

## **Special Session 7: March 17, 14:15–15:45 (JST)**

### **Sanitary Landfill Stabilization and End of Aftercare**

*Organized by Landfill Research Group of the Japan Society of Material Cycles and Waste Management*

The topic in this session is the assessment of landfill stabilization for the end of aftercare. This is the most important issue in landfill management in Japan because many closed landfills have been managed after landfilling completion. In 1998, landfill completion criteria were regulated in Japan to evaluate sanitary landfill stabilization by observations in those closed landfills. Japanese regulation related to the end of aftercare includes the parameters like leachate quality, landfill gas, temperature, etc. Especially landfill gas monitoring is a very important issue related to the safe land use of closed landfills in Japan because explosive gas like methane are significant in closed landfills. In terms of safe landfill management, toxic compounds in landfill emissions and geotechnical analysis are very important, too.

This session focuses several issues related to landfill stabilization for the end of aftercare of sanitary landfills in Thailand and Japan.

#### **Program**

Session Chairs: Ishii Kazuei, Hokkaido University

14:15-14:25 Presentations (10 minutes)

Introduction of “Sanitary Landfill Stabilization and End of Aftercare”

Hideki Yoshida, Muroran Institute of Technology

**<Thailand landfills: Toxic compounds in landfill emissions and Survey of stabilization on site>**

14:25-15:05 Presentations (15 minutes) and Q&A (5 minutes)

Genotoxicity Assessment of Landfill Emissions Using Comet Assay in Golden Pothos (*Epipremnum aureum*)

Wilai Chiemchaisri, Kasetsart University

Determination of landfill stabilization using geotechnical analysis

Komsilp Wangyao, King's Mongkut University of Technology Thonburi

**<Japanese landfill: Measurement and analysis of landfill gas generation for end of aftercare >**

15:05-15:25 Presentations (15 minutes) and Q&A (5 minutes)

Gas monitoring at landfill sites approaching the end of aftercare: Case studies in Japan

Tomonori Ishigaki, National Institute for Environmental Studies, Japan

15:25-15:45 Discussion and wrap up on “Sanitary Landfill Stabilization and End of Aftercare”