

## Detailed Workshop Programme – Oral Session

DAY 0		Monday, 27 November		Venue: Z197
9:00-18:00	On-site Registration			
DAY 1		Tuesday, 28 November (Morning)		Venue: Z207
Opening Ceremony				
8:30-8:40	FCE Dean Address (Prof. Xiangdong Li)			
8:40-8:45	RILS Director Address (Prof. Xiaoli Ding)			
8:45-8:50	Chairman Address (Prof. Hai Guo)			
8:50-9:20	Group Photo			
Session Chair: Prof. Jianmin Chen and Prof. Hai Guo				
9:20-10:00	<b>Prof. Guibin Jiang</b> <i>Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences</i>	<b>Plenary Address</b> - New pollutants study in China: history & future perspective		
10:00-10:40	<b>Prof. Donald R Blake</b> (online) <i>University of California, Irvine, USA</i>	<b>Plenary Address</b>		
10:40-11:00	Tea Break (20 min)			
Session Chair: Prof. Shuxiao Wang and Prof. Daiqi Ye				
11:00-11:40	<b>Prof. Kebin He</b> (online) <i>Tsinghua University</i>	<b>Plenary Address</b> - Synergy pathway to carbon neutrality and clean air in China		
11:40-12:00	<b>Prof. Junyu Zheng</b> <i>The Hong Kong University of Science &amp; Technology (Guangzhou)</i>	<b>Session Keynote</b> - Progress, problems, and prospects in the establishment of VOCs source profile database in China		
12:00-12:15	<b>Prof. Haibao Huang</b> <i>Sun Yat-Sen University</i>	Efficient catalytic decomposition of O <sub>3</sub> at room temperature: from basic research to application		
12:15-12:30	<b>Prof. Zibing Yuan</b> <i>South China University of Technology</i>	Is the ozone production sensitivity over the central Greater Bay Area still dominated by VOC-limited regime?		
12:30-14:30	Lunch Break			

## Detailed Workshop Programme – Oral Session

DAY 1			Tuesday, 28 November			Venue: Z209		
			(Afternoon)					
14:30-15:30		Poster Session						
Session Chair: Dr. Peter Louie and Prof. Haibao Huang								
15:30-15:50		Prof. Shuxiao Wang <i>Tsinghua University</i>		Session Keynote - Full-volatility organic emissions and their environmental impact in China and the world				
15:50-16:05		Dr. Di Wu <i>Fudan University</i>		Ship-emitted VOCs and their potential contribution to ozone and secondary organic aerosols				
16:05-16:20		Dr. Yiming Qin <i>City University of Hong Kong</i>		Explainable machine learning revealed the conditional response of biogenic isoprene to the changes in environmental factors				
16:20-16:35		Prof. Song Gao <i>Shanghai University</i>		Role of garbage classification in air pollution improvement for VOCs of a municipal solid waste disposal base				
16:35-16:50		Tea Break (15 min)						
Session Chair: Prof. Junyu Zheng and Prof. Zibing Yuan								
16:50-17:10		Prof. Daiqi Ye <i>South China University of Technology</i>		Session Keynote - Research on the emission characteristics and emission reduction potential of volatile organic compounds from industrial sources in China				
17:10-17:30		Dr. Peter Louie <i>Hong Kong Environmental Protection Department</i>		Session Keynote - VOC regional air monitoring network in the Guangdong-Hong Kong-Macao Greater Bay Area				
17:30-17:45		Prof. Bernhard Rappenglueck <i>University of Houston, USA</i>		Source apportionment of commixtures of VOCs and inorganic compounds: Insights from case studies in Houston and Mexico City				
17:45-18:00		Dr. Chengliang Zhang <i>Jinan University</i>		Reduction in fugitive VOCs emission by Leak Detection and Repair (LDAR) from a local petroleum refinery in Pearl River Delta, China				
18:00-18:15		Dr. Sarawut Thepanondh <i>Mahidol University, Thailand</i>		An in-depth exploration of VOC sources and SOA formation in the complex urban landscape of the Bangkok metropolitan region				
18:15-18:30		Mr. Kanisorn Jindamanee <i>Mahidol University, Thailand</i>		A comprehensive analysis of emission factors of volatile organic compounds from petroleum refinery plants				

## Detailed Workshop Programme – Oral Session

DAY 2			Wednesday, 29 November			Venue: Z205		
(Morning)								
Session Chair: Prof. Jean-François Müller and Prof. Tzung-May Fu								
8:30-9:10		Prof. Satoru Chatani National Institute for Environmental Studies, Japan			Plenary Address - Trends of VOCs and their impact on surface ozone in Japan			
9:10-9:25		Prof. Liya Fan South China University of Technology			Characteristics and sources apportionment of ambient volatile organic compounds (VOCs) under different pollution levels in a typical industrial city in northern Henan, China			
9:25-9:40		Dr. Jianhuai Ye Southern University of Science and Technology			Heterogeneity of VOC emission and distribution over the Amazon tropical forest			
9:40-9:55		Dr. Lei Zhu Southern University of Science and Technology			Observing downwind structures of urban HCHO plumes from space: Implications to non-methane volatile organic compound emissions			
9:55-10:10		Dr. Shuzhuang Feng Nanjing University			Impact of optimizing non-methane volatile organic compound emissions on surface ozone over China			
10:10-10:30		Tea Break (20 min)						
Session Chair: Prof.Hongli Wang and Dr. Jianhuai Ye								
10:30-10:50		Prof. Tzung-May Fu Southern University of Science and Technology			Session Keynote – Sensitivities of ozone air pollution to local and upwind volatile organic compound emissions using adjoint modeling and O <sub>y</sub> -tagged modeling			
10:50-11:05		Prof. Hongli Wang Shanghai Academy of Environmental Sciences			Development of the methods of the near-complete speciation of ROGs: Case study of residential combustion			
11:05-11:20		Prof. Bin Zhu Nanjing University of Information Science and Technology			Differential ratios of VOCs species in boundary layer revealed by vertical observation			
11:20-11:35		Dr. Daocheng Gong Jinan University			Emission characteristics of biogenic volatile organic compounds in a subtropical pristine forest of southern China			
11:35-11:50		Dr. Ting Wu Anhui Normal University			Cyanobacterial bloom is a potential source of aromatic hydrocarbons			
Lunch								

## Detailed Workshop Programme – Oral Session

**DAY 2**

**Wednesday, 29 November**

(Afternoon)

**Green Tour**

## Detailed Workshop Programme – Oral Session

DAY 3			Thursday, 30 November			Venue: Z205		
(Morning)								
Session Chair: Prof. Shaw-Chen Liu and Dr. Zhe Wang								
8:30- 9:10		Prof. Jianmin Chen <i>Fudan University</i>			Plenary Address - VOCs and ozone formation potential in Mountain and Yangtze River Campaigns			
9:10-9:30		Prof. Kin-Fai Ho <i>The Chinese University of Hong Kong</i>			Session Keynote - The hidden dangers: VOCs and their pervasive health concerns			
9:30-9:45		Dr. Ling Jin <i>The Hong Kong Polytechnic University</i>			Dissecting the toxic components driving the in vitro toxicity of biomass burning aerosols			
9:45-10:00		Dr. Haomin Huang <i>South China University of Technology</i>			Comparison of emission characteristics and risk assessment of volatile organic compounds of typical pharmaceutical industries in central plains, China			
10:00-10:15		Dr. Ning Zhang <i>Nanjing University of information Science and Technology</i>			Characterization and health risk assessment of PM <sub>2.5</sub> -bound polycyclic aromatic hydrocarbons in Yangon and Mandalay of Myanmar			
10:15-10:30		Tea Break (15 min)						
Session Chair: Prof. Kin-Fai Ho and Dr. Linwei Tian								
10:30-11:10		Prof. Shaw-Chen Liu <i>Jinan University</i>			Plenary Address - Impact of anthropogenic NOx and VOCs on the atmospheric oxidation capacity in Guangdong, China			
11:10-11:30		Dr. Linwei Tian <i>The University of Hong Kong</i>			Session Keynote –Gaseous pollutants and population health: some critical appraisal			
11:30-11:45		Dr. Yuzhe Liu <i>Fudan University</i>			Unequal health risks of source-specific VOCs driven by their differentiated compounds			
11:45-12:00		Dr. Zihua Guo <i>Fudan University</i>			Toxicity of gaseous and particulate organics emitted from typical cooking processes			
12:00-12:15		Dr. Fanglin Wang <i>The Chinese University of Hong Kong</i>			Characteristics and sources of oxygenated VOCs in Hong Kong: implications for ozone formation			
12: 15-12:30		Kieran O'Daly <i>National Physical Laboratory, UK</i>			Development of an International System of Units (SI)-traceable transmission curve reference material to improve the quantitation and comparability of proton-transfer-reaction			
12:30-15:30		Lunch Break						

## Detailed Workshop Programme – Oral Session

<b>DAY 3</b> <b>Thursday, 30 November</b> <b>Venue: PQ306</b> <b>(Afternoon)</b>		
<b>Session Chair: Prof. Satoru Chatani and Prof. Huan Liu</b>		
15:30-16:10	<b>Prof. Jean-François Müller</b> <i>Royal Belgian Institute for Space Aeronomy, Belgium</i>	<b>Plenary Address</b> - Can we trust satellite observations to quantify VOC emissions and their spatiotemporal variability?
16:10-16:30	<b>Prof. Huan Liu</b> <i>Tsinghua University</i>	<b>Session Keynote</b> – Comprehensive assessment for the emissions and atmospheric impacts of IVOCs from mobile sources
16:30-16:45	<b>Prof. Hairong Cheng</b> <i>Wuhan University</i>	Summertime carbonyl compounds in Wuhan, central China: identification of sources, key precursors and their contributions to O <sub>3</sub> formation
16:45-17:00	<b>Dr. Zhe Wang</b> <i>The Hong Kong University of Science and Technology</i>	Characteristics of oxygenated volatile organic compounds and the impacts in coastal Hong Kong
17:00-17:15	<b>Lehui Cui</b> <i>Tianjin University</i>	Enhanced dataset of global marine isoprene emission from biogenic and photochemical processes for the period 2001-2020
<b>Banquet</b>		

## Detailed Workshop Programme – Oral Session

DAY 4			Friday, 1 December		Venue: Z205	
(Morning)						
Session Chair: Prof. Tao Wang and Prof. Likun Xue						
8:30-9:10		Prof. Jianmin Ma <i>Peking University</i>		Plenary Address - Response of biogenic VOC emission and surface ozone evolution to vegetation and climate changes in China		
9:10-9:30		Prof. Likun Xue <i>Shandong University</i>		Session Keynote - Formaldehyde in the coastal atmosphere: potential marine sources and significant impacts on secondary pollution		
9:30-9:45		Dr. Haichao Wang <i>Sun Yat-Sen University</i>		Atmospheric nitrate radical chemistry in the South China Sea influenced by the urban outflow of the Pearl River Delta		
9:45-10:00		Prof. Rui Li <i>East China Normal University</i>		A novel ozone formation mechanism observed in a coastal island of East China		
10:00-10:15		Dr. Yunhua Chang <i>Nanjing University of Information Science &amp; Technology</i>		Nonagricultural emissions enhance dimethylamine and modulate urban atmospheric nucleation		
10:15-10:30		Dr. Zhaofeng Tan <i>Peking University</i>		Atmospheric oxidation capacity sustained during COVID-19 lockdown in Chengdu, China: lessons for future secondary pollution control		
10:30-10:45		Tea Break (15 min)				
Session Chair: Prof. Jianmin Ma and Prof. Fumo Yang						
10:45-11:25		Prof. Tao Wang <i>The Hong Kong Polytechnic University</i>		Plenary Address - VOCs oxidation by halogen radicals and implications for air quality		
11:25-11:40		Prof. Yang Chen <i>Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences</i>		Characteristics of VOCs in the Sichuan Basin: Chemical composition, source, and reactivities		
11:40-11:55		Dr. Nan Wang <i>Sichuan University</i>		BVOCs emissions and their impact on O <sub>3</sub> formation in Southern China		
11:55-12:10		Dr. Yu Wang <i>The Hong Kong Polytechnic University</i>		Characteristics of VOCs in a mountainous background area and their contributions to secondary PAN formation		
12:10-12:25		Dr. Lingyu Li <i>Qingdao University</i>		Historical biogenic VOC emissions and their impact on ambient O <sub>3</sub> and SOA in China		
12:30-14:30		Lunch Break				

## Detailed Workshop Programme – Oral Session

DAY 4			Friday, 1 December		Venue: Z205	
			(Afternoon)			
14:30-15:30		Poster Session				
Session Chair: Prof. Keding Lu and Dr. Haichao Wang						
15:30-15:50		Prof. Gehui Wang <i>East China Normal University</i>		Session Keynote - Gas-to-particle phase partitioning of atmospheric water-soluble organic compounds at a rural site in china: an enhancing effect of NH <sub>3</sub> on SOA formation		
15:50-16:05		Prof. Kun Li <i>Shandong University</i>		Oxidation of organic gases from wood burning: secondary organic aerosol formation and chemical evolution		
16:05-16:20		Dr. Shengrui Tong <i>Institute of Chemistry, Chinese Academy of Sciences</i>		Characteristics of atmospheric HONO, peroxyacetyl nitrate (PAN), and non-methane hydrocarbon compounds (NMHCs) and their impact on atmospheric oxidizing capacity in Beijing		
16:20-16:35		Dr. Mingfu Cai <i>South China Institute of Environmental Sciences</i>		Enhanced daytime secondary aerosol formation driven by gas-particle partitioning in downwind urban plumes		
16:35-16:50		Tea Break (15 min)				
Session Chair: Prof. Gehui Wang and Dr. Shengrui Tong						
16:50-17:10		Prof. Keding Lu <i>Peking University</i>		Session Keynote - A new perspective for urban ozone mitigations		
17:10-17:25		Prof. Hao Wang <i>Jinan University</i>		Abundance and sources of organic acids in the atmosphere of Nanling mountains, Southern China		
17:25-17:40		Dr. Jun Zhou <i>Jinan University</i>		Understanding photochemical O <sub>3</sub> formation mechanisms in different PRD cities using an improved dual-channel reaction chamber technique		
17:40-17:55		Dr. Fan Zhang <i>East China Normal University</i>		Real-world emission characteristics of VOCs from typical cargo ships and their potential contributions to SOA and O <sub>3</sub> under low-sulfur fuel policies		
17:55-18:10		Jin Yang <i>The Hong Kong Polytechnic University</i>		Deciphering unprecedentedly high ozone pollution during wintertime in Lanzhou city of China		



## Detailed Workshop Programme – Oral Session

DAY 5			Saturday, 2 December		Venue: V322	
(Morning)						
Session Chair: Prof. Min Shao and Prof. Xinming Wang						
8:30-9:10	Prof. Jia-Lin Wang National Central University, Taiwan		Plenary Address - Vertical and surface VOC measurements by offline and online techniques			
9:10-9:30	Prof. Min Shao Jinan University		Session Keynote - VOCs measurements: From total amount, reactivity to effects			
9:30-9:45	Prof. Yanli Zhang Guangzhou Institute of Geochemistry, Chinese Academy of Sciences		In-situ measurements of atmospheric Fluorinated greenhouse gases in Southern China			
9:45-10:00	Dr. Chen Wang Southern University of Science and Technology		Behaviour and impacts of secondary volatile chemical species from indoor cleaning			
10:00-10:15	Dr. Yi Chen The Hong Kong University of Science and Technology		Formation and gas-particle partitioning of nitro-phenolic compounds in coastal area			
10:15-10:30	Tea Break (15 min)					
Session Chair: Prof. Jia-Lin Wang and Prof. Hao Wang						
10:30-10:50	Prof. Xinming Wang Guangzhou Institute of Geochemistry, Chinese Academy of Sciences		Session Keynote - Biogenic volatile organic compounds and air quality			
10:50-11:05	Prof. Boguang Wang Jinan University		Observations and implications of the strong regional atmospheric oxidative capacity at Guangdong Provincial Observation and Research Station for Atmospheric Environment and Carbon Neutrality in Nanling Forests			
11:05-11:20	Dr. Xiaoming Liang South China Institute of Environmental Science		Historical VOC emission performance, drivers, and reduction perspectives for application of automobile coatings in China			
11:20-11:35	Dr. Ziwei Mo Sun Yat-sen University		Species-level and grid-scale evaluation of VOC emission inventory by ground measurement and boundary-layer mass balance			
11:35-11:50	Dr. Yafei Liu Beijing Normal University		Drivers and impacts of decreasing concentrations of atmospheric volatile organic compounds (VOCs) in Beijing during 2016–2020			
11:50-12:05	Dr. Weihao Wang Hangzhou PuYu Technology Development Co., Ltd		A new online DNPH-UHPLC-UV instrument for in situ measurement of carbonyl species			
12:05-12:20	Dr. Wing Sze Chow The Hong Kong University of Science and Technology		Evolution of volatile organic compounds (VOCs) before, during, and after a typhoon event in Hong Kong			
12:30-14:30	Lunch Break					

## Detailed Workshop Programme – Oral Session

DAY 5			Saturday, 2 December		Venue: V322
(Afternoon)					
14:30-15:30		Poster Session			
Session Chair: Prof. Boguang Wang and Prof. Yanli Zhang					
15:30-15:45		Prof. Song Gao <i>Shanghai University</i>		Obtaining the accurate volatile organic compounds data for ambient air in urban areas: Research and improvement on the automatic monitoring methods	
15:45-16:00		Dr. Qinqin Li <i>Jinan University</i>		Observations and implications of dicarbonyls and their key precursors in Lhasa, Tibetan Plateau	
16:00-16:15		Xiangyunong Cao <i>The Hong Kong University of Science and Technology</i>		Characteristics and source origins analysis of halogenated hydrocarbons in Hong Kong based on two-year observations	
16:15-16:30		Dr. Kjetil Tørseth (online) <i>Norwegian Institute for Air Research, Norway</i>		Worldwide VOC data during 30 years of monitoring	
16:30-16:45		Yuchen Mai <i>The Hong Kong University of Science and Technology</i>		A comprehensive air-sea-land measurement campaign of volatile organic compounds (VOCs) during an ozone episode in Hong Kong: Utilizing a novel helicopter-based platform	
16:45-17:00		Hao Sun <i>The Hong Kong University of Science and Technology</i>		Cruise observation of ambient volatile organic compounds over Hong Kong coastal water	
17:00-17:15		Closing Ceremony			

## Detailed Workshop Programme – Poster Session

Date Venue	Presenter	Title
28 Nov Z207	<b>Dr. Yasmine L. Sfendla</b> <i>Royal Belgian Institute for Space Aeronomy</i>	Global VOC emissions inferred from spaceborne formaldehyde and glyoxal data observed from the TROPOMI sounder
	<b>Dr. Xi Zhou</b> <i>Hainan Normal University</i>	Volatile organic compounds in arid and semiarid areas of Northwest China: Characterization, sources and environmental effects
	<b>Xujun Mo</b> <i>Jinan University</i>	Ground-based formaldehyde across the Pearl River Delta: A snapshot and meta-analysis study
	<b>Yiming Zhao</b> <i>Jinan University</i>	A comparative study of ground-gridded and satellite-derived formaldehyde during ozone episodes in the Chinese Greater Bay Area
	<b>Manni Zhu</b> <i>Jinan University</i>	Identification and characterization of atmospheric formaldehyde sources
1 Dec Z207	<b>Dr. Weihua Chen</b> <i>Jinan University</i>	The influence of typical household volatile chemical products (VCP) emissions on near-surface ozone formation
	<b>Dr. Xuefei Ma</b> <i>Peking University</i>	Anthropogenic monoterpenes aggravating ozone pollution
	<b>Dr. Can Wu</b> <i>East China Normal University</i>	Rapid formation of atmospheric brown carbon during air mass lifting process
	<b>Dr. Yibo Zhang</b> <i>Tsinghua University</i>	Performance evaluation of Community Multiscale Air Quality Model for oxygenated volatile organic compounds in China
	<b>Jiangyong Li</b> <i>Jinan University</i>	Rapid adaptive optimization model for atmospheric chemistry
	<b>Leitao Sun</b> <i>South China University of Technology</i>	VOCs characteristics and sources in the Pearl River Delta based on PTR-TOF-MS and atmospheric photochemical reactions
2 Dec V322	<b>Dr. Cenyan Huang</b> <i>Zhejiang Wanli University</i>	VOCs measurement using passive air samplers in a typical coastal area, China
	<b>Jiale Fan</b> <i>Sun Yat-Sen University</i>	Estimating VOC emissions and improving source apportionment by boundary-layer mass balance method in urban Pearl River Delta
	<b>Meiyi Fan</b> <i>The Hong Kong Polytechnic University</i>	Formation mechanisms of nitrate aerosols at Mt. Tai Mo Shan based on triple oxygen isotope observations of ozone and nitrate
	<b>Enyu Xiong</b> <i>The Hong Kong Polytechnic University</i>	Ozone photochemistry in the coastal atmosphere of southern China: Insights from direct measurements of oxygenated volatile organic compounds and OH radicals