciudad Universitaria, Mexico Jia-Twu Lee, Pingtung University of Science and Technology, Taiwan	Session Co-chairs: Tijian Wang, School of Atmospheric Sciences Nanjing University, China Senchao Lai, South China University of Technology, China	Session Co-chairs: Olga Popovicheva, Moscow State University, Russia T.Charinpanitkul, Chulalongkorn University, Thailand
Page 29	Page 29	Page 29
Lunch		
IIIg: Urban Air Pollution III	IVg: Aerosol Radiative Properties and visibility studies	Vg: Fundamentals of aerosol physics and chemistry II
Session Co-chairs: Fumo Yang, Graduate University of Chinese Academy of Sciences, China Qingyan Fu, Shanghai Environmental Monitoring Center, China	Session Co-chairs: Dui Wu, Institute of Tropical and Marine Meteorology Guangzhou, China Steven Ho, Hong Kong Premium Services and Research Laboratory, Hong Kong	Session Co-chairs: Guillaume DA, UPEC, France Varong Pavarajarn, Chulalongkorn University, Thailand
Page 31	Page 31	Page 31
Coffee Break		
IIIh: Bio-aerosols, biodefense, inactivation of bio-agents II	IVh: Biomass Burning and Biofuels	Vh: Source Apportionment II
Session Co-chairs: Sergey A. Grinshpun, University of Cincinnati, USA Gehui Wang, Institute of Earth Environment, Chinese Academy of Sciences, China	Session Co-chairs: Min Shao, Peking University, China Kin Fai Ho, "The Chinese University of Hong Kong	Session Co-chairs: Mei Zheng, Peking University, China Siwatt Pongpiachan, Prince of Songkla University, Thailand
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Session a (Wednesday, August 17, 10:30 - 12:00)

10:30-12:00	Ia: Aerosol Chemistry: Field Measurements I	IIa: Aerosol Modeling I
Room	YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs	Catherine F Cahill , Geophysical Institute University of Alaska Fairbanks, USA Zhaoyang Meng , Chinese Academy of Meteorological Sciences, China	Rushan Gao , National Oceanic and Atmospheric Administration, USA Meigen Zhang , Institute of Atmospheric Physics Chinese Academy of Sciences, China
10:30	ID111: Ambient Aerosols in Iraq and Afghanistan: Size, Concentration and Elemental and Biological Composition (Catherine F Cahill, Thomas A Cahill, Linda S Powers, et al.) Speaker: Catherine F Cahill Geophysical Institute University of Alaska Fairbanks, USA	ID160: PM _{2.5} Real-time Forecasting over the Southeastern United States with WRF/Chem-MADRID (Ming-Tung Chuang and Yang Zhang) Speaker: Ming-Tung Chuang Central University, Taiwan
10:45	ID52: Chemical Composition of Precipitation in the Lake Qinghai Area, China (Kun Zhang, Zhenxing Shen and Junji Cao) Speaker: Zhenxing Shen Xi'an Jiaotong University, China	ID22: Model Analysis of Aerosol Impacts on Atmospheric Visibility in China (Meigen Zhang, Xiao Han and Renjian Zhang) Speaker: Meigen Zhang Institute of Atmospheric Physics, Chinese Academy of Sciences, China
11:00	IDA403: Characterization of Diesel Particulates and Metal Nano-Agglomerates Using the Universal Nanoparticle Analyzer (Jing Wang, Zhun Liu, Seong-Chan Kim, et al.) Speaker: Jing Wang ETH Zurich, Switzerland	ID137: A Numerical Simulation of Windblown Sand Movement over a Slope Surface (Ning Huang, Hong Jiang and Ding Tong) Speaker: Lei Guo Lanzhou University, China
11:15	ID381: Ambient Ammonia and Ammonium Aerosol in the Urban Area of Beijing (Zhaoyang Meng, Xiaobin Xu, Weili Lin, et al.) Speaker: Zhaoyang Meng Chinese Academy of Meteorological Sciences, China	ID343: Aerosol-cloud-precipitation Interactions in Numerical Models-a New Perspective (Xiaoning Xie and Xiaodong Liu) Speaker: Xiaoning Xie Institute of Earth Environment, Chinese Academy of Sciences, China
11:30	IDA402: Measurements of Gaseous NH ₃ and HNO ₃ and Particulate Ions Collected over 4 Years in the Upper Green River Basin, Wyoming (Yi Li, Jeffrey Collett, H. James Sewell, et al.) Speaker: Yi Li Colorado State University, USA	ID389: Carbonaceous Aerosols in China: Top-down Constraints on Primary Sources and Estimation of Secondary Contribution (Tzung-May Fu, Xiaoye Zhang, Junji Cao, et al.) Speaker: Tzung-May Fu Peking University, China
11:45	ID219: Aerosol Measurements at the Nanjing Xianlin Station (Erik Herrmann and Aijun Ding) Speaker: Erik Herrmann Helsinki University, Finland	ID94: Pole-to-Pole Observations of Black Carbon Aerosol and Their Applications to Diagnosis of Long-Range Transport and Model Performance (R. S. Gao, J. P. Schwarz, J. R. Spackman, et al.) Speaker: R. S. Gao NOAA, USA

IIIa: Aerosol Instrumentation I	IVa: Advanced Measurement Methods I	Va: Aerosol Optical Properties
ChangLe Room	AnDing Room	AnYuan Room
Takashi Shibata , Graduate School of Environmental Studies Nagoya University, Japan Ping Chen , Droplet Measurement Technologies, USA	Jingkun Jiang , Tsinghua University, China Jianmin Chen , Fudan University, China	J.A. Ogren , NOAA Earth Systems Research Laboratory, USA Wu Zhang , College of Atmospheric Science Lanzhou University, China
ID395: Enhanced Aerosols Appeared at the Tropical Tropopause over Biak Indonesia in January 2011 (Takashi Shibata, Masahiko Hayashi, Keiichiro Hara, et al.) Speaker: Takashi Shibata Nagoya University, Japan	ID281: New SMPS for Measurement of Aerosol Size Distributions Down to 1 nm (Jingkun Jiang, Modi Chen, Chongai Kuang, et al.) Speaker: Jingkun Jiang Tsinghua University, China	ID119: Optical Characteristics of Aerosols over the Arid-area in Hexi-Corridor (Wu Zhang, Jinsen Shi, Jianrong Bi, et al.) Speaker: Wu Zhang College of Atmospheric Science Lanzhou University, China
ID211: Development of Polypyrrole Based Optical Aerosol Sensor (Hong-Yi Qin, Hang Zhang, Atul Kulkarni, et al.) Speaker: Hong-Yi Qin School of Mechanical Engineering Sungkyunkwan University, Korea	ID276: Development of a Lightweight Simple and Efficient Exhaled Breath Condensate Collection Device and Method (Zhenqiang Xu and Maosheng Yao) Speaker: Zhenqiang Xu Peking University, China	ID126: Aerosol Light Extinction Measurements of Urban and Regional Particulates Using a Cavity Attenuated Phase Shift-Based Monitor (Paola Massoli, Paul L. Kebabian, Andrew Freedman, et al.) Speaker: Andrew Freedman Aerodyne Research Inc., USA
ID371: Develop a Mixing-Type Electrocyclone for Removing Submicron Particulate Matter (Ta-Chih Hsiao) Speaker: Ta-Chih Hsiao Central University, Taiwan	ID279: Use of Electrostatic Sampling and ELISA Method in Studying Charge Distributions of Airborne Allergens (Yan Wu and Maosheng Yao) Speaker: Yan Wu Peking University, China	ID44: Quantitative Analysis of Aerosol Optical Properties in Summer in Beijing (Junshan Jing and Renjian Zhang) Speaker: Junshan Jing Institute of Atmospheric Physics, Chinese Academy of Sciences, China
IDA19a: Mixing Height Detection with Vaisala LIDAR Ceilometer (Mark Ma) Speaker: Mark Ma Vaisala China Ltd., China	ID257: An Iodine Vapor Filter Based Mobile High-Spectral-Resolution Lidar for Atmosphere and Aerosol (Xiaoquan Song, Jinjia Guo, Kailin Zhang, et al.) Speaker: Xiaoquan Song Ocean Remote Sensing Institute Ocean University of China, China	ID271: Source Evaluation of the Seasonal Variation in Aerosol Optical Depth Distribution over the Indian Subcontinent from Combined Measurement and Modeling Platforms (S. Verma, M. Schulz, Y. Balkanski, et al.) Speaker: S. Verma Indian Institute of Technology, Kharagpur, India
ID283: Comparative Studies of Instruments That Measure Black Carbon Properties in Mexico City (Ping Chen, Darrel Baumgardner and Armando Retama) Speaker: Ping Chen Droplet Measurement Technologies, USA	ID34: Effect of Nanoparticle Morphology on the Detection Efficiency of Condensation Particle Counters (Markus Pesch, Xiaoai Guo, Stephan Rennecke, et al.) Speaker: Changjun Tian Grimm Aerosol Technik GmbH & Co. KG, Germany	ID385: Climatology of Aerosol Properties at Mountaintop Sites (E. Andrews, J.A. Ogren, P. Bonasoni, et al.) Speaker: J.A. Ogren NOAA Earth Systems Research Laboratory, USA
	ID118: A Dual-wavelength Lidar Analysis of Dust Aerosol Properties (Zhiting Wang and Lei Zhang) Speaker: Lei Zhang Lanzhou University, China	ID306: Study of Columnar Aerosol Size Spectra at Pune (G. R. Aher and S. D. More) Speaker: Panuganti C.S. Devara Nowrosjee Wadia College, India

Session b (Wednesday, August 17, 13:30 - 15:00)

13:30-15:00		Ib: Aerosol Chemistry: Field Measurements II	IIb: Black Carbon
Room		YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs		Yili Wang , Beijing Forestry University, China Hong Li , Chinese Research Academy of Environmental Sciences, China	Yongming Han , Institute of Earth Environment Chinese Academy of Sciences, China Ignacio Pisso , JAMSTEC , Japan
13:30		ID265: Mercury Species in Atmospheric Particles and Their Dependent Conditions (Guangli Xiu, Yanyan Zhang, Ji Cai, et al.) Speaker: Guangli Xiu East China University of Science & Technology, China	ID320: The Characteristics of Black Carbon Deposition in the Forest (Kyo Kitayama, Yuuki Kimura, Shogo Oota et al.) Spesker: Kyo Kitayama Tokyo University of Agriculture and Technology, Japan
13:45		ID176: Size Distributions of Water Soluble Ions in Atmospheric Aerosol at Lin'an Regional Background Station (Honghui Xu, Jie Liu, Chunxiao Ji, et al.) Speaker: Honghui Xu Zhejiang Institute of Meteorological Sciences, China	ID86: Proposed Terminology for Black Carbon, as well as Different Forms of Carbon Fractions Used in Different Fields (Yongming Han) Speaker: Yongming Han Institute of Earth Environment, Chinese Academy of Sciences, China
14:00		ID261: Characteristics of Polybrominated Diphenyl Ether in the Air of Southern Taiwan (Long-Full Lin, Shin-Hsiung Lin and Guo-Ping Chang-Chien) Speaker: Long-Full Lin Kun Shan University, Taiwan	ID141:Sensitivity Studies for Lagrangian Inversion of Black Carbon Sources in Continental Asia Based on Measurements at Huangshan (Ignacio Pisso, Pan Xiaole, Takigawa Masayuki et al) Speaker: Ignacio Pisso , JAMSTEC , Japan
14:15		ID26: The Physicochemical Characteristics and Fractal Analysis of PM _{2.5} in the Atmosphere around the Campus of Beijing Forestry University (Yili Wang, Jiong Li and Yuan Chen) Speaker: Yili Wang Beijing Forestry University, China	ID272: Variation in Wintertime Black Carbon Aerosols at an Urban Center in the Eastern India (S. K. Pani, S. Verma and S. N. Bhanja) Speaker: S. Verma Indian Institute of Technology, Kharagpur, India
14:30		ID35: Aerosol Composition at Gosan, Korea: Measurement Data of TSP; PM ₁₀ ; and PM _{2.5} between March 1992 and Jun 2008 (Na-Kyung Kim, Yong-Pyo Kim and Chang-Hee) Speaker: Yong-Pyo Kim Ewha Womans University, Korea	ID7: Characteristics of Light Absorbing Carbon in Jiangsu, China (Zijuan Lan, Xiaofeng Huang, Lingyan He, et al.) Speaker: Zijuan Lan Peking University Shenzhen Graduate School, China
14:45		ID253: Distribution Characteristics of Aromatic Acids in Fine Aerosol Particles in Beijing, China (Hong Li, Fahe Chai, Xinming Wang, et al.) Speaker: Hong Li Chinese Research Academy of Environmental Sciences, China	ID358: Observational Study of Black Carbon in Urumqi During Summer and Autumn of 2009 (Yuting Zhong) Speaker: Yuting Zhong Institute of Desert Meteorology, CMA, Urumqi, China

IIIb: Aerosol Instrumentation II	IVb: Advanced Measurement Methods II	Vb: AMS I
ChangLe Room	AnDing Room	AnYuan Room
Xin Yang , Fudan University, China Kathleen A. Erickson , TSI, USA	Wladyslaw W. Szymanski , University of Vienna, Austria Yu-Mei Hsu , Wood Buffalo Environmental Association, Canada	Jesse H. Kroll , Massachusetts Institute of Technology, USA Xiaofeng Huang , Peking University Shenzhen Graduate School, China
ID182: A New Stand-alone Wide-range Aerosol Instrument for Automatic Environmental Monitoring (Xiaoai Guo, Markus Pesch, Hans Grimm, et al.) Speaker: Changjun Tian Grimm Aerosol Technik GmbH & Co. KG, Germany	ID145: Analysis and Handling of Biomaterials and Intact Viruses Using Electrostatic Aerosol Mobility Tools (Peter Kallinger, Anne Maisser, Wladyslaw W. Szymanski, et al.) Speaker: Wladyslaw W. Szymanski University of Vienna, Austria	ID55: Carbonaceous Aerosols at Various UK Locations: Source Attributions, Compositions and Evolution (Dantong Liu, James Allan, Gerard Capes, et al.) Speaker: Dantong Liu The University of Manchester, United Kingdom
ID112: Design and Performance of a Three-wavelength LED-based Total Scatter and Backscatter Integrating Nephelometer (Marie Laborde, Thomas Mueller and Grant Kassell) Speaker: Marie Laborde Paul Scherrer Institut, Switzerland	ID354: Application of Ambient Ion Monitor in Northeastern Alberta, Canada (Yu-Mei Hsu) Speaker: Yu-Mei Hsu Wood Buffalo Environmental Association, Canada	ID252: Measurement of Organic Aerosol using a High-Resolution Aerosol Mass Spectrometer at a Forest Site in Japan (Yuemei Han, Yoko Iwamoto, Tomoki Nakayama, et al.) Speaker: Yuemei Han Nagoya University, Japan
ID150: Two New Fast Response Water-based CPCs for Research Applications (Kathleen A. Erickson, Fred R. Quant, Sean Morell, et al.) Speaker: Kathleen A. Erickson TSI, USA	ID416: Aerosol Number Fluxes Measured by Eddy Covariance Method above Short Vegetation (Atsuyuki Sorimachi, Shinji Tokonami, Masaru Haraguchi, et al.) Speaker: Atsuyuki Sorimachi National Institute of Radiological Sciences, Japan	ID169: Overview of Submicron Aerosol Characterization in China Using an Aerodyne High-resolution Aerosol Mass Spectrometer (X.F. Huang, L.Y. He, L. Xue, et al.) Speaker: X.F. Huang Peking University Shenzhen Graduate School, China
ID195: Performance Evaluation of a Portable Nanoparticle Sizer Under Various Relative Humidity Environments (Siqin He and Da-Ren Chen) Speaker: Siqin He Washington University in St. Louis, USA	IDA412: Boundary Layer Top Detection from Lidar Dataset Using a Haar Wavelet Method over Wuhan, China (Shalei Song, Feiyue Mao and Wei Gong) Speaker: Shalei Song Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China	ID310: Comprehensive Characterization of Atmospheric Particles Using Complementary Methods of Chemical Analysis (Alexander Laskin) Speaker: Alexander Laskin Pacific NW Nat. Lab., USA
ID149: Experimental Evaluation of a Compact Electrostatic Nanoparticle Sampler (He Jing, Qisheng Ou and Da-Ren Chen) Speaker: He Jing Washington University in St. Louis, USA	IDA488: On-line and Off-line Applications of Ion Chromatography in Atmospheric Environment (Jing Wang) Speaker: Jing Wang , Thermo Fisher Scientific, China	ID188: Laboratory Studies of Organic Aerosol Aging (Jesse H. Kroll, Kevin R. Wilson, Sean H. Kessler, et al.) Speaker: Jesse H. Kroll Massachusetts Institute of Technology, USA
ID51: Single Particle Analysis of Hygroscopic Property of Ambient Aerosol in Shanghai (Xinning Wang, Xingnan Ye, Xin Yang, et al.) Speaker: Xin Yang Fudan University, China	ID198: Decomposition Efficiency of Polycyclic Aromatic Hydrocarbons in Nanoparticles from Rubber-wood Combustion Using Soft X-rays (Jiraporn Chomanee, Surajit Tekasakul, Perapong Tekasakul, et al.) Speaker: Perapong Tekasakul Prince of Songkla University, Thailand	ID151: An Aerosol Chemical Speciation Monitor-ACSM-for Routine Monitoring of the Composition and Mass Concentrations of Ambient Aerosol (Nga L. Ng, Scott C. Herndon, Achim Trimborn, et al.) Speaker: John T. Jayne Aerodyne Research Inc, USA

Session c (Wednesday, August 17, 15:30 - 16:30)

15:30-16:30	Ic: CCN and Meteorology	IIc: Aerosol Modeling II
Room	YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs	Lei Zhang , Lanzhou University, China Seong Soo Yum , Yonsei University, Korea	Xuejiao Deng , Institute of Tropical and Marine Meteorology China Meteorological Administration Guangzhou, China Hua Zhang , National Climate Center China Meteorological Administration , China
15:30	ID117: Cirrus Cloud Measurement Using Lidar over Semi-arid Areas (Ruijin Liu and Lei Zhang) Speaker: Lei Zhang Lanzhou University, China	ID80: On the Correlation of Air and Pollutant Exchange for Non-uniform Street Canyons (Yunwei Zhang, Zhaolin Gu and Jianying Jiao) Speaker: Yunwei Zhang Xi'an Jiaotong University, China
15:45	ID164: Long Term Measurement of Aerosol Size Distribution and CCN Concentration in Seoul, Korea (Seong-Soo Yum, Woo-Jae Kim, Jong-Hwan Kim, et al.) Speaker: Seong-Soo Yum Yonsei University, Korea	IDA6a: Advanced Remote Sensing and Multi-scale Modeling of Severe Aerosol Episodes (R.-M. Hu, R. S. Sokhi, et al.) Speaker: R.-M. Hu Centre for Atmospheric and Instrumentation Research, University of Hertfordshire, United Kingdom
16:00	IDA199: "Why are wind speeds so strong along the coast of China?" (Kenneth A. Rahn) Speaker: Kenneth A. Rahn Center for Atmospheric Chemistry Studies, Graduate School of Oceanography, University of Rhode Island, USA	ID420: Simulation of Direct Radiative Forcing of Aerosols and Their Effects on East Asian Climate Using an Interactive AGCM-Aerosol Coupled System (Hua Zhang and Zhili Wang) Speaker: Hua Zhang National Climate Center China Meteorological Administration , China
16:15		ID42: The Turbulent Exchange Characteristics of Typical Pollution Processes over Guangzhou Region (Xuejiao Deng, Fei Li, Dui Wu, et al.) Speaker: Xuejiao Deng Institute of Tropical and Marine Meteorology China Meteorological Administration Guangzhou, China

IIIc: Pollution Control Technology	IVc: Aerosol and Climate Change	Vc: AMS II
ChangLe Room	AnDing Room	AnYuan Room
Shun-cheng Lee , The Hong Kong Polytechnic University , Hong Kong Zhenxing Shen , Xi'an Jiaotong University, China	Zhiwei Han , Institute of Atmospheric Physics Chinese Academy of Sciences, China Jie Tang China Meteorological Administration, China	Junying Sun , Chinese Academy of Meteorological Sciences, China John Jayne , Aerodyne Research Inc ,USA
ID379: Study on Non-steady Collection Theory for Dust of Electrostatic Precipitator (Wenge Hao, Mengcheng Li and Yan Li) Speaker: Mengcheng Li Northeastern University, China	ID408: Direct Radiative and Climatic Effects of Aerosols in East Asia (Zhiwei Han) Speaker: Zhiwei Han Institute of Atmospheric Physics, Chinese Academy of Sciences, China	ID328: Chemical Characterization of Sub-micrometer Aerosol in Beijing (Junying Sun, Yangmei Zhang, Xiaojing Shen, et al.) Speaker: Junying Sun Chinese Academy of Meteorological Sciences, China
ID193: Effect of Pleat Shape on the Pressure Drop of Clean Pleated Filter Panels (Qisheng Ou and Daren Chen) Speaker: Qisheng Ou Washington University in St. Louis, USA	IDA473: Observational study of aerosol optical properties over the cruise during the Third Chinese National Arctic Research Expedition (Jie Tang, Peng Yan, Lingen Bian, et al.) Speaker: Jie Tang China Meteorological Administration, China	ID154: Source Signatures of Submicron Particle-phase Organic Components at Coastal and Inland California (Shang Liu, Lars Ahlm, Douglas A. Day, et al.) Speaker: Shang Liu University of California San Diego, USA
ID363: Development of the Electro-physical Method of Aero-ion Cleaning of Gaseous Atmosphere (Andrey Grishin, Ivan Yagodkin, Andrey Posagennikov, et al.) Speaker: Andrey Grishin Institute for Physics and Power Engineering, Russia	ID349: A Modeling Study on the Climatic Effects of Aerosols in China (Shu Li, Tijian Wang, Bingliang Zhuang, et al.) Speaker: Shu Li Nanjing University, China	ID152: Changes in Aerosol Mass Spectra during the Photochemical Aging of Organic Aerosols (Nga L. Ng, Manjula R. Canagaratna and Douglas R. Worsnop) Speaker: John T. Jayne Aerodyne Research Inc, USA
ID226: Study on Collection Efficiency of 2-layered Electrostatic Filters with Different Gaps (Soohyun Ha, Jong-Bum Kim, Soon-Bark Kwon, et al.) Speaker: Soohyun Ha Sungkyunkwan University, Korea	ID346: Semi-direct and Indirect Climate Effects of Fossil Fuel Black Carbon Aerosol over China (Bingliang Zhuang, Tijian Wang, Shu Li, et al.) Speaker: Bingliang Zhuang School of Atmospheric Sciences Nanjing University, China	ID19: Mixing State of Particles by Single Particle Aerosol Mass Spectrometer in Urban Area of PRD (Xinhui Bi, Guohua Zhang, Lei Li, et al.) Speaker: Guohua Zhang Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, China

Session d (Thursday, August 18, 10:30 - 12:00)

10:30-12:00		IId: Urban Air Pollution I	IIId: Air Pollution Health Effects I
Room		YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs		Jiun-Horng Tsai , Cheng-Kung University, China Jianzhen Yu , Hong Kong University of Science & Technology, Hong Kong	Rong-Ming Hu , University of Hertfordshire, United Kingdom Lianzhong Zhang , School of Physics Nankai University, China
10:30		ID200: Inorganic Species of Airborne Particulate Matter and Their Gases Precursors in the Episode Event-A Case Study in Taiwan (Jiun-Horng Tsai, Ting Ke Tseng and Jian-Horng Lin) Speaker: Jiun-Horng Tsai Cheng-Kung University, Taiwan	ID143: Use of Six-stage Andersen Sampler in Investigating Bioaerosol Inhalation Risks in Different Environments (Zhenqiang Xu and Maosheng Yao) Speaker: Zhenqiang Xu Peking University , China
10:45		ID293: Humic-like Substances in Ambient Aerosols in the Pearl River Delta Region, China (Jianzhen Yu and Peng Lin) Speaker: Jianzhen Yu Hong Kong University of Science & Technology, Hong Kong	ID75: Real-time Detection of Airborne Influenza a Viruses Using Silicon Nanowire Field Effect Transistor (Fangxia Shen, Miaomiao Tan, Maosheng Yao, et al.) Speaker: Maosheng Yao Peking University, China
11:00		ID317: Chemical Composition of Fine and Coarse Particles at Wuqing during the HaChi Summer Campaign (Qian Tang, Min Hu, Zhibin Wang, et al.) Speaker: Qian Tang Peking University, China	ID3: Traffic Related Particles Induced Pro-inflammatory Cytokine mRNA Expression in Vitro: Importance of Organic Matter and Quinones (Yu Shang) Speaker: Yu Shang Shanghai University, China
11:15		ID87: Chemical Characterization of Water-soluble Species in PM ₁₀ of Baoji: a Case Study of a Mid-scale City in Inland China (Gehui Wang, Shuyuan Hu, Mingjie Xie, et al.) Speaker: Gehui Wang Institute of Earth Environment, Chinese Academy of Sciences, China	ID365: Moving Boundary Study of Micro-Particle Deposition in Human Oropharynx Airway Model under Steady Inspiration (Lianzhong Zhang and Jianhua Huang) Speaker: Lianzhong Zhang Nankai University, China
11:30		ID138: The Aerosol Characteristics in Different Air Pollution Events over Nanjing (Bin Zhu, Honglei Wang, Qiucheng Zhang) Speaker: Bin Zhu Nanjing University of Information Science & Technology, China	ID192: Inhibitory Effects on Lung Carcinogenesis in A/J Mice by Aerosolized NSAIDs (Jingjie Zhang, Huijing Fu and Da-ren Chen) Speaker: Jingjie Zhang Washington University in St. Louis, USA
11:45		ID148: How Similar are the Aerosols of Beijing and Delhi? (Kenneth A. Rahn and Manju Mohan) Speaker: Kenneth A. Rahn Tsinghua University, China	IDA406: Physicochemical and Toxicological Assessment of Commuter Exposure to Coarse and Fine Particulate Matter (PM) in Subway and Light-Rail Systems of the Los Angeles Metro (Zhi Ning, Winnie Kam, James J. Schauer, et al.) Speaker: Zhi Ning City University of Hong Kong, Hong Kong

IIIId: Carbonaceous Aerosol	IVd: Aircraft and Satellite Measurement	Vd: Source Apportionment I
ChangLe Room	AnDing Room	AnYuan Room
Yingjun Chen , Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, China Kochy K. Fung , AtmAA Inc., USA	Anthony D. A. Hansen , Magee Scientific, USA Panuganti C.S. Devara Indian Institute of Tropical Meteorology, India	Chung-Shin Yuan , Sun Yat-sen University, Taiwan Jialiang Feng , Shanghai University, China
ID83: Characteristics of Carbonaceous Aerosols in Yangtze River Delta Region, China (Guang H. Wang) Speaker: Guang H. Wang Shanghai Institute of Applied Phy, China	ID31: Estimation of Aerosol Black Carbon at the Tropopause by Measurements in Commercial Aircraft Cabins (Anthony D. A. Hansen and Grisa Mocnik) Speaker: Anthony D. A. Hansen Magee Scientific, USA	ID16: Size Distribution of Chemical Elements and Their Source Appointment of Ambient Coarse/Fine/Ultrafine Particles in Shanghai Atmosphere (Senlin Lu, Rui Zhang, Man Feng, et al.) Speaker: Senlin Lu Shanghai University, China
ID248: Carbonaceous Aerosols at a High Altitude Location in Central Himalayas (Zhiyuan Cong, Shichang Kang and Junji Cao) Speaker: Zhiyuan Cong Institute of Tibetan Plateau Research, China	ID340: Aerosols and Gases Measured by Aircraft during a Dust Storm Event over North China (Jianzhong Ma, Wei Wang, Yue Chen, et al.) Speaker: Jianzhong Ma Chinese Academy of Meteorological Sciences, China	ID133: Pollution Situation and Possible Markers of Different Sources in the Ordos Region, Inner Mongolia, China (Wenjie Zhang, Jianhua Chen, Zhipeng Bai, et al.) Speaker: Wenjie Zhang Chinese Research Academy of Environmental Sciences, China
ID316: Characteristics and the Origins of the Carbonaceous Aerosol at a Rural Site of PRD in the Summer of 2006 (Weiwei Hu, Min Hu, Peng Lin, et al.) Speaker: Weiwei Hu Peking University, China	ID18: Asian Dust Detection from Satellite Imagers (Xuepeng Zhao) Speaker: Xuepeng Zhao NOAA/NCDC, USA	IDA545: Chemical Composition and Source Apportionment of PM ₁₀ in Xi'an and Surrounding Areas (Juan Qiang, Wentao Li and Hongmei Xu) Speaker: Hongmei Xu Institute of Earth Environment Chinese Academy of Sciences, China
ID205: Harmonizing Aerosol Carbon Measurements between Two Conventional Thermal/Optical Analysis Methods (Guorui Zhi and Yingjun Chen) Speaker: Yingjun Chen Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, China	IDA544: Aerosol Variability over East Asia as Seen by Polder Space-Borne Sensors (X. Su, I. Chiapello, P. Goloub, et al.) Speaker: Xiaoli Su , Laboratoire d'Optique Atmosphérique, Lille, France	ID61: Composition of Fine Particles at Lin'an, a Background Rural Site in the Yangtze River Delta Region (Jialiang Feng, Wu Wang, Minghong Wu, et al.) Speaker: Jialiang Feng Shanghai University, China
IDA23a: Precautions for In-injection Port Thermal Desorption-Gas Chromatography/Mass Spectrometry (TD-GC/MS) as Applied to Aerosol Filter Samples (Steven Ho, Judith C. Chow, John G. Watson, et al.) Speaker: Steven Ho Hong Kong Premium Services and Research Laboratory, Hong Kong	ID396: Direct and Remote Sensing Methods for Chemical Pollution Studies (Panuganti C.S. Devara) Speaker: Panuganti C.S. Devara Indian Institute of Tropical Meteorology, India	ID120: Diurnal Variation and Source Apportionment of Atmospheric Aerosols at Xiamen Bay (Tsung-Chang Li, Chung-Yi Wu, Chung-Shin Yuan, et al.) Speaker: Chung-Shin Yuan Sun Yat-sen University, Taiwan
IDA2a: Interaction of Minerals with Black Carbon in Thermal Optical Techniques (Kochy K. Fung, Judith C. Chow, Jerome Robles, et al.) Speaker: Kochy K. Fung AtmAA Inc., USA	ID37: Aircraft Measurements of Gaseous Pollutants and Particles during Care Beijing: Classification and Distribution Analysis (Wenjie Zhang, Tong Zhu, Jianhua Chen, et al.) Speaker: Wenjie Zhang Chinese Research Academy of Environmental Sciences, China	ID161: Characteristics and Sources of Ionic Species and Metallic Elements in Airborne PM _{2.5} in Busan, Korea (Gee-Hyeong Park, Jeong-Gu Cho, Byeong-Kyu Lee, et al.) Speaker: Atilla Mutlu University of Ulsan, Korea

Session e (Thursday, August 18, 13:30 - 15:00)

13:30-15:00	Ie: Secondary Organic Aerosol	IIe: Air Pollution Health Effects II
Room	YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs	Zhongming Chen , Peking University, China Junfeng Liu , Princeton University, USA	Haidong Kan , Fudan University, China Lin Tian , State University of New York at Canton, USA
13:30	ID172: Characterization of New Particle and Secondary Aerosol Formation during Summertime in Beijing, China (Yangmei Zhang, Xiaoye Zhang and Junying Sun) Speaker: Yangmei Zhang Chinese Academy of meterorological Sciences, China	ID203: A Time-stratified Case-crossover Study of Fine Particulate Matter Air Pollution and Mortality in Guangzhou, China (Haidong Kan) Speaker: Haidong Kan Fudan University, China
13:45	ID171: Global In-Cloud Production of Secondary Organic Aerosols Based on Detailed Aqueous-Phase Chemistry (Junfeng Liu, Larry W. Horowitz, Songmiao Fan, et al.) Speaker: Junfeng Liu Princeton University, USA	ID207: CFD Study of Transport and Deposition of Asbestos Fibers in Human Upper Tracheo-bronchial Airways (Lin Tian and Goodarz Ahmadi) Speaker: Lin Tian State University of New York at Canton, USA
14:00	ID29: Effects of FeSO ₄ Seeds on Secondary Organic Aerosol Formation from Photooxidation of α -Pinene/NO _x and Toluene/NO _x (Biwu Chu, Junhua Li, Jiming Hao, et al.) Speaker: Biwu Chu Tsinghua University, China	ID352: A Study of Mutagenic Index in PM ₁₀ of Residential Areas in Bangkok (Siwatt Pongpiachan, Chomsri Choochua, Charnwit Kositanone, et al.) Speaker: Siwatt Pongpiachan School of Social and Environmental Development National Institute of Development Administration, Thailand
14:15	ID78: Nationwide Impacts by Fire Emissions in the United States in Summer 2002 (Tao Zeng and Yuhang Wang) Speaker: Tao Zeng Gerogia Institute of Technology, USA	ID114: Detection of Influenza Virus in Human Exhaled Air (Pei-Chun Yen, Pei-Shih Chen and Wan-Chi Kuo) Speaker: Pei-Chun Yen Kaohsiung Medical University, Taiwan
14:30	ID268: Contribution of Aqueous Oxidation of Biogenic VOCs to SOA Production (Zhongming Chen, Xuan Zhang, Dao Huang, et al.) Speaker: Zhongming Chen Peking University, China	ID238: Problem with Radon Action Level due to the Unattached Radon Decay Products (Norbert Kavasi, Tamas Vigh, Tibor Kovacs, et al.) Speaker: Norbert Kavasi National Institute of Radiological Sciences, Japan
14:45		ID401: Effects of Inhalation Profiles on Particle Deposition in Human Upper Airway (Zheng Li and Lujie Cao) Speaker: Lujie Cao Ocean University of China, China

IIIe: Bio-aerosols, biodefense, inactivation of bioagents I	IVe: Upper air measurements by UAV, balloon, remote sensor, and microsensor	Ve: Aerosol Emissions
ChangLe Room	AnDing Room	AnYuan Room
Maosheng Yao , Peking University, China Yiping Chen , Institute of Earth Environment, Chinese Academy of Sciences. China	Ching-Ho Lin , Fooyin University, Taiwan N.M.Sitnikov , Central Aerological Observatory, Russia	Hiroshi Hara , Tokyo University of Agriculture and Technology, Japan Erkki Lamminen , Dekati Ltd., Finland
ID4: Bioaerosol Science, Technology and Engineering: Past, Current and Beyond (Maosheng Yao) Speaker: Maosheng Yao Peking University, China	ID299: Boundary Layer Evolution and Soot Aging: a Case Study with Tethered Balloon Observation (Daizhou Zhang, Guangyu Shi, Biao Wang, et al.) Speaker: Daizhou Zhang Prefectural University of Kumamoto, Japan	ID79: Large Fire Emissions in Summer over the Southeastern US: Satellite Measurements and Modeling Analysis (Tao Zeng, Yuhang Wang, Di Tian, et al.) Speaker: Tao Zeng Georgia Institute of Technology, USA
ID275: Performance of a Button Inhalable Sampler with Modified MCE Filter Method in Enumerating Culturable Bacterial and Fungal Aerosol Concentration and Diversity (Zhenqiang Xu and Maosheng Yao) Speaker: Zhenqiang Xu Peking University, China	ID156: Unmanned Aircraft System-Based Aerosol Concentration, Size and Composition Measurements (Catherine F Cahill and Gregory W Walker) Speaker: Catherine F Cahill Geophysical Institute University of Alaska Fairbanks, USA	IDA18a: Characteristics of Sized-resolved Anhydrosugars and Pollutants Derived from Rice Straw Burning in Controlled Chamber (Chih-Jen Chuang, James J. Lee and Jian-Li Lin) Speaker: Chih-Jen Chuang Yunlin University of Science and Technology, Taiwan
ID14: Effects of Single-walled Carbon Nanotube Filter on Culturability and Diversity of Environmental Bioaerosols (Zhenqiang Xu and Maosheng Yao) Speaker: Zhenqiang Xu Peking University, China	ID157: Vertical Distributions of Ozone and Nitrogen Dioxide Observed in a Polluted Marine Boundary Layer around Kaohsiung City (Ching-Ho Lin, Chin-Hsing Lai and Yee-Lin Wu) Speaker: Ching-Ho Lin Fooyin University, Taiwan	ID38: Characterization of particles from residential coal combustion (Kun Wang, Junhua Li, Jiming Ha, et al.) Speaker: Kun Wang Tsinghua University, China
ID336: Ecophysiological Responses of Winter Wheat Seedling to Aerosol Wet Deposition of Xi'an Area (Yiping Chen) Speaker: Yiping Chen Institute of Earth Environment, Chinese Academy of Sciences, China	IDA4a: Monitoring of NOx by a Sensor Made of Tungsten Oxide-Multiwalled Carbon Nanotube Composite (S. Monchayapisut, M. Sriyudthsak and T. Charinpanitkul) Speaker: T. Charinpanitkul Chulalongkorn University, Thailand	ID249: Measurement of PM Emissions and Electrostatic Precipitator Charging Efficiency from Coal Combustion (Erkki Lamminen and Jukka Kujanpaa) Speaker: Erkki Lamminen Dekati Ltd., Finland
ID278: Influences of Air Volume DNA Template and Dilution Factor on the Performance of qPCR Coupled with a Modified BioStage Sampling Method in Quantifying Bioaerosols (Zhenqiang Xu and Maosheng Yao) Speaker: Maosheng Yao Peking University, China	ID191: Environmental Monitoring Using Unmanned Aerial Vehicles (N.M.Sitnikov, D.V.Akmulin, I.I.Chekulaev, et al.) Speaker: N.M.Sitnikov Central Aerological Observatory, Russia	ID49: Characteristics of Particles Emissions and Polycyclic Aromatic Hydrocarbons from IDI-Turbo Diesel (Khamphe Phoungthong, Surajit Tekasakul, Perapong Tekasakul, et al.) Speaker: Perapong Tekasakul Prince of Songkla University, Thailand
	ID372: O ₃ /NO ₂ /NMHC Air Pollutants Monitoring Through an Unmanned Aerial Vehicle (Jir-Ming Char, Chin-Ho Lin, Harry Chu, et al.) Speaker: Jir-Ming Char Fooyin University, Taiwan	IDA538: The Development and Application of Single Particle Aerosol Mass Spectrometer (Mei Li, Zhengxu Huang, Lei Li, et al.) Speaker: Mei Li Shanghai University, China

Session f (Friday, August 19, 10:30 - 12:00)

10:30-12:00		If: Indoor pollution and air quality I	IIIf: Haze and dust storm
Room		YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs		Chuen-Jinn Tsai National Chiao Tung University, Taiwan Rongbiao Xiang , Huazhong Agricultural University, China	Min Hu , Peking University, China Guangli Xiu , East China University of Science & Technology, China
10:30		ID82: Monitoring the Particulate Matter Pollution in an Underground Car Park in Wuhan (Rongbiao Xiang and He Wang) Speaker: Rongbiao Xiang Huazhong Agricultural University, China	ID290: Assessment of Dust Concentration and Sediment Load of Dust Storms in the Sistan Region of Iran (A.R. Rashki, D.G. Kaskaoutis, P.Gupta, et al.) Speaker: A.R. Rashki University of Pretoria, South Africa
10:45		ID202: Design and Validation of a Personal Nanoparticle Sampler (Chun-Nan Liu, Shao-Ming Hung, Sheng-Chieh Chen, et al.) Speaker: Shao-Ming Hung Chiao Tung University, Taiwan	ID33: Integrated Evaluation of Aerosols from Regional Brown Hazes over Northern China in Winter: Concentrations, Sources, Transformation, and Mixing States (Weijun Li, Shengzhen Zhou, Xinfeng Wang, et al.) Speaker: Weijun Li Shandong University, China
11:00		ID105: Influence of Convection on Diffusion Induced by Inlet Wind Velocity in a Tunnel (Jia-Twu Lee and Hsing-Nan Wu) Speaker: Jia-Twu Lee Pingtung University of Science and Technology, Taiwan	ID318: Regional Fine Particle Pollution and Haze Problem (Min Hu, Xiaofeng Huang, Lingyan He, et al.) Speaker: Min Hu Peking University, China
11:15		ID96: Indoor Air Quality in University (Yu-Ju Ke, Chia-Yu Chen and Pei-Shih Chen) Speaker: Yu-Ju Ke Kaohsiung Medical University, Taiwan	ID264: The Association of Carbonaceous Species with Haze Pollution (Guangli Xiu, Mengya Zhu, Junji Cao, et al.) Speaker: Guangli Xiu East China University of Science & Technology, China
11:30		ID369: Numerical Simulation in the Micro Environment in Han Yang Mausoleum Museum (Nanying Cao, S.C.Lee, JunJi Cao) Speaker: Nanying Cao The Hong Kong Polytechnic University, Hong Kong	IDA30a: Characteristics, Sources and Long-range Transport of Heavy Metals of Aerosols over China (Rong Zhang Guoshun Zhuang Juan Li Kan Huang Qiongzen Wang Chang Xu) Speaker: Rong Zhang Fudan University, China
11:45		ID104: Ultrafine Particles Counts in Elementary School (Yi-Chieh Chen and Pei-Shih Chen) Speaker: Wei-Che Houng Kaohsiung Medical University, Taiwan	IDA393: An Auto-Detection Algorithm for Asian Dust Aerosols over China Seas based on Satellite Observations and Model Simulations (Zengzhou Hao, Qianguang Tu and Fang Gong) Speaker: Zengzhou Hao Second Institute of Oceanography, China

IIIIf: Urban Air Pollution II	IVf: Ambient Measurement	Vf: Fundamentals of aerosol physics and chemistry I
ChangLe Room	AnDing Room	AnYuan Room
Darrel Baumgardner , Universidad Nacional Autonoma de Mexico, Ciudad Universitaria,Mexico Jia-Twu Lee , Pingtung University of Science and Technology, Taiwan	Tijian Wang , School of Atmospheric Sciences Nanjing University, China Senchao Lai South China University of Technology, China	Olga Popovicheva , Moscow State University, Russia T.Charinpanitkul , Chulalongkorn University, Thailand
ID146: Comprehensive Physical and Chemical Characterization of Urban Aerosols in Vienna, Austria (Wladyslaw W. Szymanski, Nayla Sabbagh-Kupelwieser, Kazuhiko Sekiguchi, et al.) Speaker: Wladyslaw W. Szymanski University of Vienna, Austria	ID129: Chemical Characterization of Aerosol Collected at Mt. Yulong in Winter Time, Southeastern Tibetan Plateau (N.N. Zhang, J.J. Cao and Y.Q. He) Speaker: Ningning Zhang Institute of Earth Environment, Chinese Academy of Sciences, China	ID280: Investigation of Factors Affecting the Mass Size Distribution of Ambient Particulates (Jim-Juimin Lin, Mon-Shi Lin and Kuan-Lun Pan) Speaker: Jim-Juimin Lin , Kaohsiung First University of Sci & Tech, Taiwan
ID208: Study of Conditioning System Inside the Temperature of the Flow Field of EMU Air (Jia-Twu Lee, Wu-Chou Yu, Wen-Long Yu and Chih-Hung Huang) Speaker: Jia-Twu Lee , Pingtung University of Science and Technology, Taiwan	ID243: Atmospheric Behavior of the Bi-functional Carbonyls Partitioning on SPM and NRPM1 (Ortiz Ricardo, Shimada Satoru and Kazuhiko Sakamoto) Speaker: Ortiz Ramirez Institute for Environmental Science and Technology Saitama University, Japan	ID93: Quantification of Indirect Combustion Aerosols (Olga Popovicheva, Yu-Xing Yun and Joyce Penner) Speaker: Olga Popovicheva Moscow State University, Russia
ID313: Assessment of Traffic Control Measures during the Beijing Olympic Games Based on Particle Number Size Distributions (Z. B. Wang, M. Hu, D. L. Yue) Speaker: Qingfeng Guo Peking University, China	ID330: Iodine Speciation in Marine Aerosols: the Spatial Variation from Shanghai, China to Prydz Bay, Antarctica (Senchao Lai, Zouqing Xie and Thorsten Hoffmann) Speaker: Senchao Lai South China University of Technology, China	ID321: Fabrication of Fibers of Resorcinol/Formaldehyde Gel by Electro-spinning toward the Formation of Mesoporous Carbon Fibers (Panitnart Ubollers, Pitt Supaphol and Varong Pavarajarn) Speaker: Varong Pavarajarn Chulalongkorn University, Thailand
IDA20a: Chemical Characteristics of Aerosols in High Air Pollution Episode during Autumn of Shanghai, China (Changhong Chen, Min Zhou, Hongli Wang and et al.) Speaker: Changhong Chen Shanghai Academy of Environmental Sciences, China	ID327: Characteristics of Surface Ozone at an Urban Site in Xi'an, China (Xin Wang and Zhenxing Shen) Speaker: Xin Wang Xi'an Jiaotong University, China	ID30: Studies on Sodium Aerosol Characteristics in the Presence of Gamma Radiation Field (Subramanian V., Baskaran R. and Venkatraman B.) Speaker: Subramanian V. Indira Gandhi Centre for Atomic Research, India
ID309: Ultrafine, Fine and Coarse Particles in the Ambient Air of Beijing, China (Dane Westerdahl, Xing Wang, Xiao-Chuan Pan, et al.) Speaker: Dane Westerdahl Cornell University, USA	ID347: Characteristics of Ozone and Fine Particle Observed in Urban and Suburban of Nanjing, China (Tijian Wang, Ziqiang Jiang, Xiaoxian Huang, et al.) Speaker: Tijian Wang School of Atmospheric Sciences Nanjing University, China	ID351: Parameters Influencing Analytical Reliability of Sulfur Speciations in Aerosol Samples Using Sulfur K-Edge X-Ray Absorption Near-Edge Structure (S. Pongpiachan, W. N. Phatthalung, W. Klysubun et al.) Speaker: Siwatt Pongpiachan , National Institute of Development Administration, Thailand
ID282: Evolution of Aerosol Properties Before, During After Fog Events Near Paris, France (Darrel Baumgardner, Neda Boyouk and Ping Chen) Speaker: Darrel Baumgardner Droplet Measurement Technologies, USA	ID335: A Supersite Program for Real-time Characterization of Particulate Matter (PM) in Hong Kong (Chak K Chan, NT Lau, Arthur PS Lau, et al.) Speaker: Jianzhen Yu The HK University of Science and Technology, Hong Kong	IDB4a: Encapsulation of Menthol with PEG6000 by Aerosol Spraying of Supercritical CO ₂ Suspension (N. Suankaew, Y. Matsumura and T. Charinpanitkul) Speaker: T. Charinpanitkul Chulalongkorn University, Thailand

Session g (Friday, August 19, 13:30 - 15:00)

13:30-15:00	Ig: Indoor pollution and air quality II	IIg: Nanoparticle and nanoaerosol technology
Room	YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs	Hong Huang , Nanchang University, China Jungang Dong , Xi'an University of Architecture and Technology, China	Y. Matsui , Kyoto University, Japan Zhaolin Gu , Xi'an Jiaotong University, China
13:30	ID370: Chemistry Components in PM _{2.5} and PM ₁₀ for Ambient and Indoor Airs in Campus of Nanchang University, Nanchang City, China (Hong Huang, Junji Cao and Changwei Zou) Speaker: Hong Huang Nanchang University, China	ID292: Nano Particle Inhalation System with Electron Spray Generator (Y. Matsui, S. Kimoto, M. Adachi, et al.) Speaker: Y. Matsui Kyoto University, Japan
13:45	ID168: Ionic Components of Indoor Aerosols at Emperor Qin's Terra-Cotta Museum, Xi'an, China (Jungang Dong, Junji Cao and Ting Zhang) Speaker: Jungang Dong Xi'an University of Architecture and Technology, China	ID199: Numerical Modeling of Nanoparticle Charging Efficiency of Corona-Wire Unipolar Aerosol Charger (Chuen-Jinn Tsai, Chih-Liang Chien, Hui-Lin Chen, et al.) Speaker: Chih-Liang Chien Chiao Tung University, Taiwan
14:00	ID108: The Influence of Children Jumping on the Bed on PM ₁₀ PM _{2.5} PM ₁ Concentration Profile (Wei-Che Houng) Speaker: Wei-Che Houng Kaohsiung Medical University, Taiwan	ID15: Study of Heterogeneous Nucleation upon Nanoparticles in Condensation Particle Counters Effects of Particle and Vapor Composition (Modi Chen, Michel Attoui and Peter McMurry) Speaker: Modi Chen University of Minnesota, USA
14:15	ID113: Concentration of Enterovirus in Air Samples and Exhaled Samples (Pei-Chun Yen, Pei-Shih Chen and Wan-Chi Kuo) Speaker: YiChieh Chen Kaohsiung Medical University, Taiwan	ID197: Morphological Control of Carbon Nanoparticles Generated by Laser Ablation (Ayumi Inoue, Masato Takebayashi, Takafumi Seto, et al.) Speaker: Ayumi Inoue Kanazawa University, Japan
14:30	ID165: Physical Parameters Effect on Ozone Initiated Formation of Indoor Secondary Organic Aerosols with Emission from Cleaning Products (Yu Huang, Kin Fai Ho, Steven Sai Hang Ho, et al.) Speaker: Yu Huang The Hong Kong Polytechnic University, Hong Kong	ID167: Quenching of Zinc Vapor for the Generation of Zinc Oxide Nanoparticles (Chuen-Jinn Tsai and Rodrigo Blanco) Speaker: Rodrigo Blanco Chiao Tung University, Taiwan
14:45	ID246: Identification of Volatile Organic Compounds Emitted from Consumer Products (Sun-Hwa Kim, Thai Phoung Vu, Gwi-Nam Bae, et al.) Speaker: Sun-Hwa Kim Korea Institute of Science and Technology, Korea	ID228: Controlling the Glass Protective Layer on Copper Powders via Spray Pyrolysis (Dae-Soo Jung, Yun-Chan Kang and Seung-Bin Park) Speaker: Dae-Soo Jung Korea Advanced Institute of Science and Technology, Korea

IIIg: Urban Air Pollution III	IVg: Aerosol Radiative Properties and visibility studies	Vg: Fundamentals of aerosol physics and chemistry II
ChangLe Room	AnDing Room	AnYuan Room
Fumo Yang , Graduate University of Chinese Academy of Sciences, China Qingyan Fu , Shanghai Environmental Monitoring Center, China	Dui Wu , Institute of Tropical and Marine MeteorologyGuangzhou, China Steven Sai Hang Ho Hong Kong Premium Services and Research Laboratory, Hong Kong	Guillaume DA , UPEC, France Varong Pavarajarn , Chulalongkorn University Thailand
ID431: Regional Pollution Characteristics and Sources of PM ₁₀ for Five Northern Cities in China (Yinchang Feng, Yingze Tian, Guoliang Shi, et al.) Speaker: Guoliang Shi Nankai University, China	ID305: Determination of Direct Aerosol Radiative Forcing at Pune (G. R. Aher, G. V. Pawar and P. C. S Devara) Speaker: Panuganti C.S. Devara Nowrosjee Wadia College, India	IDA104: Mixing and Water-soluble Characteristics of Particulate Organic Compounds in Individual Urban Aerosol Particles (Weijun Li and Longyi Shao) Speaker: Weijun Li , Shandong University , China
ID338: The Study on Vertical and Temporal Variation of PM ₁₀ of Yantaqu in Xi'an During Winter (Jingbo Zhao, Zhenzhen Mu, Na Xu, et al.) Speaker: Jingbo Zhao Shaanxi Normal University, China	ID410: Aerosol Optical and Radiative Properties Observed by Lidar and Sky-radiometer during a Haze Episode over Hefei (Zhenzhu Wang, Dong Liu, Decheng Wu, et al.) Speaker: Zhenzhu Wang Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China	ID189: Experimental Set-up for Particle Deposition Measurements from Turbulent Flow in Large Ventilation Ducts: Application to Food Industries (Guillaume DA, Evelyne GEHIN, Mourad BEN OTHMANE, et al.) Speaker: Guillaume DA UPEC, France
IDA21a: Characterization of volatile organic compounds (VOCs) around the Chinese Spring Festival and International Labour Day in the urban area of Shanghai, China (Hongli Wang, Changhong Chen, Cheng Huang, et al.) Speaker: Hongli Wang Shanghai Academy of Environmental Sciences, China	ID56: Visual Range Trends in the Yangtze River Delta Region of China during 1981-2005 (Lina Gao, Gensuo Jia, Renjian Zhang, et al.) Speaker: Lina Gao Institute of Atmospheric Physics, China	ID128: Numerical Study on Seasalt Depositions in Niigata Prefecture, Japan (Naoto Kihara, Hiromaru Hirakuchi, Akira Takahashi et al.) Speaker: Naoto Kihara Central Research Institute of Electric Power Industry , Japan
ID404: PM _{2.5} Speciation and Chemical Extinction during the 2008 Beijing Olympics (F. Yang, X. Li, C. Li, et al.) Speaker: Fumo Yang Graduate University of Chinese Academy of Sciences, China	ID158: Simulation of Aerosol Optical Properties and Direct Radiative Forcing with RAMS-CMAQ in East Asia (Xiao Han, Meigen Zhang and Cui Ge) Speaker: Xiao Han Institute of Atmospheric Physics Chinese Academy of Sciences, China	ID392: Spatial and Seasonal Variability of Aerosol Organic Mass-to-Organic Carbon Ratios in Chinese Cities (Li Xing, Tzung-May Fu, Junji Cao, et al.) Speaker: Li Xing Peking University, China
IDB233: Influence of intersection in chemical composition of atmospheric particulate matters observed at roadside environment in urban area. (Kyung-Hwan Kim) Speaker: Kyung-Hwan Kim Saitama University, Japan	ID387: Reconstructed Light Extinction Coefficient by Chemical Compositions of PM _{2.5} in Winter in Urban Guangzhou, China (Jun Tao, Renjian Zhang, Junji Cao, et al.) Speaker: Jun Tao South China Institute of Environmental Sciences, China	ID322: Effects of Gel Network on the Formation of Mesoporous Titania Assisted by Resorcinol/Formaldehyde Gel (Mananya Thovicha and Varong Pavarajarn) Speaker: Varong Pavarajarn Chulalongkorn University, Thailand
ID334: Characteristics on Air Quality during the 2010 Shanghai Expo (Qingyan Fu, Haiping Wei, Yanmin Huang, et al.) Speaker: Qingyan Fu Shanghai Environmental Monitoring Center, China	ID124: Characteristics of Carbon Aerosol Spectrum and Water Soluble Components Spectral in South China during 1988-2010 Period (Dui Wu) Speaker: Dui Wu Institute of Tropical and Marine MeteorologyGuangzhou, China	ID183: Polluted Dust Optics: Case of Semi-external Mixing (S. K. Mishra, S. N. Tripathi, S. G. Aggarwal, et al.) Speaker: S. G. Aggarwal National Physical Laboratory, India

Session h (Friday, August 19, 15:30 - 16:30)

15:30-16:30	Ih: Aerosol Metrology	IIIh: Ultrafine Particle and Nanoparticle
Room	YongNing Ballroom 1	YongNing Ballroom 2
Session co-chairs	Shankar G. Aggarwal , National Physical Laboratory, India Daizhou Zhang , Prefectural University of Kumamoto, Japan	Yan Yin , Nanjing University of Information Science and Technology, China Kyung Hwan Kim , Saitama University, Japan
15:30	ID288: Overlooking Aerosol Metrology: A Big Hole in Atmospheric Aerosol Measurement Studies (Shankar G. Aggarwal and Prabhat K. Gupta) Speaker: Shankar G. Aggarwal National Physical Laboratory, India	ID110: Nanoparticle Characteristics at Lulin Site, Taiwan (Sheng-Chieh Chen, Yi-Hong Hong and Chuen-Jinn Tsai) Speaker: Chih-Liang Chien Chiao Tung University, Taiwan
15:45	IDA11a: The Method to Control the Size of Generated Particles from a Spark Discharger by the Ion Bombardment with the Multi-Ionizing (Kyu-Tae Park and Jung-Ho Hwang) Speaker: Kyu-Tae Park Yonsei University, Korea	ID244: Diurnal Variation of Chemical Composition in Ultrafine and Fine Particles in Urban Area, Japan (Kyung-Hwan Kim, Takayoshi Okamoto, Shimpei Sato, et al.) Speaker: Kyung-Hwan Kim Saitama University, Japan
16:00	ID383: Comparison Study of Three Plutonium Aerosol Monitoring Techniques for Continuous Monitoring of the Filtered Exhaust Gas in a Plutonium Reprocessing Facility (Yongyang Su, Zhiming Li, Jiang Xu, et al.) Speaker: Yongyang Su Northwest Institute of Nuclear Technology, China	ID398: Distribution Characteristics of Nano-TiO ₂ Aerosol at Work Place (Yi Yang, Ping Mao, Chunlan Xu, et al.) Speaker: Yi Yang , Nanjing University of Science and Technology, China
16:15	IDA31a: Advances in the fine scale simulation of urban wind environment (Zhaolin Gu, Yunwei Zhang, Jianying Jiao) Speaker: Zhaolin Gu Xi'an Jiaotong University, China	IDA408: The Relationship between Aerosol and CCN measured on a High Mountain in Southeast China (Y. Yin, K. Chen, C. Chen, et al.) Speaker: Yan Yin Nanjing University of Information Science and Technology, China

IIIh: Bio-aerosols, biodefense, inactivation of bioagents II	IVh: Biomass Burning and Biofuels	Vh: Source Apportionment II
ChangLe Room	AnDing Room	AnYuan Room
Sergey A. Grinshpun , University of Cincinnati, USA Gehui Wang , Institute of Earth Environment Chinese Academy of Sciences. China	Min Shao , Peking University, China Kin Fai Ho , The Chinese University of Hong Kong	Mei Zheng , Peking University, China Siwatt Pongpiachan , Prince of Songkla University, Thailand
ID337: A New Model for Estimation Emissions of Biogenic Volatile Organic Compounds (BVOCs) from Hyytiälä in the Southern Finland (Qingyang He and Michael Boy) Speaker: Qingyang He University of Helsinki, Finland	IDA435: Modifications in Physicochemical Properties of Wood Combustion Aerosols Due to Chemical Aging (Zhijun Wu, L. Poulain, O. Böge, et al.) Speaker: Zhijun Wu Leibniz Institute for Tropospheric Research Leipzig, Germany	ID315: Source Apportionment of Primary and Secondary Organic Aerosols at Urban and Rural Locations of Beijing (Song Guo, Min Hu, Weiwei Hu, et al.) Speaker: Song Guo Peking University, China
ID77: Effects of Microwave Irradiation on Culturability and Diversity of Biological Aerosols of Different Sizes in Different Environments (Yan Wu and Maosheng Yao) Speaker: Yan Wu Peking University, China	ID123: Polybrominated Diphenyl Esters in the Ambient Air of Southern Taiwan during the Biomass Burning Periods (Shun-Shiang Chang, Wen-Jhy Lee, Lin-Chi Wang, et al.) Speaker: Shun-Shiang Chang Cheng Kung University, Taiwan	ID384: Sources of Carbonaceous Aerosol in the Pearl River Delta Region and Hong Kong (Mei Zheng, James Schauer, Peter K.K. Louie, et al.) Speaker: Mei Zheng Peking University, China
ID76: Differences in Positively and Negatively Charged Bacterial Aerosol Diversity in Indoor and Outdoor Environments (Fangxia Shen and Maosheng Yao) Speaker: Fangxia Shen Peking University, China	ID388: Injection Heights of Springtime Biomass Burning Plumes in Southeast Asia (Yue Jian and Tzung-May Fu) Speaker: Yue Jian Peking University, China	IDA1a: Application of PMF to AMS Data Observed at Fukue Island, Japan (Satoshi Irei, Akinori Takami, Toshihide Hikida, et al.) Speaker: Satoshi Irei National Institute for Environmental Studies, Japan
ID13: How Combustion of Energetic Materials Affects Viability of Aerosolized Bio-agents (Sergey A. Grinshpun, Mihael Yermakov, Reshma Indugula, et al.) Speaker: Sergey A. Grinshpun University of Cincinnati, USA	IDA8a: Emission Inventory of Air Pollutants from Biomass Burning in the Pearl River Delta Region, China (Yisheng Zhang and Min Shao) Speaker: Yisheng Zhang Peking University, China	ID353: Multivariate Analysis of Particulate Polycyclic Aromatic Hydrocarbons in Bangkok Atmosphere (Siwatt Pongpiachan, Mattanawadee Hattayanone, Charnwit Kositanone, et al.) Speaker: Siwatt Pongpiachan School of Social and Environmental Development National Institute of Development Administration, Thailand

Poster Session I: Wednesday, August 17, 2011, 16:30-18:00 Second Floor Foyer

No.	Title	Author(s)	Affiliation
1	ID1 Lung Generated Aerosols	Wan-Ting Lin, Sheng-Hsiu Huang, Yu-Mei Kuo, et al.	Taiwan University, Taiwan
2	ID2 Control of Indoor Fungal Bioaerosols by Using Ozone	Hsiao-Lin Huang and Jen-Hsuan Tai	Institute of Industrial Safety and Disaster Prevention Chia Nan University of Pharmacy and Science , Taiwan
3	ID8 A Case Study of the Impacts of Dust Aerosols on Surface Atmospheric Variables and Energy Budgets in a Semi-Arid Region of China	Xiaolu Ling, Weidong Guo, Lei Zhang et al.	Lanzhou University, China
4	ID12 Contamination Assessment of Copper, Lead, Zinc and Chromium in Dust Fall of Jinan, NW China	Suping Feng	Shandong University, China
5	ID17 Chemical Characteristics of Inhalable Atmospheric Aerosols in Urumqi During Winter	Dilnur Talip, Yalkunjan Tursun, Igawa Manabu et al.	Xinjiang University, China
6	ID21 Characterization of Optical Properties and Chemical Compositions of Ambient Aerosols in Shanghai	Yong Tang	Fudan University, China
7	ID23 The Impact of the Pollution Control Measures for the 2008 Beijing Olympic Games on the Chemical Composition of Aerosols	Tomoaki Okuda, Shinichiro Matuura, Daisuke Yamaguchi, et al.	Keio University, Japan
8	ID24 The Measurement of the Size Distribution of Cigarette Mainstream Smoking by ELPI	Yong Jin, Shitai Wang, Jinyun Liu, et al.	China Tobacco Hunan Industrial Co Ltd., China
9	ID25 From the Risk/Benefit Aspect to Determine the Optimal Operation Condition for Simultaneously Controlling the Emissions of PCDD/Fs and PAHs from the Iron Ore Sintering Process	Perng-Jy Tsai, Yu-Cheng Chen, Jin-Luh Mou, et al.	Cheng Kung University, Taiwan
10	ID27 Single-particle Characterization of Wintertime Atmospheric Particles Collected at Taiyuan City, China on Haze and Non-haze Days	Hong Geng, Shila Maskey and Chul-Un Ro	Shanxi University, China
11	ID36 Comparison of Source Contributions to Urban Ultrafine Particles and Other Pollutants	Yungang Wang, Philip K. Hopke, David C. Chalupa et al.	Clarkson University, USA
12	ID39 Impact of Air Pollution from North Korea to Seoul	In-Sun Kim, Ji-Yi Lee and Yong-Pyo Kim	Ewha Womans University, Korea
13	ID45 Elemental Composition of the Atmospheric Particle in Beijing during the Traffic Restriction and Un-restricting Period: Effectiveness of Traffic Restriction Method	Renjian Zhang, Zhenxing Shen, Leiming Zhang et al.	Institute of Atmospheric Physics Chinese Academy of Sciences, China
14	ID57 Size Distributions of Polycyclic Aromatic Hydrocarbons in Diesel Exhaust Particles Collected by Using a Nanosampler	Keiko Shibata, Nobuhiro Yanagisawa, Kenji Enya, et al.	Isuzu Advanced Engineering Center LTD., Japan
15	ID58 Characterization and Source Apportionment of Submicron Aerosols at a Regional Site in Pearl River Delta of China Using an Aerodyne High-Resolution Aerosol Mass Spectrometer	Z.-H. Gong, L.-Y. He, X.-F. Huang, et al.	Peking University Shenzhen Graduate School, China
16	ID81 Modification of Dust Particles through Heterogeneous Reactions Uptake of SO ₂ over Chinese Continent during Dust Storm Episodes	Weijun Li and Longyi Shao	Shandong University, China
17	ID85 On-line Analysis and Mass Concentration Characters of Nitrate in Aerosol PM ₁₀ in Beijing	Kai Zhang, Yuesi Wang, Tianxue Wen, et al.	Chinese Research Academy of Environmental Sciences, China
18	ID90 An Improved Thermal Oxidation Method for the Quantification of Organic and Black Carbon in Soot Based on the Difference of Pyrolytic Behavior	Mingyu Jiang, Zhuling Chen, Xinmei Wang et al.	Fuzhou University, China
19	ID91 The Emission Factor and Chemical Characteristics of Particulate N-alkanes Originated from the Combustion of Different Fossil Fuel and Biomass	Gongshi Lin, Yiqing Wu and Fengfu Fu	Fuzhou University, China
20	ID98 Investigation about the Association of Children's Lung Function and Air Pollution in Kaohsiung City	Yu-Ju Ke, Chih-Sean Ou, Pei-Shih Chen	Kaohsiung Medical University, Taiwan
21	ID101 Indoor Air Monitoring in Day-care Centers	Yu-Ju Ke, Yi-Lien Lee and Pei-Shih Chen	Kaohsiung Medical University, Taiwan
22	ID102 Real-time Monitoring of PM _{2.5} in Primary School	Yi-Chieh Chen and Pei-Shih Chen	Kaohsiung Medical University, Taiwan
23	ID103 The Distribution of PM ₁₀ , PM _{2.5} , and PM ₁ Concentrations in Primary School in Kaohsiung City	Yi-Chieh Chen and Pei-Shih Chen	Kaohsiung Medical University , Taiwan

Session Chair: Shun-cheng Lee, The Hong Kong Polytechnic University, Hong Kong

No.	Title	Author(s)	Affiliation
24	ID106 Airborne Mycobacterium tuberculosis Profiles in a Hospital with a Nosocomial TB outbreak	Wei-Che Houn	Kaohsiung Medical University , Taiwan
25	ID107 Exposure Assessment of Ozone in Elementary School in Kaohsiung, Taiwan	Wei-Che Houn	Kaohsiung Medical University , Taiwan
26	ID115 Characterization of the Bacterial and Fungal Bioaerosols	Pei-Chun Yen, Pei-Shih Chen and Chih-Sean Ou	Kaohsiung Medical University , Taiwan
27	ID116 Characterization of Organic Particles from Incense Burning Using a High-resolution Time-of-flight Aerosol Mass Spectrometer	Yongjie Li and Chak-Keung Chan	Hong Kong Univ. of Sci. and Tech. , Hong Kong
28	ID121 Physicochemical Fingerprints of Particulate Matter Emitted from Various Sources in Kin-Xia Region	Chung-Yi Wu, Tsung-Chang Li, Chung-Shin Yuan, et al.	Sun Yat-sen University , Taiwan
29	ID139 Field Test for Fine Dust Collection in an MVAC of Metro Subway	Dong-Ki Lee, Yun-Hui Lim and Young-Min Jo	Kyunghee University , Korea
30	ID153 Method for Combining Electrical Mobility and Optical Size Distributions for Wide Range Particle Size Distribution Measurement	Hee-Siew Han, Avula Sreenath, Nathan T. Birkel et al.	TSI, USA
31	ID159 The Properties of Water-soluble Ions in the Asian Brown Cloud: Observation over the Mountain Lulin site in Taiwan	Ming-Tung Chuang, Chuang-Te Lee and Neng-Huei Lin	Central University , Taiwan
32	ID180 The Research on the CCN Activation of Aerosols in Shanghai	Chunpeng Leng	Fudan University , China
33	ID204 Particulate Mercury and Gas-solid Partition of Gaseous Elemental Mercury in Kaohsiung Area	Yi-Shiu Jen, Chung-Shin Yuan and Chang-Gai Lee	Tajen University , Taiwan
34	ID206 Numerical Investigation of Electrostatic Effect on Indoor Particle Resuspension Due to Human Activity	Xinyu Zhang, Goodarz Ahmadi, Jing Qian, et al.	State University of New York at Canton , USA
35	ID213 Aircraft Measurements of Aerosol Composition over Eastern Coastal, Yangtze River Areas and Pearl River Delta of China	Lihong Ren, Wei Wang, Jianhua Chen, et al.	Chinese Research Academy of Environmental Sciences , China
36	ID222 Investigation of Microbial Contaminations and Building Physical Characteristics in Day Care Centers	Hyeun-Jun Moon, Soo-Hyeun Yang and Yoon-Sung Hwan	Dankook University , Korea
37	ID224 Characteristics and Sources of Elements in Atmospheric Particles before and in Heating Period of Beijing	Lingda Yu, Guangfu Wang, Guanghua Zhu et al.	Beijing Normal University , China
38	ID251 Emission of Particulate Polycyclic Aromatic Hydrocarbons from Various Combustion Sources in China	Xinghua Li, Shuxiao Wang, Duan Lei et al.	Beihang University , China
39	ID266 Components of PM _{2.5} and Its Source Apportionment by PFA from 2000 to 2001 in Shanghai	Guangli Xiu, Qi Ying, Donald Lucas, et al.	East China University of Science & Technology , China
40	ID267 Different Characteristics of Carbonaceous Components in Size-Segregated Particles between a Roadside and a Suburban Site	Linfa Bao, Masami Furuuchi, Mitsuhiro Hata, et al.	Kanazawa University , Japan
41	ID286 Carbonaceous, Inorganic, Some Molecular Markers and Stable Isotopic Compositions in the Mumbai Aerosols for the Implications of Their Sources and Atmospheric Processing	Shankar G. Aggarwal, Kimitaka Kawamura, Govindraj S. Umarji, et al.	National Physical Laboratory , India
42	ID287 Metals in Aerosol as Potential Tracers for Waste, Fossil Fuel, Biomass/Biofuel Burning and Dust Sources	Shankar G. Aggarwal, Sudhanshu Kumar, Rajeev K. Saxena, et al.	National Physical Laboratory , India
43	ID289 Fine and Coarse Particle Mass Distributions in New Delhi	Khem Singh, Arvind K. Jha, Shankar G. Aggarwal, et al.	National Physical Laboratory , India
44	ID298 Characteristics and Source Regions of the Biomass Burning Tracer Levoglucosan in Spring at Four Background Sites in South China	Zhisheng Zhang, Chuen-yu Chan, Guenter Engling, et al.	Sun Yat-sen University , China

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No.	Title	Author(s)	Affiliation
45	ID325 Characterization of Water-soluble Organic Carbon in Ash Samples from a Coal Combustion Boiler	Seung-Shik Park, Ja-Hyun Kim and Jae-Uk Jeong	Chonnam National University , Korea
46	ID326 Characterization of Hydrophilic and Hydrophobic Fractions of Water-soluble Organic Carbon in PM _{2.5} at an Urban Site	Seung-Shik Park, Jae-Uk Jeong and Ja-Hyun Kim	Chonnam National University , Korea
47	ID329 The Study for Inorganic Compounds in Ambient Aerosols by FTIR in Hefei	Xiuli Wei, Minguang Gao, Jianguo Liu, et al.	Hefei Institutes of Physical Science , China
48	ID356 Observational Study of Black Carbon in Urumqi in Winter of 2009	Xinchun Liu	Institute of Desert Meteorology, CMA , China
49	ID357 The Features of Ionic Components of TSP and Factors Analysis in Urumqi	Qing He	Institute of Desert Meteorology, CMA, Urumqi , China
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63	IDB467 Rare Earth Composite Materials for the Reduction of Ammonia in Biomass Gasification. Part 2. Reactivity and Characterization in Selective Catalytic Oxidation Processes	Chang-Mao Hung	Yung-Ta Institute of Technology and Commerce , Taiwan
64	IDA14a 3-dimensional Simulation of Micro Virtual Impactor	Y.H. Joe, J.H. Park and J. Hwang	Yonsei University, Korea
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70	ID127 Simultaneous Measurement of Particle Optical Extinction and Scattering Using the CAPS Single Scattering Albedo Monitor	Andrew Freedman, Timothy B. Onasch, Paola Massoli, et al.	Aerodyne Research Inc., USA
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73	ID135 Wind Tunnel Study of Sand Emission Rate by PIV	Xiaohui Lv, Lei Guo and Ning Huang	Lanzhou University, China
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75	ID142 Environmental Benefit to Enhance the Dust Filtration in a Subway Ventilation Chamber	Shan Huang, Hyun Hee Lim, Ju Yeoel Lee, et al.	Kyunghee University, Korea
76	ID166 Unsteady SO ₂ Absorption by a Moving Water Aerosol with Chemical Dissociation	Ke-Miao Lu, Wei-Hsin Chen, Yuan-Yi Chen, et al.	Cheng Kung University, Taiwan
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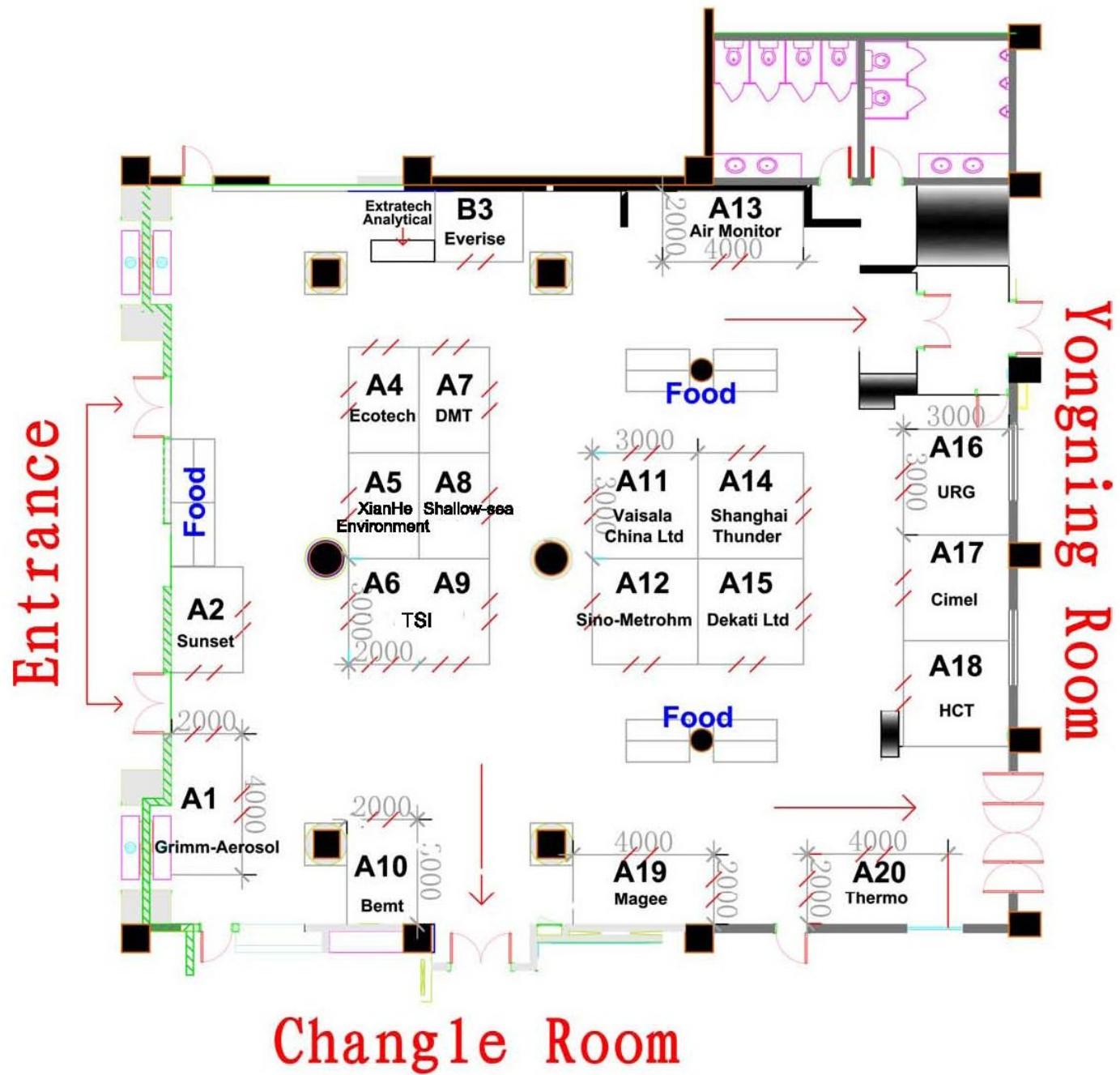
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103	ID236 Efficiency of Dust Removal Device in Subway Cabin	Jong-Bum Kim, Soon-Bark Kwon, Seok Namgoong, et al.	Korea Railroad Research Institute , Korea
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Session Chair: Shankar G. Aggarwal, National Physical Laboratory (NPL), CSIR, India

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111	ID324 Fabrication of Core-Sheath Fibers by Electrospinning for the Formation of Flexible Carbon Nanofibers	Chanwit Apibanborirak, Chinarat Tongtaow, Farkfun Duriyasart, et al.	Chulalongkorn University, Thailand
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A1	Grimm-Aerosol	Changjun Tian	www.grimmaerosol.com	Germany
A2	Sunset	Ben Cary	http://www.sunlab.com/	USA
A4	Ecotech	Melanie Chester	www.ecotech.com	Australia
A5	XianHe Environment	Jianghong Ma	www.sailhero.com	China
A6	TSI	Robert Zhou	www.tsi.com	USA
A9				
A7	DMT	Darrel Ba-numgardner	www.dropletmeasurement.com	USA
A8	Shallow-sea	Yu Zhang	www.shallow-sea.com	USA
A10	BMET	Annie Chen	www.bmet.cn	China
A11	Vaisala	Mark Ma	www.vaisala.com	Finland
A12	Sino-Metrohm	Zhaohui Chen	www.metrohm.com	Switzerland
A13	Air Monitor	Jason Yu	http://www.airmonitor.cn	China
A14	Shanghai Thunder	Peiling Wu	http://www.leder.com.tw/Website/index.aspx	Taiwan
A15	Dekati Ltd.	Hunan Liu	http://dektati.com/cms/	Finland
A16	URG	Shere Stone	www.urgcorp.com	USA
A17	Cimel	Yao Wei	http://www.cimel.fr	France
A18	HCT	Jae woo Ahn	http://www.hctpd.com	Korea
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A20	Thermo	Abbie Henderson Martin	www.thermo.com	USA
B3	Everise	Hui Li	http://www.everisetech.com.cn/	China

About the Exhibitors

Grimm
Booth A1

Germany
www.grimmaerosol.com



Grimm Aerosol Technik GmbH & Co. KG was established over 20 years ago by Dipl.-Ing. Hans-Juergen Grimm in Bavaria/Germany. It is a leading worldwide company in particle measurement with innovative developments. Grimm offers solutions for emission and immission monitoring, IAQ/workplace safety, nano particle counters and sizers, filter testing, and aerosol generators. The products and technologies are used for environmental monitoring, indoor air quality, engine emission testing, pharmaceutical, epidemiological studies and quality control.

Sunset Laboratory Inc.
Booth A2
USA
<http://www.sunlab.com/>



Sunset Laboratory Inc.

Sunset Laboratory Inc. has specialized in the analysis of air pollution for carbon aerosols since 1984. As well as performing the OCEC analysis, Sunset Laboratory also provides instrumentation for carbon aerosol analysis in the laboratory environment or in the field, with our semi-continuous carbon aerosol instrument. Our clients include researchers working for government regulatory agencies, private companies, commercial laboratories, and universities.

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Australia
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Ecotech also manufactures a wide range ambient air analysers for the measurement of criteria pollutants such as O₃, CO, NO₂ and SO₂ as well as calibration systems for its analysers, and writes software for the capture, transmission and analysis of data for validation and reporting.

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China
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USA
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TSI Incorporated serves a global market by investigating, identifying and solving measurement problems. As an industry leader in the design and production of precision measurement instruments, TSI partners with research institutions and customers around the world to set the standard for measurements relating to aerosol science, air flow, indoor air quality, fluid dynamics and biohazard detection. TSI® serves the needs of industry, governments, research institutions, and universities, with applications ranging from pure research to primary manufacturing. With headquarters based in the U.S. and field offices throughout Europe and Asia, TSI has established a worldwide presence in the markets we serve. Every day, our dedicated employees turn research into reality.

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USA
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Droplet Measurement Technologies (DMT) of Boulder, Colorado, U.S.A. is a leader in aerosol and cloud physics instrumentation. DMT instruments are used by scientists worldwide to characterize aerosols, dust, black carbon, volcano ash, sprays, cloud droplets, ice crystals, fog, precipitation, and cloud condensation and ice nuclei for applications in aerosol research, air quality monitoring, and cloud and precipitation studies. Visit our booth to see the new Photoacoustic Extinctiometer (PAX), which measures aerosol light absorption and scattering from a single instrument, and provides Black Carbon (BC).

Shallow-Sea Technology Ltd.
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BMET
Booth A10
China
[http://www.bmet.cn/](http://www.bmet.cn)



Beijing Saak-Mar Environment Instrument Ltd. is an environmental Integration company, specializing in ambient air monitoring system in China for over 10 years. We supplied a number of ambient air monitoring stations, gas analysers and aerosol equipment for EPB, CMA, universities/ Institutes, Industrial enterprises all over. Beijing Saak-Mar Environment Instrument Ltd is an ISO9001 endorsed company. We design, manufacture, supply and maintain a vast selection of ambient air monitoring systems. For various applications, our comprehensive services are highly regarded by our valuable customers.

VAISALA
Booth A11
Finland
www.vaisala.com



Vaisala develops, manufactures and markets products and services for environmental and industrial measurement. Vaisala's markets are global. The mission is to provide basis for better quality of life, environmental protection, safety, efficiency and cost savings. The major customer group are meteorological and hydrological institutes, aviation organizations, defense forces, road and rail organizations, weather related private sector, system integrators and industry worldwide. Vaisala's competitiveness in environmental measurement is based on premium value products. The company is the global market leader in many of its core businesses.

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Switzerland
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Booth A13
China
<http://www.airmonitor.cn>



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Shanghai Thunder
Booth A14
Taiwan
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DEKATI
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Finland
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Dekati Ltd. is a leading manufacturer of real-time aerosol measurement instruments and sample conditioning devices. Dekati provides particle measurement solutions for automotive, combustion, tobacco, nanotechnology and air quality applications. Dekati product line ranges from real-time instruments such as the Electrical Low Pressure Impactor (ELPI+) to gravimetric impactors and complete sample conditioning systems. The broad range of instruments gives a definite edge to solve any and all of your fine particle measurement and sampling needs.

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USA
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France
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Korea
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Magee Scientific
Booth A19
USA
<http://mageesci.com/index.htm>



Magee Scientific is the originator of the Aethalometer(R), the technology most widely used in the world for real-time measurement of the Black Carbon component of aerosols. Various models of Aethalometer offer instruments for fixed, portable or personal-monitoring applications; with analysis at 1, 2 or 7 optical wavelengths; and with time resolutions as rapid as 1 Hz. The Optical Transmissometer measures the BC content of previously-collected filter samples. Applications include routine Air Quality monitoring for protection of public health; epidemiological studies of personal exposure; measurement of source emissions from stacks and exhaust pipes; and profiling of the atmospheric burden of BC as data input to calculations of Climate Change.

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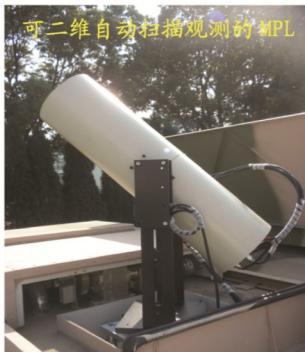
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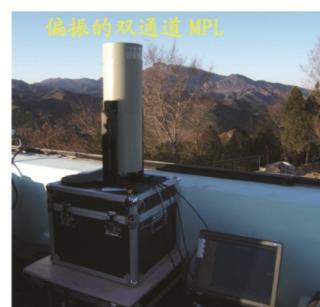
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中科院合肥物质科学研究院大气光学中心在1990年开始从事大气探测激光雷达的研制



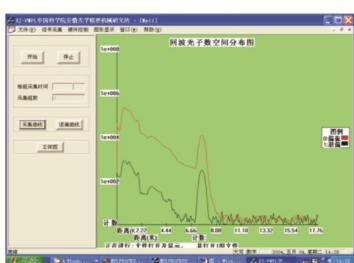
与应用研究。2001年研制成功我
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(MPLA1/T)；2004年已有偏振
微脉冲激光雷达(PMPL)出售；
2009年双波长偏振微脉冲激光
雷达(DPMPL)研发成功。我们的
系列MPL特点是：接收和发
射光学系统为共用的透射式结
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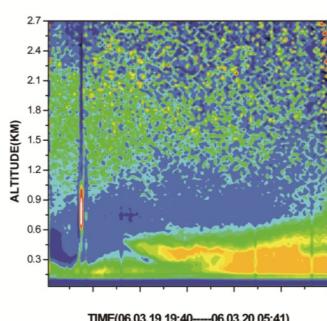
Common Specifications			
	Single Wavelength	Polarization	Dual Wavelength
Wavelength/Pulse Energy	1064nm/532nm $\geq 10 \mu J$	532nm $\geq 10 \mu J$	532nm+1064nm/ $10 \mu J + 20 \mu J$
Rep. Rate/ Pulse width		1---2500Hz / 10ns	
Signal receiving	Single channel	Dual channels	Three channels -532nm for polarization
Range / Resolution	0---30km	/ Spatial resolution 18m (min)	Temporal resolution 1s(min)
Environment Temp	5°C to 35°C	for operation	
Operating model	Continuous operation (full-time)		
Scanner (option)	Horizontal 0° — 360° Vertical 0° — 90° Scan speed 20° / s (max)		
Temperature box (option)	The MPL operating environment Temp. extended: -15°C to 40°C		
Service	Data analyse, database,lidar net, soft		



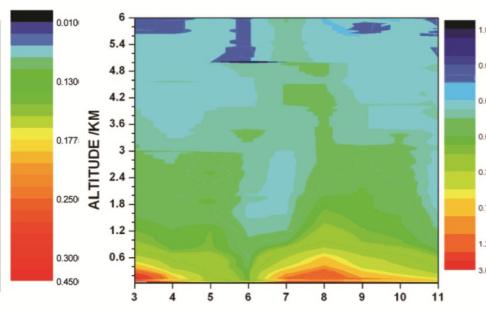
Signal profiles for dual channel



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迷你型空气采样器可专门用来采集大气中的悬浮颗粒，其流速可达 5 升 / 分钟 (LPM)。该采样器体积小，重量轻，适合于在不同的地方进行采集。除了用交流电源供电之外，这个采样器还可使用可充电式 12V 直流锂离子电池供电，使用电池时工作时间可超过 24 小时。在没有交流电源的偏僻地点，就可使用该采样器进行远距离采样了。

通过使用不同的采样器冲撞喷嘴，我们就可以用这个迷你型空气采样器采集 TSP , PM10 , PM2.5 或者 PM1 了。脉宽调制式 (PWM) 控制组件严格控制了空气的流速，它包括一个孔口和一个差分压力传感器，可用来监测流速。精确的流速控制对采样器的精准切割起着至关重要的作用。

MSP 310 粒度分级式大气采样器



采样原理

采样空气以 300LPM 的流量进入全方位，圆柱型入口。空气动力学当量直径大于 10 微米的颗粒将被切割器切割掉。颗粒小于 10 微米的采样空气进入下面的 PM2.5(PM1 可配) 分级器。在 2.5-10 (1.0 到 10 可配) 微米范围内的颗粒被收集在 62 毫米 x 165 毫米 (2.5 " × 6.5 ") 的过滤膜上，那些小于 2.5(1.0 可配) 微米的颗粒物收集在 200 毫米 × 250 毫米 (8 " × 10 ") 的过滤膜上。通过滤膜的采样空气，继续通过聚氨酯泡沫取样器，空气中的挥发性有机化合物被收集。



PM10、PM2.5(1.0)&VOC

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- 用于挥发性有机物和颗粒分离的气相采样
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Institute of Earth Environment, Chinese Academy of Sciences

Established in Xi'an through the efforts of Professors Tunghseng Liu, Zhisheng An, and others in 1999, IEE-CAS is an extension to the State Key Laboratory of Loess and Quaternary Geology (SKLLQG), CAS. IEE-CAS researchers study regional and global climatic and environmental changes at different timescales to better define and implement sustainable environmental practices.

IEECAS is composed of four research units: 1) the Paleo-Environment Division; 2) the Recent Environmental Processes Division; 3) the Aerosol & Environment Division (under development for Key Lab of Aerosol, Chinese Academy of Sciences); and 4) the Xi'an Accelerator Mass Spectrometer (AMS) center. IEECAS employs 80 scientists and technicians and a staff of 95. There are more than 50 visiting scientists, 90 graduate students, and ~8 post-doctoral fellows. IEECAS is equipped with a 3 MV AMS, 2G-755R U-channel Superconducting Rock Magnetometers, MAT-252 and Delta plus, Laser Particle Analyzer, XRF, SP2, HTDMA, Carbon Analyzers, TL/OSL and Lenovo 1800 Cluster computers. IEECAS cooperates with academic institutions from the U.S., U.K., France, Germany, Austria, Canada, Japan, Australia, the Netherlands, Korea, Russia, and Sweden, among other countries. The institute is gaining in reputation as a world-renowned center for environment research and training.



Post-Conference Study Tour (August 20, 2011, 07:30—17:30)

Arranged by the Conference organizers, this study tour includes Emperor Qin's Terra-cotta Warriors and Horses and Han Yangling Museums. The price is U.S.\$55 (RMB365) per person. English-speaking guide, entrance ticket, transportation and a lunch are included. **It's free if you have full registration of the conference.** A special emphasis of the tour is protection methods from environmental threats to cultural artifacts.



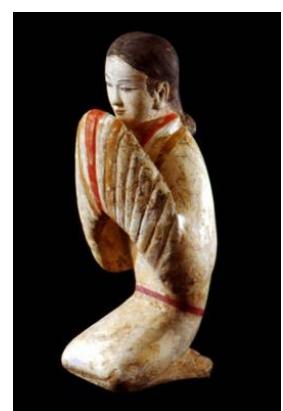
Terra-cotta Warriors and Horses Museum

Located 30 km east of Xi'an, Emperor Qin's Terracotta Warriors and Horses Museum, "the Eighth Wonder of the World" is a world cultural heritage site. It is among the top archaeological excavations of the 20th century.

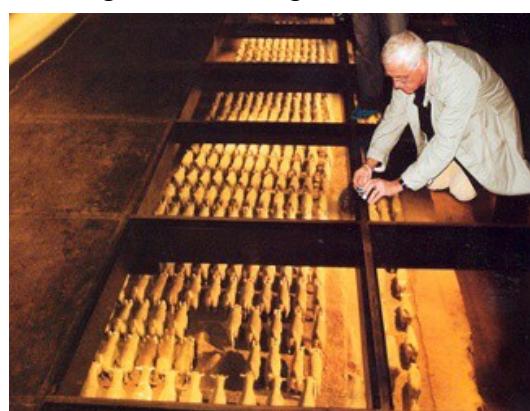
Constructed more than 2,200 years ago to protect the afterlife of the Emperor Qin Shi Huang, the terra-cotta army includes > 7,000 life-sized warriors, horses, chariots, and weapons. It was discovered by peasants digging a well in 1974. The original paint has worn off, and the bronze-age weapons (including swords, arrows, and lances) have eroded. The most impressive aspect of the site is the scale of the collection even though only 20% of the statues have been unearthed. The unique faces of the warriors are said to be modeled after the artists who sculpted them and the Imperial Guards of the time.

Han YangLing Museum

Located ~30 km east of Xi'an near the Xianyang airport, Han YangLing is the mausoleum and garden of Liuqi, the fourth emperor of the Western Han Dynasty. It has been dated to 2,000 years ago, a time regarded as the golden age of Imperial China. The archaeological investigation at YangLing started in 1970, but the explorations were enhanced during the 1990s when highways were built to the Xianyang airport. The museum, built in 1999, houses a large number of precious relics inside hermetically sealed enclosures.



This large-scale underground museum uses advanced technology to protect the cultural relics. The pits are encased with special glass that maintains the environment similar to what it was before excavation. Suspended glass corridors allow visitors to take a closer look at the painted pottery warriors, animals, chariots, and horses.



Acknowledgements

The 7th Asian Aerosol Conference was cosponsored by Asian Aerosol Research Assembly (AARA), Chinese Academy of Sciences (CAS), the Institute of Earth Environment, Chinese Academy of Sciences (IEECAS), Chinese Association of Aerosol Science and Technology (CAAST), Xi'an Jiatong University, and the Institute of Atmospheric Physics, Chinese Academy of Sciences. Additional financial support was provided by the National Natural Science Foundation of China (NSFC), the K.C. Wong Education Foundation, the State Key Lab of Loess & Quaternary Geology, and Xi'an Environmental Monitoring Center.

Many people contributed to the success of this international conference, and most of them are on a voluntary basis. I would like to my sincere expressions for the members of the Scientific Steering Committee, session co-chairs, local organizing committee, and the authors of the conference Proceedings for their valuable time and efforts. These are the key participants who attracted others to join the conference, and made the conference successfully.

The technical and secretarial staff at IEECAS and Xi'an Jiaotong University dedicated countless hours for organizing the conference. Ms. Jiamao Zhou, Mr. Eric Tian, Ms. Wenting Dai, Ms. Zhuzi Zhao, Prof. Yongming Han, Prof. Zhenxing Shen, Prof. Gehui Wang, Dr. Feng Wu, Dr. Chongshu Zhu, Dr. Ningning Zhang, Dr. Tafeng Hu, Dr. Jianjun Li, Dr. Suixin Liu, Ms. Ting Zhang, Ms. Hongmei Xu, Mr. Xu Guo, Ms. Jing Zhao, Mr. Nan Li, Ms. Suxia Yang, Ms. Qingyang He, Ms. Xinyi Niu and Ms. Haiyan Ni, Mr. Ping Wang, Mr. Changlin Zhan, Ms. Bianhong Zhou, Mr. Baocheng Zhang, Mr. Chunlei Cheng, Mr. Chong Wei, Mr. Nanying Cao, Ms. Ning Liu, Ms. Xin Wang, Ms. Li Liu, Ms. Yufan Sun, Mr. Ji Chen, Mr. Zhihai Tan, Ms. Xiaoli Su, Mr. Tao Sun, Mr. Qiyuan Wang, Mr. Kun Zhang merit the recognition for their untiring efforts on our behalf. We specially thank Dr. Kin Fai Ho for his efforts in compilation of the conference program, Mr. Garnett Xiao for establishment and maintenance of the conference Web site. Ms. Feng Annie Chen and Mr. Tom Merrifield for facilitating the vendor exhibition of the conference, and the Sponsors and Exhibitors for providing the support of the conference.

To enhance our success of the conference, all of the participants are encouraged to submit papers by October 31, 2011, for peer-reviewed publication in special issues of the Journal of Aerosol and Air Quality Research (AAQR) and the Journal of Particuology .

Junji Cao, Ph. D.
Technical Program Chair

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