

Schedule of the 2nd International Workshop on Heterogeneous Kinetics Related to Atmospheric Aerosols

Venue: Tsukuba International Congress Center

Date: November 12 (Saturday) – 14, 2016 (Monday)

Saturday November 12, 2016			
Time	Content	Speaker	Title
09:00-09:10	Opening Remarks	Akihiro Morita	
09:10-09:20	Welcome Speech from IGAC SSC	Hiroshi Tanimoto	
	Session I	Chair: Akihiro Morita	
09:20-10:20	Keynote Speech	Veronica Vaida	Chemical processing at environmental water-air interfaces: building complexity on atmospheric aerosols
10:20-10:50	Long	Gen Sasaki	In-situ observation of surface melting of ice crystal surfaces by advanced optical microscopy
10:50-11:10	Coffee Break		
	Session II	Chair: Jun Hirokawa	
11:10-11:40	Long	Manabu Shiraiwa	Formation of reactive oxygen species by secondary organic aerosols in water
11:40-12:00	Short	Hui-Ming Hung	The Oxidation of SO ₂ on the Surfaces of Acidic Micro-Droplets: Implication to the Ambient Sulfate Formation
12:00-12:20	Short	Shinichi Enami	Heterogeneous Reactions of Atmospheric Radical/Atom with Aqueous Species
12:20-13:30	Lunch		
	Session III	Chair: Mingjin Tang	
13:30-14:00	Long	Shoichi Yamaguchi	Molecular Structure of Liquid Interfaces Probed by Sum Frequency Generation Spectroscopy
14:00-14:20	Short	Akihiro Morita	Microscopic Structure and Uptake Kinetics at Aqueous Surfaces
14:20-14:40	Short	Jing-yao Liu	Reduction of NO on noble metal surfaces: A mechanistic and kinetic study
14:40-15:00	Short	Qingzhu Zhang	Heterogeneous Reaction Mechanism of Gaseous HNO ₃ with Solid NaCl: a Density Functional Theory Study
15:00-15:20	Coffee Break		

	Session IV	Chair: Zhongming Chen	
15:20-15:50	Long	Chak K. Chan	Heterogeneous uptake of ammonia and dimethylamine by acidic particles
15:50-16:10	Short	Yun-Hong Zhang	Volatility and repartitioning between gas phase and aerosol condensation phase
16:10-16:30	Short	Akihiro Yabushita	Formation reactions of molecular iodine related to water and ice
16:30-16:45	Coffee Break		
	Session V	Chair: Mikinori Kuwata	
16:45-17:15	Long	Aijun Ding	Secondary aerosol formation from heterogeneous reactions and air pollution-boundary layer-weather interactions: Results from the SORPES station
17:15-17:35	Short	Takayuki Kameda	Mineral dust aerosols promote the nitration of atmospheric polycyclic aromatic hydrocarbons
17:35-17:55	Short	Jing Shang	Synergistic effect of nitrate-doped TiO ₂ on the photochemical oxidation of formaldehyde
17:55-18:15	Short	Zhongming Chen	The role of peroxides in the heterogeneous reactions on aerosol particles
18:30-20:30	Banquet @ Restaurant ESPOIR (inside Tsukuba International Congress Center)		

Sunday November 13, 2016			
Time	Content	Speaker	Title
	Session VI	Chair: Shinichi Enami	
09:00-10:00	Keynote Speech	Kevin R. Wilson	The Interfacial Chemistry of Organic Aerosols and Cloud Droplets
10:00-10:30	Long	Tong Zhu	Phase and Reactivity Change of a Single Particle in the Atmospheric Multiphase Reaction
10:30-10:50	Coffee Break		
	Session VII	Chair: Hui-Ming Hung	
10:50-11:20	Long	Shoji Ishizaka	In situ observations of the phase transitions of single droplets levitated in air by means of a laser trapping technique
11:20-11:40	Short	Azuchi Harano	In Situ Microscopic Observation of

			Deliquescence and Crystallization of Single Levitated Microdroplet Using Electrodynamic Balance
11:40-12:10	Long	Maofa Ge	Heterogeneous Process studies on the formation of secondary aerosol
12:10-13:20	Lunch		
	Session VIII	Chair: Manabu Shiraiwa	
13:20-13:50	Long	Satoshi Takahama	Constraining the mass budget of heterogeneous processes in laboratory and atmospheric organic aerosols through functional group analysis
13:50-14:10	Short	Ying Li	Global atmospheric secondary organic particle phase state distribution
14:10-14:30	Short	Mikinori Kuwata	1-Octanol-Water Partitioning as a Classifier of Water Soluble Organic Materials: Implication for Solubility Distribution
14:30-14:50	Short	Qi Chen	Modeling of Organic Aerosol in China: The Roles of Sources and Aging
14:50-15:10	Coffee Break		
	Session IX	Chair: Tong Zhu	
15:10-15:40	Long	Jianmin Chen	Tropospheric multiphase chemistry elevated by diverse mass spectrometric techniques in China
15:40-16:00	Short	Akio Shimono	Improvement of Methodology for Measuring Heterogeneous or Reactive Uptake of Gaseous Species on Aerosols
16:00-16:20	Short	Norimichi Takenaka	Chemical reactions promoted by freezing solution and the acceleration mechanism
16:20-16:40	Short	Mingjin Tang	Heterogeneous reactions of N ₂ O ₅ and ClONO ₂ with TiO ₂ aerosol particles: implications for stratospheric particle injection for climate engineering
16:40-16:55	Coffee Break		
16:55-17:25	General discussion about future actions, Chair: Michihiro Mochida		
17:25-17:35	Closing Speech	Hajime Akimoto	

Monday November 14, 2016

09:00-14:00	General Discussion (NIES facility)
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