	lovember 8, 2012, Thursday)		
Field Trip /	Registration / Welcome Reception		
Day 2 (N	lovember 9, 2012, Friday)		
09.00 -	Opening Ceremony		
10.15	Welcome Remarks		
	<ul> <li>Professor Hiroaki Furumai, Chair of the Symposium, Research Center for Water Environment Technology, The University of Tokyo</li> <li>Dr. Le Van Thanh, National University of Civil Engineering (NUCE), Rector of NUCE</li> <li>Minister of MoC (Ministry of Construction)</li> <li><i>Keynote Lectures</i></li> <li>Professor Bui Cach Tuyen, Vice Minister of MoNRE (Ministry of Natural Resources and Environment), General Director of VEA (Vietnam Environment Agency)</li> </ul>		
	- Professor Keisuke Hai	naki, Department of Urban Engineerir	ng, The University of Tokyo
10.15 - 10.	.45 Coffee break		
	Room A	Room B	Room C
10.45 - 12.15	[A1] Geology and hydrology A1-1 Manish Kumar A1-2 Sokchhay Heng A1-3 Temur Khujanazarov	[B1] Chemical pollution of the water environment B1-1 Indah R.S. Salami B1-2 Ma. Kristina Oquiñena-Paler B1-3 Mizuki Sakai	[C1] Biological treatment I: bioreactors C1-1 Bui Xuan Thanh C1-2 Tsutomu Okubo C1-3 Kengo Kubota
12.15 - 13.	.30 Lunch		
13.30 - 15.30	[A2] Sustainability of the water environment A2-1 Khondoker Mahbub Hassan A2-3 Sujata Manandhar A2-3 Nguyen Viet Anh A2-4 Mohammad Arifur Rahman	<b>[B2] Drinking water</b> B2-1 Sujithra Kushaliya Weragoda B2-2 Pharkphum Rakruam B2-3 Charongpun Musikavong B2-4 Shihabudheen Malliyekkal	[C2] Plant-assisted treatment processes C2-1 Chart Chiemchaisri C2-2 Pham Hoang Lam C2-3 Risky Ayu Kristanti C2-4 Jian Pu
15.30 - 16.			
16.30 - 18.00	[A3] Public involvement and participation A3-1 Do Thuan An A3-2 Rosalina Palanca-Tan A3-3 Tushara Chaminda G.G.	<b>[B3] Physico-chemical</b> <b>processes</b> B3-1 Tran Thi Viet Nga B3-2 Rajesh Roshan Dash B3-3 M.R. Alavi Moghaddam	<b>[C3] Biological treatment II:</b> <b>anaerobic processes</b> C3-1 Nguyen Viet Anh C3-2 Thu Hang Duong C3-4 Wee Shen Lee
18.00 - 18.	.30 Break		
18-30 -	Symposium Dinner		
DAY 3 (N	November 10, 2012, Saturday		
	Room A	Room B	Room C
08.30 - 10.00	<b>[A4] Meteorology and climate</b> A4-1 Anshul Agarwal A4-2 Thanh Ngo-Duc	[B4] Health-related microbiology of the water environment B4-1 Herto Dwi Ariesyady B4-2 Manami Inaba B4-3 Masakazu Hashimoto	[C4] Lake water pollution and water environment C4-1 Awalina-Satya C4-2 Do Thu Nga
10.00 - 10.	.30 Coffee break		
10.30 - 12.00	<b>[A5] Flood-related issues</b> A5-1 Ichiko Inagaki A5-2 Ratih Indri Hapsari	<b>[B5] River water pollution</b> B5-1 Absar Ahmad Kazmi B5-2 Chandath Him B5-3 Duong Thi Hanh	
12.00 - 12.	.30 Break		
12.30 - 14.	.00 Farewell Lunch		

# PLATFORM PRESENTATIONS

# Session A1: Geology and hydrology

- A1-1 Hydrogeochemical zonation for groundwater management in the area with diversified geological and land-use setup Manish Kumar<sup>\*</sup>, Roger Herbert, Aparna Das and AL. Ramanathan
- A1-2 Suspended sediment load prediction using a coupled model of singular spectrum analysis and artificial neural network: A case study of Ban Tha Sai catchment in the Lower Mekong basin Sokchhay Heng<sup>\*</sup> and Tadashi Suetsugi
- A1-3 Integration of the rainfall-runoff-inundation model with the web-based hydrological data management platform Temur Khujanazarov<sup>\*</sup>, Yutaka Ichikawa and Jun Magome

# Session A2: Sustainability of the water environment

- A2-1 Application of multifarious compounds in shrimp farms and allied sediment quality Khondoker Mahbub Hassan<sup>\*</sup>, Md. Monzur Hossain and Kensuke Fukushi
- A2-2 An integrated framework to assess climate change impacts on water resources and evaluate adaptation options Sujata Manandhar<sup>\*</sup>, Vishnu Prasad Pandey and Futaba Kazama
- A2-3 Business model assessment in fecal sludge management in selected Vietnamese cities Nguyen Viet Anh<sup>\*</sup>, Nguyen Hong Sam, Dinh Dang Hai, Nguyen Phuoc Dan and Nguyen Xuan Thanh
- A2-4 Development of sustainable livelihood improvement strategy considering integrated char resources management (ICRM) in Reverine Char *Mohammad Arifur Rahman*<sup>\*</sup>

# Session A3: Public involvement and participation

- A3-1 Household survey on water sources and point-of-use water treatment systems in Hanoi, Vietnam Do Thuan An<sup>\*</sup>, Keisuke Kuroda, Tran Thi Viet Nga, Kumiko Oguma, Takeshi Hayashi and Satoshi Takizawa
- A3-2 Knowledge, attitudes, and willingness to pay for domestic sewerage and sanitation services: A contingent valuation survey in Metro Manila Rosalina Palanca-Tan<sup>\*</sup>

A3-3 Evaluation of community owned water resources based on water quality information platform (WQIP) in Thailand Tushara Chaminda G.G.\*, Hiroaki Furumai, Variga Sawaittayotin, Ryo Honda, Toru Watanbe, Yoshifumi Masago and Rungnapa Chulasak

### Session A4: Meteorology and climate

- A4-1 How uncertain are future climate predictions? An assessment in a Himalayan river basin Anshul Agarwal<sup>\*</sup>, Mukand S. Babel and Shreedhar Maskey
- A4-2 Seasonal precipitation trend over Vietnam in the past and its projection into the future Thanh Ngo-Duc<sup>\*</sup> and Tan Phan-Van

### Session A5: Flood-related issues

- A5-1 Regional characteristics of public perceptions of flood awareness among flood prone areas in East Java Province, Indonesia Ichiko Inagaki<sup>\*</sup>, Dian Sisinggih, Sri Wahyuni and Ratih Indri Hapsari
- A5-2 Flood emergency response decision system in urban river basin for communicating probabilistic rainfall-runoff short-term prediction Ratih Indri Hapsari<sup>\*</sup>, Satoru Oishi, Ichiko Inagaki, Tadashi Suetsugi, Kengo Sunada, Dian Sisinggih and Tetsuya Sano
- ♦ Session B1: Chemical pollution of the water environment
- **B1-1** Comparison of heavy metals levels in *O. niloticus* and *C. carpio* from floating cage aquaculture at Cirata Reservoir, Citarum River Basin in Indonesia Indah R.S. Salami<sup>\*</sup>, Suphia Rahmawati and Ratri I.H. Sutarto
- **B1-2** Copper, lead and zinc accumulation in catfish (*Clarias macrocephalus* Günther) from the Butuanon River, Metro Cebu, Philippines *Ma. Kristina Oquiñena-Paler*<sup>\*</sup> and Rico C. Ancog
- **B1-3** Long-term fate of organochlorinepesticides in sediment and paddy soils in Kameda basin, Niigata, Japan Mizuki Sakai<sup>\*</sup>, Nobuyasu Seike, Takashi Otani and Yukio Takahashi

#### Session B2: Drinking water

**B2-1** Goals in drinking water supply and groundwater pollution: Field investigation in eight districts, Sri Lanka Weragoda S.K.<sup>\*</sup>, Kawakami Tomonori, Motoyama Ayuri and Kodithuwakku S.

- **B2-2** Reduction of hydrophilic and hydrophobic DOM fractions and its THMFP in inline coagulation with ceramic membrane filtration *Pharkphum Rakruam, Suraphong Wattanachira<sup>\*</sup> and Takashi Hashimoto*
- **B2-3** Removal of hydrophobic, transphilic and hydrophilic organic fractions and their THMFP in raw water supply from the U-Tapao Canal by enhanced coagulation

Kanjanee Srimuang, Thunwadee Tachapattaworakul Suksaroj, Chaisri Suksaroj and Charongpun Musikavong  $^{*}$ 

**B2-4** Green and facile synthesis of a nanostructured adsorbent composite and its application in defluoridation of water *Akshay R.G., Gaurab Saha, Shihabudheen M. Malliyekkal<sup>\*</sup> and Sabumon P.C.* 

# Session B3: Physico-chemical processes

**B3-1** Laboratory-scale performance evaluation of soil aquifer treatment in Hanoi, Vietnam Norbert Hüsers, Catalin Stefan<sup>\*</sup>, Jens Förster, Bingxin Wang, Thomas Fichtner,

Tran My Hanh, Tran Thi Viet Nga and Peter Werner

- **B3-2** Decolourisation of simulated reactive dye bath effluents using aluminium and magnesium based prehydrated salts Akshaya Kumar Verma, Puspendu Bhunia and Rajesh Roshan Dash<sup>\*</sup>
- **B3-3** Application of response surface methodology for dye removal from aqueous solution by activated carbon prepared from pomegranate residual *E. Radaei, M.R. Alavi Moghaddam<sup>\*</sup> and M. Arami*

#### Session B4: Health-related microbiology of the water environment

- **B4-1** Microbiological source tracking of *Salmonella* sp. and *Escherichia coli* by antibiotic resistance analysis in Upper Citarum River, West Java, Indonesia *Herto Dwi Ariesyady*<sup>\*</sup> and Siska Widya Dewi Kusumah
- **B4-2** Detection of genus *Kobuvirus* for evaluation as virus indicators for fecal contamination source tracking from Nhue River *Manami Inaba<sup>\*</sup>*, *Hiroyuki Katayama, Tran Thi Viet Nga and Hiroaki Furumai*
- **B4-3** Estimation of diarrhea incidence through flooding simulation in low-income community areas in Dhaka City, Bangladesh Masakazu Hashimoto<sup>\*</sup>, Tadashi Suetsugi, Kengo Sunada, Yutaka Ichikawa, Naoki Kondo and Kei Nishida

### ♦ Session B5: River water pollution

- **B5-1** Effect of mass bathing on water quality of river Ganges and consequential health risks during 2010 Maha Kumbh Vinay Kumar Tyagi, Akanksha Bhatia, Rubia Zahid Gaur, Abid Ali Khan, Muntajir Ali, Anwar Khursheed and Absar Ahmad Kazmi<sup>\*</sup>
- **B5-2** Environmental survey on organic micro-pollutants in rain, river and wastewater samples in Cambodia Chandath Him<sup>\*</sup>, Mizuki Sakai and Kiwao Kadokami
- **B5-3** Screening analysis of a thousand micro-pollutants in Vietnamese Rivers Duong Thi Hanh<sup>\*</sup>, Kadokami Kiwao and Nguyen Quang Trung

# Session C1: Biological treatment I: bioreactors

- **C1-1** Industrial wastewater reuse by airlift external membrane bioreactor Bui Xuan Thanh<sup>\*</sup>, Le Linh Thy, Nguyen Phuoc Dan and C. Visvanathan
- C1-2 A long-term evaluation of a novel non-aerated aerobic process for post-treatment of UASB-treated sewage by on-site practical-scale in India *Tsutomu Okubo, Takashi Onodera, Shigeki Uemura, Kengo Kubota, Masanobu Takahashi, Takashi Yamaguchi, Akiyoshi Ohashi and Hideki Harada*<sup>\*</sup>
- C1-3 Microbial community composition of a G3-type DHS reactor in UASB-DHS system treating municipal sewage Kengo Kubota<sup>\*</sup>, Mikio Hayashi, Kengo Matsunaga, Akiyoshi Ohashi, Yu-You Li, Takashi Yamaguchi and Hideki Harada

# Session C2: Plant-assisted treatment processes

- **C2-1** Utilization of concentrated leachate for plant cultivation on municipal solid waste landfill *C. Suwunpukdee, C. Chiemchaisri<sup>\*</sup>, W. Chiemchaisri and S. Tudsri*
- **C2-2** Application of vegetated submerged bed for advanced treatment of industrial zone wastewater Nguyen Phuoc Dan<sup>\*</sup>, Do Hong Lan Chi, Pham Hoang Lam, Vu Le Quyen, Bui Le Thanh Khiet and Doan Thi Thuy
- **C2-3** The potential of rhizoaugmentation using *Spirodela polyrrhiza* and nitrophenol (NP)-degrading bacteria for sustainable treatment of NPs polluted water Risky Ayu Kristanti<sup>\*</sup>, Masahiro Kanbe, Tadashi Toyama, Yasuhiro Tanaka and Kazuhiro Mori
- C2-4 Improved phytoextraction of cadmium from contaminated soil using microbial biopolymers

Jian Pu<sup>\*</sup>, Kensuke Fukushi, Fumiyuki Nakajima and Kazuo Yamamoto

### ♦ Session C3: Biological treatment II: anaerobic processes

C3-1 Anaerobic co-digestion of organic waste and septic tank sludge at thermophilic condition

Nguyen Viet Anh<sup>\*</sup>, Duong Thu Hang, Thai Manh Hung, Nguyen Phuong Thao, Zeig C., Wagner M. and Yasui H.

- C3-2 Pre-treatments to enhance the bio-methanation and energy recovered from kitchen waste and sewage Thu Hang Duong<sup>\*</sup>, Jingxing Ma, Marta Carballa and Willy Verstraete
- **C3-3** Mesophilic and thermophilic production of volatile fatty acids from palm oil mill effluent for polyhydroxyalkanoates generation Wee Shen Lee<sup>\*</sup>, Adeline Seak May Chua, Hak Koon Yeoh and Gek Cheng Ngoh

### Session C4: Lake water pollution and water environment

- C4-1 The changes of phytoplankton community structure of Situ Rawa Kalong, a shallow polluted tropical lake in West of Java Fachmijany Sulawesty, Awalina Satya<sup>\*</sup> and Tjandra Chrismadha
- C4-2 A conceptual approach of assessing nitrogen runoff from paddy in Material Flow Analysis Do Thu Nga<sup>\*</sup> and Nishida Kei

# POSTER PRESENTATIONS

- **P01** Micro-components survey of residential water use in Hanoi Pham Ngoc Bao, Toshiya Aramaki, Masahiro Otaki, Yurina Otaki and Tran Thi Viet Nga
- **P02** Nutrient pollution problems in Southeast Asian countries Pham Ngoc Bao, Toshiya Aramaki and Tran Duc Ha
- **P03** Potentially pathogenic bacteria isolated from different tropical waters in Sri Lanka W.M.G.C.K. Mannapperuma, K.C.L. Abayasekara, G.B.B. Herath and D.R.I.B. Werellagama
- **P04** Water quality and water use in peat lands area of the transitional zone of Giam Siak Kecil Bukit Batu Biosphere Reserve, Sumatera Island Reliana Lumban Toruan and Ignasius D.A. Sutapa
- P05 Access to basic human needs in times of emergency: The case of the 2011 Thailand flood Sengyun Kim, Iwato Amano, Kyoungjin An and Jatuwat Sangsanont

- **P06** Rethinking integrated water resources management (IWRM): Need for reframing IWRM for futurability Hironori Hamasaki, Hisaaki Kato, Chie Imagawa and Satoko Watanabe
- **P07** Development of a sewage treatment system combining an UASB and a random packing type down-flow hanging sponge reactor for minimum energy requirement

Takahashi M., Tanaka H., Kato K., Nagano A., Yamaguchi T. and Harada H.

- **P08** Characteristics of dissolved silicate loads from major rivers to Ariake Bay, Japan Hiroshi Kumagai, Yoshito Tanaka, Yuko Ishibashi and Okihiro Ohishi
- **P09** Examination of heavy metal in soil-sediment, water and plants of the Bagmati **River in Nepal** Malla R., Shakya M., Chapagain S.K., Mori K. and Kazama F.
- **P10** Change of dissolved silica concentration and diatom population in Ariake Sea in Japan Yoshito Tanaka, Hiroshi Kumagai, Yuko Ishibashi and Okihiro Oishi
- Identification of hydrogeochemical processes in the groundwater environment of **P11** Diphu, Assam Aparna Das and Manish Kumar
- **P12** The effectiveness on water quality in tiger shrimp (Penaeus monodon) pond treated with *Streptomyces* sp. A1 probiotic Ngo Thi Tuong Chau, Ngo Hoang Song Uyen, Huynh Thi Kim Son and Tran Duy Loc
- Underlying just compensation and land use in flood issues: An investigation on **P13** Ayutthaya Province after Thailand's 2011 event Souza Felipe Francisco De, Baba Hiroki, Yadav Shweta, An Kyoung-Jin and Sangsanont Jatuwat
- **P14** A Programme of Overseas Partnership Centre (OPaC) - International Research Center for River Basin Environment, University of Yamanashi for Water Quality Monitoring in Upper Brantas and Sampean Rivers, East Java, Indonesia Dian Sisnggih, Ichiko Inagaki and Sri Wahyuni
- P15 Effect of household practices to disease prevention during the 2011 flooding: A case study in Ayutthaya Province, Thailand Ong James Michael, Pathirana Shakila, Tomomi Shimizu, Sangsanont Jatuwat and An Kyoung Jin
- **P16** Study on sediment production distribution in the Red River basin, Vietnam Kazuhiro Kakizawa, Hiroshi Ishidaira, Jun Magome and Wang Jie
- Availability of input data for inundation and water quality simulation in Hanoi **P17** downtown

Pham Van Quan, Hiroaki Furumai, Futoshi Kurisu and Ikuro Kasuga

- **P18** Characteristic analysis of pollution load from storm surface runoff of urban highway and rail road C.S. Lee, H.G. Park, C.H. Yoon, S.C. Hong, Y.M. Seo and G.T. Seo
- P19 Effect of organic loading on biological hydrogen production in Up-flow Anaerobic Sludge Blanket (UASB) Reactors S.J. Jeong, D.R. Park, C.Y. Seong, J.S. Won, T.S Lee and G.T. Seo
- **P20** Non-point pollutant runoff characteristics from agricultural area of the upstream watersheds of Nam-river dam in Korea C. S. Lee, G. T. Seo, B.H.Moon, K.H. Park, C.H. Yoon, W.C. Jeong, J.W. Lee and S.E. Chun
- P21 Antibiotic susceptibility of coliform bacteria recovered from the samples of environmental water in Lao P.D.R.: Preliminary observation on antibiotic susceptibility to *Klebsiella* spp. Satoshi Nakamura, Yutaka Midorikawa, Toru Watanabe and Masami Nakatsu
- P22 Time- and space-saving method for sampling, storage, and identification of waterborne pathogenic bacteria by using 'Detection Papers': A case report of Indonesia

Takuro Furusawa, Satoshi Nakamura and Hana Furusawa

- **P23** Removal of C, N and P from a municipal UASB reactor using a novel SBR with spatial separation of the anoxic and aerobic zones Abid Ali Khan, Rubia Zahid Gaur, Vasileios Diamantis, Beni Lew, Mahmood Ahmad, Anwar A. Khan, Indu Mehrotra and A.A. Kazmi
- P24 Enrichment of mixed culture for simultaneous removal of NH4-N and COD via facultative and ANAMMOX route Anjali Gopakumar and P.C. Sabumon
- P25 Backfill situation and the influences to do inundation situation due to tide in Ho Chi Minh City Bui Viet Hung
- **P26** Integrated management concept for craft villages in Vietnam regarding water, wastewater, waste and related energy Nguyet Thi Tran, Sebastian Meier, Celia Hahn, Dirk Weichgrebe, Peter Werner and Karl-Heinz Rosenwinkel
- **P27** Nutrient dynamics in sulfidic Lake Maninjau, Indonesia: Implication of fish cage aquaculture Cynthia Henny and Sulung Nomostryo
- **P28** Aquatic resource management by sea cucumber fishers in a changing water environment in the Philippines Maria Rebecca Campos

- **P29** Trihalomethane formation potential of Aung Kaew reservoir water Noratep Polwanich and Vililuck Kijjanapanich
- **P30** Estimation of rainfall erosivity under climate change in The Upper Nan watershed, Thailand *Pheerawat Plangoen and Roberto S. Clemente*
- P31 Water quality and diversity of macroinvertebrate species in rivers of Cebu City, Philippines Rico Ancog, Geralph B. Andrade, Ruth B. Miasco and Maricar F. Ortiz
- **P32** Development of a low cost wastewater treatment system for decentralized application with reuse potential *Rajiv Ranjan, P.C. Sabumon and Lokendra Kumar*
- **P33** Development of a high rate nitritation-denitritation process with phosphorous removal at low dissolved oxygen concentration in a down- flow fixed film reactor *Puja Balachandran, P.C. Sabumon, Anjali Gopakumar and Shihabudheen. M. Malliyekkal*
- **P34** Investigation of nitrate concentration in drinking water distribution network of Tehran city, Iran *M.M. Azadegan, M.R. Alavi Moghaddam and R. Maknoon*
- P35 The introduction of fixed-bed/attached-growth biofilm strategy to improve performance of sequencing batch reactor for removal of azo dyes from wastewater

E. Hosseini Koupaie, M. R. Alavi Moghadda and S.H. Hashemi

- P36 Effect of adding polyaluminum chloride on electrocoagulation process for removal of hexavalent chromium S. Sadeghi, M.R. Alavi Moghaddam and M. Arami
- P37 The assessment of to date water quality status of Sampean Baru River, East Java Province – Indonesia Sri Wahyuni, Dian Sisinggih and Ichiko Inagaki
- **P38** Removal of organics from treated palm oil mill effluent (POME) using powdered activated carbon (PAC) Suleyman A. Muyibi, Tamrin Tajari and Mohammed Saedi Jami
- **P39** Nitrate-organic carbon relationship in groundwater denitrification of Kathmandu Valley, Nepal Takashi Nakamura, Ken'ichi Osaka, Kei Nishida, Saroj K. Chapagain, Yuki Hiraga and Futaba Kazama
- **P40** Study on natural stabilization of urban sewerage sludge at experimental pilot laboratory scale *Tran Duc Ha, Nguyen Quoc Hoa and Nguyen Viet Anh*

- **P41** Mesocosm scale experiment to use duckweed (*Lemna perpusilla* Torr.) in closed recirculation fish aquaculture Awalina Satya, Tjandra Chrismadha, Gunawan P. Yoga and Fachmijany Sulawesty
- **P42** Application of water quality index for management of Huong river water quality in Hue city – Central Vietnam Nguyen Van Hop, Nguyen Nhu Thao Hanh, Nguyen Thi Yen Nhi and Nguyen Manh Hung
- **P43** Evaluation of groundwater environment of Dhubdhubhi watershed in Maharashtra, India Sangam Shrestha and Parmeshwar Udmale
- P44 Land-use impact on urban river water quality: A case study for Re river, Haiphong City, Vietnam Tran Thuy Anh, Kensuke Fukushi, Kazuo Yamamoto and Fumiyuki Nakajima
- P45 Evaluation of bio-toxicity removal in two-stage membrane bioreactor for landfill leachate treatment Varinthorn Boonyaroj, Chart Chiemchaisri, Wilai Chiemchaisri and Kazuo Yamamoto
- P46 Microscopic analysis of Speleothem in Ha Long Bay, a proxy for regional environmental assessment Trinh Anh Duc, Javier Garcia Guinea, Luz Robredo and Antonio Garralon Lafuente
- P47 Degradation of Noyyal River, South India due to dyeing units: Physico chemical analysis of dyeing unit effluent and its toxicity to freshwater water fish using certain biomarkers

Mathan Ramesh, Velusamy Sasikalamathi, Annamalai Malarvizhi and Manoharan Saravanan

P48 Performance and microbial community structure of an aerobic digesters treating palm oil mill effluent

Sachiko Shibuya, Kengo Kubota, Daisuke Tanikawa, Shogo Itezono, Kazuaki Syutsubo, Takashi Yamaguchi, Yuji Sekiguchi, S.S. Chen, M.F.M. Yunus and Hideki Harada

- P49 Isolation, identification and characterization of *Vibrio* sp. in drinking Water sources in Mihintale, Sri Lanka *K.W.T. Chethana and W.M.G.C.K. Mannapperuma*
- **P50** Occurrence situation and potential health risk of lead contamination around Cho Dien Lead/Zinc mine, Viet Nam *N.T.T. Hien, M. Yoneda, Y. Matsui, S. Fujii, H. Harada and H.T. Hai*