

The Integrated Exposure and Effects Analysis

Co-organized by:



National Institute for Environmental Studies (NIES), JAPAN



Ministry of Natural Resources and Environment of Vietnam (MONRE), VIETNAM

In Cooperation with:

Embassy of Japan in VIETNAM

Date: 10 January 2014 Venue: Baoson International Hotel, Hanoi, Vietnam

Background and Objective

In recent years, increasing numbers of studies have been conducted to evaluate the impact of the chemical contaminants on humans and ecosystem, especially when they exist as a mixture. In the United States (US), National Institute of Health (NIH) started a toxicological research programme on chemical mixtures and US Environmental Protection Agency (US EPA) is developing the Mode-of-Action Oriented Assessment. European Union (EU) has set up a research initiative for the Effect Directed Analysis (EDA). All of those activities are aiming to combine toxicological and analytical approaches to better understand the risk of chemical mixtures. At the international workshop held by National Institute for Environmental Studies (NIES) in 2012, many delegates not only from US/EU countries but also Asian countries showed strong interests in this movements and research initiative. Accordingly, NIES decided to hold an Asian version of the workshop in order to involve more researchers and decision makers from especially Southeast Asian countries. Sharing the information on IEEA with Asian partners and developing possible collaborations in IEEA research will make Asian countries can take the influential leadership for the global standardization of the IEEA research in future.

The first Southeast Asian IEEA Workshop is planned to be held in Hanoi and co-hosted by the Ministry of Natural Resources and Environment of Vietnam (MONRE). The goals of the workshop are forming a network around the related government, academia and industries throughout Southeast Asia and establishing a basis of IEEA in Asia. The topics discussed in the workshop will be:

- 1) Toxicity endpoints specific to Asian situations;
- 2) Methods for evaluating the endpoints;
- 3) Analytical methods for identifying responsible substances and
- 4) Better risk management in Asia.

While the assessment of endpoints particular to each region will be conducted in its own country, the capable laboratories within the network will take part in the identification of substances. The network formation through the workshop will facilitates establishing a basis of consistent methods for IEEA in Asia.

Agenda

	Opening Session	Chair: Le Ke Son and Shoji Nakayama
8:00 am	Welcome	Hirofumi Miyake, Embassy of Japan in Vietnam
8:10 am	Opening Remarks	Shoji Nakayama, NIES
8:25 am	Plenary: Some Key Issues on Environment and Health in Vietnam	Le Ke Son, MONRE
8:45 am	Perinatal Dioxin Exposure and Neurodevelopment of Children Aged 3 Years - A Follow up Study in Vietnam	Pham The Tai, Vietnam Military Medical University
9:00am	Co-contamination of Soil with Dioxin and Arsenic at Former Military Airbases in Vietnam	Mick Saito, NPO Global Environment College
9:15 am	Application of CALUX Assays for Human Exposure Assessment Monitoring of Dioxin-related Compounds and other Potential Contaminants in E-waste Recycling and Urban Sites in Northern Vietnam	Shin Takahashi, Ehime University
9:45 am	Break	
10:05 am	Assessment of Human Exposure to PCB and BFRs in Indonesia	Agus Sudaryanto, BPPT, Indonesia
10:35 am	Exposure to Carcinogenic Compounds in Air Pollution and their Health Effects	Panida Navasumrit, Chulabhorn Research Institute, Thailand
11:05 am	Discussion	
11:35 am	Photo session	
11:40 pm	Lunch	
1:10 pm	Case Study Session Introduction	Shoji Nakayama
	Case Studies I	Chair: Nakajima and Minh
1:20 pm	Measurement of Organic Chemicals in Human Blood by GCxGC-TOF/MS	Toru Matsumura, Idea Consultant, Inc.
1:40 pm	Identification of Estrogenic Active Compounds in Wastewater using Recombinant Yeast Assay and LC- TOFMS	Daisuke Nakajima, NIES
2:00 pm	The Study of the Environmental Monitoring of the River Basin in Vietnam using <i>in vitro</i> Bioassay	Nguyen Quang Trung, IET, VAST
2:20 pm	Assessment and Management of Toxic Chemical Releases	Nguyen Anh Tuan, VEA

2:40 pm	Break	
	Case Studies II	Chair: Suzuki and Tuan
3:00 pm	Application of CALUX in East Asian Countries	Masafumi Nakamura, Hiyoshi
3:20 pm	Effect and Exposure Analysis of Dioxin-like Compounds in Soil and River Sediment Collected from E-waste Recycling Village in the Northern Part of Vietnam	Go Suzuki, NIES
3:40 pm	CALUX Analysis of Human Milk samples for Assessment of Exposure to Chemicals Released from Informal Recycling of Various Waste in Vietnam	Ngyuen Minh Tue, Ehime University
4:00 pm	Cumulative Health Risk Assessment of Flame Retardants and Platicizers in Soil from Vietnamese Informal E-waste Recycling Site	Hidenori Matsukami, NIES
4:20 pm	Discussion	
4:50 pm	Wrap Up/Next Steps/Future Plans	Chair: Le Ke Son and Shoji Nakayama
5:10 pm	Closing Remarks	Le Ke Son