

Workshop of Institute of Low Temperature Science, Hokkaido University
Interaction between the Atmosphere and Biosphere: With a focus on Atmospheric Chemistry
Institute of Low Temperature Science, Hokkaido University, Auditorium, July 9-10, 2009

Program

July 9 (Thursday)

Chair person: Kimitaka Kawamura

1. 13:30-13:40 K. Kawamura (Inst. Low. Temp. Sci., Hokkaido Univ.) : Introduction to the Atmosphere- Biosphere Interaction Workshop
2. 13:40-14:05 T. Yasunari (HyARC, Nagoya Univ.), K. Sudo (Grad. School of Environ. Studies, Nagoya Univ.) : Coupled effects of land use and aerosols changes and their impacts on Asian climate
3. 14:05-14:55 (Invited) Jost Heintzenberg, Wolfram Birmili (IfT, Leipzig) : Aerosols over Siberia: The ZOTTO project
4. 14:55-15:20 M. Sasakawa¹, K. Shimoyama², T. Machida¹, N. Tsuda³, H. Suto⁴, M. Arshinov⁵, D. Davidov⁵, A. Fofonov⁵, O. Krasnov⁵ (¹NIES, ²Hokkaido Univ., ³GEF, ⁴JAXA, ⁵IAO, RAS) : Monitoring of greenhouse gases over Siberia

15:20-15:30 Break

Chair person: Yuzo Miyazaki

5. 15:30-16:20 (Invited) A. Tanaka (Inst. Low. Temp. Sci., Hokkaido Univ.) : Evolution of global environment and photosynthesis
6. 16:20-16:45 A. Tani (Inst. Environ. Sci., Univ. of Shizuoka) : Isoprene and monoterpene emissions from plants
7. 16:45-17:10 S. Matsunaga¹, A. Tani², T. Yamada³, J. Greenberg⁴, P. Harley⁴, A. Guenther⁴ (¹Japan Petroleum Energy Center, ²Univ. of Shizuoka, ³Tokyo Metropolitan Univ., ⁴National Center for Atmos. Res.) : A study on "unique" BVOC and BVOC emission
8. 17:10-17:35 T. Saito, Y. Yokouchi (National Inst. Environmental Studies) : Methyl chloride emission from tropical forest

Reception (17:40-19:30 Lounge, Inst. Low. Temp. Sci., Hokkaido Univ.)

July 10 (Friday)

Chair person: Motoki Sasagawa

9. 9:00-9:25 M. Uematsu (Ocean Res. Inst., Univ. of Tokyo) : Formation factors of acidic sea fogs over the western subarctic North Pacific region
10. 9:25-9:50 Y. Miyazaki, K. Kawamura, M. Sawano (Inst. Low. Temp. Sci., Hokkaido Univ.) : Size distribution of marine biogenic organic aerosols over the North Pacific in the summer of 2008
11. 9:50-10:15 K. Matsumoto (Univ. of Yamanashi) : Air pollutants and their impacts on forests
12. 10:15-10:40 Y. Igarashi, H. Takahashi, Y. Inomata (MRI) : Aerosol research using mountain and its challenges-highlighting at Mt. Fuji

10:40-10:50 Break

Chair person: Takuya Saito

13. 10:50-11:15 Pingqing Fu¹, K. Kawamura¹, C. M. Pavuruli¹, T. Swaminathan² (¹Inst. Low. Temp. Sci., Hokkaido Univ., ²Indian Inst. Technol. Madras, Chennai, India) : Contributions of isoprene, monoterpene, and sesquiterpene to the formation of secondary organic aerosol in South Asia
14. 11:15-11:40 Kundu Shuvashushi^{1,2}, K. Kawamura¹, T. W. Andreae³, A. Hoffer⁴, M. O. Andreae³ (¹Inst. Low. Temp. Sci., Hokkaido Univ., ²Grad. School of Environ. Sci., Hokkaido Univ., ³Biogeochem. Dep., Max Planck Inst. Chem., Mainz, Germany, ⁴Dept. Earth and Environ. Sci. Univ. Pannonia, Veszprem) : Molecular distributions of dicarboxylic acids, ketocarboxylic acids and dicarbonyls in biomass burning aerosols: Implications for photochemical production and degradation in smoke layer
15. 11:40-12:05 K. Kawamura, T. Watanabe (Inst. Low. Temp. Sci., Hokkaido Univ.) : Distributions

and stable carbon isotopic ratios of low molecular weight dicarboxylic acids in the atmospheric aerosols

12:05-12:30 U. Tsunogai¹, D.D. Komatsu¹, S. Daita¹, F. Nakagawa¹, I. Noguchi², and J. Zhang³ (¹Fac. Sci., Hokkaido Univ., ²Hokkaido Inst. of Environ. Sci., ³Toyama Univ.) : Tracing atmospheric nitrate through a forest ecosystem on eastern Asian region using $\Delta^{17}\text{O}$

12:30-13:30 Lunch break

Chair person: Kiyoshi Matsumoto

16. 13:30-13:55 S. Yamamoto, K. Kawamura (Inst. Low. Temp. Sci., Hokkaido Univ.) : Application of compound-specific stable isotopic measurements to the studies of atmospheric chemistry

17. 13:55-14:20 T. Takemura (Res. Inst. Applied Mechanics, Kyushu Univ.) : Estimation of aerosol effects on climate by modeling studies

18. 14:20-14:45 M. Toda (Grad. School of Environ. Sci., Hokkaido Univ.), T. Hara (Inst. Low. Temp. Sci., Hokkaido Univ.) : A simulation study on forest dynamics and surface energy and carbon exchanges in a sub-boreal deciduous forest

Intermission

15:00-16:00 General Discussion and Announcements (Chair person : Kimitaka Kawamura)