Form 3

Annual Report

LaMer, Ehime University

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To Director of LaMer

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Include the report on the result of the project/meeting in a separate sheet.

1. Project / Meeting title

- Conference Title: the 19th International Symposium on Pollutant Responses in Marine Organisms (PRIMO 19)
- Session Title: Pollution in Vietnam

2. Members of project / meeting

Name	Affiliation	Position	Contribution part
PI Members 1. Le Thi Hai Le	Hanoi Univ. of Natural Resources & Environ.	Senior Lecturer	Chair of Session & give Presentation
2. .Pham Hung Viet	National Univ. for Natural Sciences	Director of Center	Chair of Session & give Presentation
3. Le Thi Trinh	Hanoi Univ. of Natural Resources & Environ.	Director of Faculty	Presentation
4. Nguyen Hung Minh	Center for Environ. Monitoring	Head of laboratory	Presentation
5. Tran Minh Tri	National Univ. for Natural Sciences	Lecturer	Presentation
LaMer Faculty member in charge 1. Shinsuke Tanabe 2. Iwata Hisato		Director of CMES Director of LAMER	Chair of Session Supervise

REPORT TO LAMER

Session on “Pollution in Vietnam” at PRIMO19 on June 30- July 3, 2017 in Matsuyama, Japan

Le Thi Hai Le
Hanoi University of Natural Resources and Environment, Vietnam

In recent decades, Vietnam has developed its economy with unprecedented speed. From a backward agricultural country, undergoing two wars has now become a high economic growth country. The development of industrialization from the backward agricultural production has made a great emerging country, but industrial development, transportation and urbanization has been causing increased environmental pollution.

With the support of the LAMER Program (Prof. Iwata Hisato, Program Director), the delegation of scientists from universities and environmental management agencies of Vietnam attended and opened the session "**Environmental Pollution in Vietnam** "at the 19 International Symposium on Pollutant Responses in Marine Organisms (PRIMOR19) on July 1, 2017 at Ehime University, Matuyama, Japan.

The purpose of the session is to provide a comprehensive picture of current environmental issues in Vietnam; to share experiences with international colleagues on future research collaborations and to find out the solutions to control environmental pollution, especially the management of the marine environment in Vietnam.

At the session Oral and Poster presentation, a number of topics on environmental issues have been discussed, as well as pointed out new research findings and collaborative research directions needed to do in the future, including as follows as:

1. Fours (4) papers on POPs/PCBs and heavy metals pollution in river systems in Vietnam :

a) Distribution and accumulation profiles of OCPs and PCBs in sediment and biota samples from Cua Dai Estuary, Vietnam (Authors: Le Thi Trinh et al.)

b) Bioaccumulation of heavy metals (As, Cd, Hg, Pb) in blood cockle *Anadara granosa* from Mekong Delta, Vietnam (Authors: N.P. Cam Tu et al.)

c) Initial studies on toxic accumulate PCBs in estuaries in the northeastern region of Vietnam (Authors: Le Thi Hai Le et al.)

d) Assessment for the levels of PCBs residue in sediments in some coast estuary areas in middle of Vietnam (Authors: Trinh Thi Tham et al.)

2. Three (3) papers on pollution caused by production activities in industrial zones, craft villages and waste recycling areas in Vietnam:
   a) Distribution and sources of PFCs in surface water from drainage system and lake in Hanoi and some craft villages in the Northern Vietnam; (Authors: Pham Hung Viet et al.)
   b) Contamination by PFCs in blood collected and fish species collected in Hanoi Vietnam (Authors: Le Huu Tuyen et al.);
   c) Contamination and human exposure to hazardous substances in modern waste recycling sites in Vietnam (Authors: Takahashi Shin et al.).
3. Fours (4) papers on pollution caused by the consequences of chemical war in Vietnam :
   a) Human health Risk assessment of dioxin from soil contamination in A Luoi district, in middle region of Vietnam (Authors: Le Thi Hai Le et al.);
   b) Determination of PCDD/Fs in breast milk of women living near Bien Hoa Airbase: Implication of source and assessment of dioxin intake in infants (Authors; Nguyen Hung Minh et al.);
   c) Bioaccumulation of PCDD/Fs in food items collected near Bien Hoa and Da Nanng airbase: Assessment on source, distribution and their intake in human (Authors; Nguyen Hung Minh et al.)
   d) A trans-generational relationship of dioxin on adrenal antigens of Vietnamese mother-child pairs (Authors: Le Thai Anh et al.)
4. Fours (4) papers on the future collaborative research direction for the toxicology of pollutants in humans and organisms:
   a) Persistent toxic substances in Vietnam results of recent studies on environmental distribution and human exposure (authors: Tran manh Tri et al.)
   b) Effects of naturally synthesized dioxin, 1,3,7 tribromodibenzo-p-dioxin on the mystic transcriptome (Authors: Le Huu Tuyen et al.);
   c) The occurrence and human exposure of endocrine disrupting compounds in the door environment from Vietnam (Authors: Tran Manh Tri et al.);
   d) Screening analysis of organic pollutants in dust from ELV recycling and urban areas in northern Vietnam (Authors: Hoang Quoc Anh et al.)

Vietnam is in a stage of strong economic development with a transparent view of the government. "Do not change the environment for the economy." Therefore, through this symposium, the Vietnamese delegation had the opportunity to learn about the environmental management experiences of Japan and other countries, seeking partners in scientific research in order to effectively environmental control and minimize the pollutants impacts to human and organisms./.