Program Overview

Date	*Time*	*Details*	*Location*
Day 1: December 13, 2022	08:00 - 08:30	Registration	AITCC
	08:30 - 08:50	Opening ceremony and Welcome remarks	Auditorium, AITCC
	08:50 - 09:35	Keynote Speech I : Prof.Chongrak Polprasert	
	09:35 - 10:00	Group photo/break	
	10:00 - 11:00	Parallel Session 1	
		- Water resource management I	Room 1
		- Modeling, data utilization	Room 2
		- Sanitation I	Room 3
	11:00 - 11:10	Short Break	
	11:10 - 12:10	Parallel Session 2	
		- Novel technologies and methods	Room 1
		- Heavy metal risk	Room 2
		- Sanitation II	Room 3
	12:10 - 13:10	Lunch	
	13:30 - 14:15	Keynote Speech II:Mr Evariste Kouassi-Komlan	Milton Bender Auditorium
	14:15 - 14:25	Short Break	
	14:25 - 15:25	Parallel Session 3	
		- Advanced water treatment technology I	Room 1
		- Water quality management	Room 2
		- Domestic wastewater treatment	Room 3
	15:25 - 15:55	Coffee Break	
	15:55 - 17:15	Parallel Session 4	
		- Advanced water treatment technology II	Room 1
		- Water environment	Room 2
		- Industrial wastewater treatment	Room 3
	17:15 - 18:15	AIT tour	
	18:30 - 20:30	Welcome dinner	
Day 2: December 14, 2022	08:30 09:15	Keynote Speech III : Prof. Taku Fujiwara	Milton Bender Auditorium
	09:15 - 09:25	Short Break	
	09:25 - 10:25	Parallel Session 5	
		- Water resource management II	Room 1
		- Health related microbiology	Room 2
		- Emerging issues in the environment	Room 3
	10:25 - 10:40	Break	
	10:40 - 12:00	Parallel Session 6	
		- Disinfection and disinfection by-products	Room 1
		- Innovative wastewater treatment	Room 2
		- Nutrient removal	Room 3
	12:00 - 13:00	Lunch	
	13:00 - 18:00	Technical tour	

Date	*Time*	*Details*	*Location*
Day 3: December 15, 2022	08:30 - 09:15	Keynote Speech IV : Prof. Kazuaki Syutsubo	Milton Bender Auditorium
	09:15 - 09:25	Short Break	
	09:25 - 10:45	Parallel Session 7	
		- **Water supply**	Room 1
		- **Sludge management**	Room 2
		- **Resource recovery**	Room 3
	10:45 - 11:00	Break	
	11:00 - 12:00	Parallel Session 8	
		- **Climate change**	Room 1
		- **Micropollutants**	Room 2
		- **Health risk and ecotoxicity**	Room 3
	12:00 - 13:00	Lunch and Closing ceremony (Award presentation)	

Remark: Room 1, Room 2 and Room 3 are in AITCC. Lunch, Dinner and Coffee is served at AITCC.

Special session by the Pollution Control Department (PCD), Thailand

DAY 1 (Tuesday, December 13th, 2022)

Topic : Treatment Efficiency Lebel as a tool for Decentralized Wastewater Management

Time : 11:10 – 12:10

Location : Milton Bender Auditorium, at Asian Institute of Technology (AIT)

(Open session)

Time	*Details*
11:10 – 11:20	Opening Remark and Strategic plan on Decentralized Wastewater Management Deputy Director General, Wastewater Management Authority (WMA)
11:20 – 11:30	Rationale, Development and Goals for Treatment Efficiency Label Dr. Chayawee Wangcharoenrung, Director of Domestic Wastewater Sub-division, Pollution Control Department (PCD)
11:30 – 11:50	The future of Treatment Efficiency Label as a Tool Dr. Wijarn Simachaya, President of Thailand Environment Institute (TEI)
11:50 – 12:10	Panel Discussion: "Motivation factors and Expectations from manufacturer's point of view" 4 Representatives of commercial package treatment system manufacturer

Technical tour

DAY 2 (Wednesday, December 14th, 2022)

Time : 13:00 – 18:00

Location: Bang Sue Education and Environmental Conservation Center

Kamphaeng Phet 2 Rd, Khwaeng Chatuchak, Chatuchak, Bangkok 10900,

Trip itinerary

Time	Event
13:00	Meeting time at AITCC
13:15	Departure from AITCC
14:15	Arrive at Bang Sue Education and Environmental Conservation Center
16:30	Departure from Bang Sue Education and Environmental Conservation Center
18:00	Arrive at AITCC

The Bang Sue Environmental Education and Conservation Center (EECC) project was developed on the northwest reservoir of Vachirabenjatas Park or the Railway Park's (SUAN ROD FAI) boundary. The circulation path within the compound had been designed to maintain the existing main routes such as bicycle lanes, walkways, and jogging route, and connect to the Park's circulation system.

The project was designed to be in harmony with the existing environment. The main building is designed as a 2-storey with an Underground Wastewater Treatment plant (WWTP) facility (with 10x100x150 m. size). The building consists of two sides; a curvaceous waterfall-facade facing the park and an office-like side facing the Kampaeng Phet 2 Road and elevated express way.

The EECC project is housed an environmental education, especially AQUATIC PLANTS and Ecology Conservation Center, which aim to educate and raise visitors' awareness on the importance of environment resources. Not only in conserving aspect, but also integrating and promoting the lively urban environments. The facade of the building facing the park will be highlighted by a 100-meter-long strip of waterfall, which utilize recycled water treated by an advanced treatment process from the underground WWTP.

The main Landscaped area, constructed and floating–look on existing reservoir is an educational AQUATIC PLANTS study center as an open water garden which display water plants according to their habitats and botanical grouping. Intimate spaces for multifarious aquatic plants are provided and highlighted by special area of the Royal projects case study. This garden will also provide spaces for environmental activities or outdoor retreat and recreation spaces, concerts highlighted with an unique surrounding. All visitors could move, learn and be entertained along the landscaped areas on the floating wooden boardwalks. All landscape functions, features and elements were inspired designed, in the ripple pattern, to blend the technology and existing lush urban environment with human demands and use.

This project is considered as a first pilot project in South East Asia for the sub-merged WWTP project and also shall be the prototype of designed project which well combined and integrated the needs of Human Urban communities and Ecology environment. and it was awarded by Thai Association of Landscape Architects (TALA) as an Honor Award: General Design-Institution for year 2015.

Reference:https://worldlandscapearchitect.com/bang-sue-environmental-education-and-conservation-center-project-bangkok-thailand-group-three-design/#.Y4RyGnbP238

Keynote Speech I

Title

Emerging Water Environment Issues Relating to Pharmaceutical and Personal Care Products (PPCPs) and Microplastics

Professor Chongrak Polprasert
Thammasat University, Emeritus Professor, AIT, Thailand

Abstract
Over uses of anti-biotic drugs in Thailand and other countries have resulted in the occurrence of drug-resistant bacteria, causing severe health and economic losses. Some fish samples in Thailand were also found to be contaminated with anti-biotic drugs. Recent studies found that advanced constructed wetlands and electrochemical oxidation processes were effective in degrading these contaminated drugs in wastewater. Another emerging water environment issue is microplastics which have been found to widely contaminate the water environment including aquatic organisms used as food and feed, tap and bottled water. More efforts should be made to reduce and reuse the plastic wastes.

Keynote Speech II

Title

Impact Air, soil and water pollutions on Child health (Mongolia)

Mr. Evariste Kouassi-Komlan
UNICEF Representative in Mongolia

Abstract
Air, soil and water pollutions are major threats to child survival and development. Despite measure taken by many governments, the impacts of these 3 mains burden continue to impact the lives on millions of children worldwide. The keynote will present the different analysis conducted in Mongolia on Polluted Air, soil and ground water and their direct and indirect effects on the health of young children. It will also define some options of improvement and share the highlights of simple solutions implemented that have changed lives of mothers and children.

Keynote Speech III

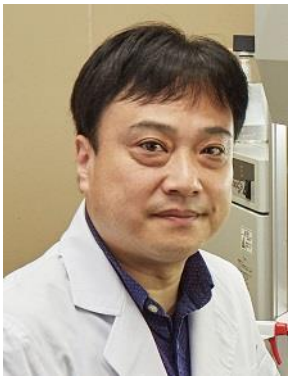
Title

Dual dissolved oxygen control system in oxidation ditches as an energy saving sewage treatment technology

Professor Taku Fujiwara
Kyoto University, Japan

Abstract
The authors have developed a dual dissolved oxygen (DO) control system in oxidation ditches through a tripartite partnership between academia, industry, and government. Two DO probes are installed to adjust the DO gradient in the ditch and stably control the ratio of the aerobic/anoxic zone under large fluctuations in influent load. Therefore, this system can simultaneously achieve stable organic matter and nitrogen removal, energy saving and reduced hydraulic retention time. In the keynote speech, I will explain the development history from the basics of technology to full-scale demonstration and horizontal deployment.

Keynote Speech IV



Title

Development of appropriate decentralized domestic wastewater treatment technology

Professor Kazuaki Syutsubo
National Institute for Environmental Studies, Japan (NIES)

Abstract
Installation of centralized sewerage system has been delayed because of economic constraints in Southeast Asian developing countries. For effective control of the pollutant load in a short period of time, introduction of a decentralized domestic wastewater treatment system is reasonable option. In addition, the reduction in operating energy (costs) facilitates the introduction of treatment systems. This talk describes the result of pilot scale performance evaluation of novel aerobic trickling filter (Down-flow Hanging Sponge: DHS) for treatment of domestic wastewater from apartment buildings in Bangkok, and its potential for social implementation.

Presenters

[Day 1: 13th December, 2022]

Time	Room 1	Room 2	Room 3
Parallel Session 1	**Water resource management I**	**Modeling, data utilization**	**Sanitation I**
10:00 - 10:20	A-008_ Ricky dela Cruz	A-003_ Makito Sasano	A-062_ Tatchai P.
10:20 - 10:40	A-044_ K.S.Kasiviswanathan	A-081_ Sathasivan A.	A-104_ Nawa Raj K.
10:40 - 11:00	A-084_ Kilonzi Peter Muindi	A-076_ Bhargabnanda Dass	A-105_ Loi Huynh Tan
Parallel Session 2	**Novel technologies and methods**	**Heavy metal risk**	**Sanitation II**
11:10 - 11:30	A-046_ Jay Sharma	A-002_ Maris Asuncion L.B	A-064_ Tatchai P.
11:30 - 11:50	A-078_ Patiparn P.	A-085_ Lora Mae Villegas	A-029_ Devasena M.
11:50 - 12:10	A-107_ Thananont A.	(no presentation)	A-059_ Hendra Gupta
Parallel Session 3	**Advanced water treatment technology I**	**Water quality management**	**Domestic wastewater treatment**
14:25 - 14:45	A-067_ Siriwara M.	A-024_ Chomphunut P.	A-012_ Nagano A.
14:45 - 15:05	A-009_ Ittikorn Palee	A-053_ Keisuke Kuroda	A-039_ Ankur Rajpal
15:05 - 15:25	A-033_ Priya E.	A-083_ Virgie P. Celestial	A-056_ Ghazal S.
Parallel Session 4	**Advanced water treatment technology II**	**Water environment**	**Industrial wastewater treatment**
15:55 - 16:15	A-047_ Aunnop W.	A-065_ Lan Huong N.	A-025_ Athit Phetrak
16:15 - 16:35	A-080_ Qing Ding	A-069_ Shunsuke Oka	A-041_ Thanapat T.
16:35 - 16:55	A-075_ Sathasivan A.	A-099_ Kim Neil Irvine	A-079_ Gaurav V.
16:55 - 17:15	A-055_ Patthranit K.	A-103_ Aye P.P. Aung, Chanikarn T.	A-106_ Rajesh R.D.

[Day 2: 14th December, 2022]

Time	Room 1	Room 2	Room 3
Parallel Session 5	**Water resource management II**	**Health related microbiology**	**Emerging issues in the environment**
09:25 - 09:45	A-005_ Kilonzi Peter Muindi	A-092_ Kwanrawee S.	A-063_ Kesirine J.
09:45 - 10:05	A-018_ Aksara P.	A-037_Tippawan S.	A-045_ Manish K.
10:05 - 10:25	A-068_ K. S. Kasiviswanathan	A-035_ M A Khan	A-093_ Tharindu P.G.
Parallel Session 6	**Disinfection and disinfection by-products**	**Innovative wastewater treatment**	**Nutrient removal**
10:40 - 11:00	A-027_ Thirawit P.	A-043_ Mami Watarai	A-014_ Pongsak N.
11:00 - 11:20	A-038_ Jack Jia Xin Song	A-066_ Hiroyasu Satoh	A-028_ Chew Lee L.

Parallel Session 6	Disinfection and disinfection by-products	Innovative wastewater treatment	Nutrient removal
11:20 - 11:40	A-072_ Surapong R.	A-070_ Bhaskar Jyoti Deka	A-034_ Phuong T.T.
11:40 - 12:00	A-096_ Charongpun M.	A-071_ Bhaskar Jyoti Deka	A-049_ Ghazal S.

[Day 3: 15th December, 2022]

Time	Room 1	Room 2	Room 3
Parallel Session 7	**Water supply**	**Sludge management**	**Resource recovery**
09:25 - 09:45	A-004_ Benyapa S.	A-011_ Chea Eliyan	A-013_ Wai Lun Ng
09:45 - 10:05	A-036_ Chotikoon B.	A-016_ Arutchelvan V.	A-050_ Yoon Li wan
10:05 - 10:25	A-020_ Shekhar Khanal	A-021_ Sotelo TJ.	A-077_ Gowtham B.
10:25 - 10:45	A-015_ Mitria Widianingtias	A-097_ Mayur Jain	A-088_ Son Tran H.
Parallel Session 8	**Climate change**	**Micropollutants**	**Health risk and ecotoxicity**
11:00 - 11:20	A-026_ Keane Carlo Lomibao	A-019_ Gowtham B.	A-023_ Parinda T
11:20 - 11:40	A-086_ Hannah W. Jose	A-030_ Muntzeer Ali	A-061_ Pham H.T
11:40 - 12.00	A-017_ Aksara P.	A-031_ Gowtham B.	A-091_Rosalyn P.A.

Remark: Abstracts are available online in the SEAWE-13 website

List of Presentation

[Day 1: 13th December, 2022]

Parallel Session 1

ID	*Presentation Title / Authors*
Water resource management I	
A-008	Formulation irrigation water resources management plan: A case of Malinao Irrigation System, Bohol, Philippines *C. Pascual, N. Alibuyog and R. dela Cruz**
A-044	Bayesian-based machine learning algorithms for streamflow forecasting *Abhinanda Roy and K. S. Kasiviswanathan**
A-084	Is the Mekong truly "sustainable"? – State-of-the-art of water governance and hydropolitics in the Mekong *Hironori Hamasaki and Nguyen Dieu Linh; Kilonzi Peter Muindi**
Modeling, data utilization	
A-003	Public acceptance of potable reuse of reclaimed water using social network data *Makito Sasano*, Shinobu Kazama, Kumiko Oguma and Satoshi Takizawa*
A-081	Advances in modelling decay of chlorine and disinfection by-products in water supply systems *Sathasivan A*, Fisher I and Kastl, G.*
A-076	Power spectrum analysis of hydrological time-series: Interpreting springshed processes in the Indian Himalayas *Bhargabnanda Dass*, Nishant Saxena and Sumit Sen*

ID	*Presentation Title / Authors*
Sanitation I	
A-062	Sanitation greenhouse gas emissions and measures for climate change mitigation: Preliminary estimation based theoretical approach *Thammarat Koottatep, Tatchai Pussayanavin*, Atitaya Panuvatvanich, Nawatch Surinkul, Hendra Gupta, Suraj Pradhan, Chawalit Chaiwong, Nuttapong Ploysurin and Chongrak Polprasert*
A-104	Value addition on user interface and sanitation governance through nudge instruments *Nawa Raj Khatiwada*, Shankar Shrestha, Monica Maharjan and Sophiya Shrestha*
A-105	Seasonal variability in greenhouse gas emissions from septic tanks in Hanoi, Vietnam *Huynh Tan Loi*, Hidenori Harada, Shigeo Fujii, Pham Nguyen Hong Lien, Thu-Huong Thi Hoang and Huynh Trung Hai*

Parallel Session 2

ID	*Presentation Title / Authors*
Novel technologies and methods	
A-046	Defluoridation of ground water by dual-metal hydroxide nanocomposite of Zr-Mn *Jay Sharma*, Vikrant Ranyal and Sudipta Sarkar*
A-078	Adsorption of iodinated trihalomethanes onto ZIF-8(Zn) derived carbon *Alongorn Siri, Aunnop Wongrueng, Pharkphum Rakruam and Patiparn Punyapalakul**
A-107	Development of image processing technique for detecting microorganism colony counting *Thananont Aunsiripant* and Nawatch Surinkul*
Heavy metal risk	
A-002	Preliminary study of nanosilica-chitosan coated superparamagnetic iron oxide nanoparticles as adsorbent for lead removal *Maris Asuncion L Bayhon*, Janice B, Sevilla-Nastor, Marisa J. Sobremisana, and Jey-R S. Ventura*
A-085	Heavy metal toxicity risk assessment of pore water, sediments, and fishes in Toledo River basin, Cebu, Philippines *Jarold John Leyson, Lora Mae G. Villegas*, Lemuel M. Veloso, Hemres M. Alburo, and Rosalyn P. Alburo.*
Sanitation II	
A-064	Performance evaluation of two-stage thermophilic septic tank for treating mixed toilet and coffeeshop wastewater *Thammarat Koottatep, Tatchai Pussayanavin*, Sopida Khamyai, Peerawit Janta, Usatip Kunsit and Chongrak Polprasert*
A-029	Optimization of nutrient recovery from urine using response surface methodology *Devasena M* and Indumathi Nambi*
A-059	Development of the city-wide inclusive sanitation in Krong Kracheh, Cambodia: A PolyUrbanWater project case study *Hendra Gupta*, Thammarat Koottatep and Richard J. Hocking*

Parallel Session 3

ID	*Presentation Title / Authors*
Advanced water treatment technology I	
A-067	Removal efficiency of bacteria and virus by the coagulation process *Siriwara Maneein* and Surapong Rattanakul*
A-009	A pilot-scale of high-rate magnetic ion exchange resin as a pretreatment for dissolved organic carbon removal in water purification of power plant *Ittikorn Palee*, Santiboon Kaewsimmaporn, Thunyalux Ratpukdi, Panitan Jutaporn and Phanwatt Phungsai*
A-033	Advancement of adsorption technology for wastewater treatment to remove nitrate and phosphate *Priya E*, Sudipta Sarkar and Pradip K. Maji*
Water quality management	
A-024	E. coli decay behavior in the estuary of Tokyo considering inactivation effects of solar radiation and salinity: experiment and modelling *Chomphunut Poopipattana*, Motoaki Suzuki and Hiroaki Furumai*
A-053	Occurrence of artificial sweeteners acesulfame and sucralose in swimming pools: evaluating emission from swimmers *Keisuke Kuroda*, Reina Ishiguro, Rina Kakinoki, Cong Li and Akihiko Hata*
A-083	Groundwater nitrate concentration on intensive sugarcane growing areas in Negros Island Philippines *Virgie P. Celestial*, Jayno C. Ramos, Jayson T. Tumbay, Toshihiko Anzai, Tetsuro Kikuchi and Ignacio S. Santillana*
Domestic wastewater treatment	
A-012	Performance evaluation of compact package-type down-flow hanging sponge reactor operated in Khon Kaen City, Thailand *Nagano A*, Kirishima Y, Watari T, Thepubon T, Choeisai P, Hongyon C, Panjapan P, Wong-Asa T, Harada H, Matsueda T, Hatamoto M and Yamaguchi T*
A-039	Optimization of package onsite wastewater treatment system (Johkasou) for carbon and nitrogen removal *A A Kazmi, Ankur Rajpal*, Aashutosh Garg and Abhishek Sahu*
A-056	Insights on wastewater characterization influencing biological process performance and microbial community dynamics in an anoxic-aerobic configured full-scale SBR at IIT Roorkee *Ghazal Srivastava* and Absar Ahmad Kazmi*

Parallel Session 4

ID	*Presentation Title / Authors*
Advanced water treatment technology II	
A-047	Efficiencies of powder activated carbon and ceramic microfiltration membrane on reduction of dissolved organic matter and trihalomethane formation potential in leachate-polluted groundwater *Kanlayanee Yimyam, Pharkphum Rakruam, Saoharit Nitayavardhana, Prattakorn Sittisom, Phacharapol Induvesa and Aunnop Wongrueng**
A-080	Applying pre-ozonation to reduce the low molecular weight fraction that plays a cross-linking role between meso fraction and membrane surface *Qing Ding*, Danru Zhao, Naoki Murata, Nobuhiro Aoki and Hiroshi Yamamura*

ID	*Presentation Title / Authors*
Advanced water treatment technology II	
A-075	Biologically activated carbon coupled with enhanced coagulation for better chlorine stability in drinking water treatment *Korotta-Gamage S.M. and Sathasivan A**
A-055	Effects of high frequency-alternating electric fields on bacterial cell growth in planktonic and biofilm modes *Patthranit Kunlasubpreedee*, Tomohiro Tobino and Fumiyuki Nakajima*
Water environment	
A-065	Low-cost Permeable Reactive Barrier (PRB) for remediation of groundwater polluted by leachate from municipal solid waste landfills *Lan Huong Nguyen*, Hoai Son Tran, Thi Viet Nga Tran, Tien Dung Nguyen and Thuy Lien Nguyen*
A-069	Identification of fecal contamination source and enteric viruses in groundwater in the Special Region of Yogyakarta province, Indonesia *Shunsuke Oka*, Shinobu Kazama, Kumiko Oguma and Satoshi Takizawa*
A-099	Mae Kha river re-imaged: The design process to enhance water quality, liveability, and community wellbeing for an at-risk urban watershed *Boonsita Aransawan, Piyatida Iemyang, Chanisa Jamthaworn, Kanchaporn Klumem, Juthamath Momwongsuwon, Supanut Dejnirattisai, Chanikarn Thanasrilungkul, Pattamon Selanon, Thanaraat Jetwaranyu, Thammarat Koottatep and Kim N. Irvine**
A-103	Mae Kha river re-imaged: Design and engineering for water quality remediation *A.M.S.N. Amarakoon, Aye Pyae Pyae Aung*, Quazi Syeem Al Ferdous Arnab, Chanikarn Thanasrilungkul*, Tanaset Kittipotiklang, Palacksone Vongxayalath, Naphasorn Phanthathan, Thanawit Pratum, Pitchsinee Warachan, Punyapha Pinyopawasutti, Natthamol Praditsakul, Thada Raksawong, Sidtipark Petchwhan, Watcharachai Watcharakul, Noppipat Vichai, Arituch Yathoum, Yuttachai Sarathai, Supanut Dejnirattisai, Chanikarn Thanasrilungkul, Pattamon Selanon, Thanaraat Jetwaranyu, Damrongsak Rinchumphu, Lihoun Teang, Thammarat Koottatep and Kim N. Irvine*
Industrial wastewater treatment	
A-025	Role of ferroferric oxide particles coated powdered activated carbon in hexavalent chromium removal from aqueous solutions *Natenarin Junhavadhanasiri and Athit Phetrak**
A-041	Effect of initial pH level on acidification efficiency of an anaerobic up-flow acidification reactor treating tapioca starch wastewater *Thanapat Thepubon*, Pairaya Choeisai and Kubota Kengo*
A-079	Roughness enhanced electrospray hydrophobic membrane for separation of dye from textile wastewater via membrane distillation *Gaurav Vaghela*, Mohd Sahil and Bhaskar Jyoti Deka*
A-106	Removal of Organics and COD from rice mill wastewater in a Moving Bed Biofilm Reactor *Challa Mallikarjun, Anurag Rai, Rajesh Roshan Dash* and Manaswini Behera*

[Day 2: 14th December, 2022]

Parallel Session 5

ID	*Presentation Title / Authors*
Water resource management II	
A-005	An assessment of water security and drought resilience in Mwingi Central subcounty Kenya *Kilonzi Peter Muindi*, Linh Dieu Nguyen and Hironori Hamasaki*
A-018	A long-term analysis of meteorological and hydrological drought indices for the Eastern Economic Corridor (EEC) region in Thailand *Sasin Jirasirirak, Aksara Putthividhya*, Wimolphat Bumbudsanpharoke Kamkanya and Somkiat Prajamwrong*
A-068	Spatial and temporal variations of drought occurrence in Afghanistan *Rahmatullah Dost and K. S. Kasiviswanathan**
Health related microbiology	
A-092	Metagenomic analysis of bacterial and viral pathogens and antibiotic resistance genes in the Saen Saep Canal *Krittayapong Jantharadej, Akechai Kongprajug, Wutthichai Mhuantong, Tawan Limpiyakorn, Benjaporn Boonchayaanant Suwannasilp, Skorn Mongkolsuk and Kwanrawee Sirikanchana**
A-037	Virus removal throughout wastewater treatment plant by membrane bioreactor compared with activated sludge process *Tippawan Singhopon*, Vu Duc Canh and Hiroyuki Katayama*
A-035	Evaluating antibiotic resistant bacteria in the commercial fish farms water *M A Khan*, Moza Beljaflah and Sara AlHemeiri*
Emerging issues in the environment	
A-063	Plastic waste management and current status in Thailand for addressing the issues of marine plastic waste from land-based sources *Chongrak Polprasert, Sittikorn Kamngam, Kesirine Jinda*, Tatchai Pussayanavin and Thammarat Koottatep*
A-045	Imprints of COVID-19 pandemic on the prevalence of microplastic and antibiotic resistance in the ambient urban waters *Manish Kumar*, Madhvi Joshi, Shashank Shekhar, Payal Mazumder and Vaibhav Srivastava*
A-093	CrAssphage as a viral indicator of human sewage contamination in surface water *Montakarn Sresung, Phongsawat Paisantham, Pacharaporn Ruksakul, Akechai Kongprajug, Natcha Chyerochana, Tharindu Pollwatta Gallage*, Thitima Srathongneam, Surapong Rattanakul, Skorn Mongkolsuk and Kwanrawee Sirikanchana*

Parallel Session 6

ID	*Presentation Title / Authors*
Disinfection and disinfection by-products	
A-027	Unknown screening analysis of disinfection by-products formed by chlorine, chlorine dioxide, and chloramine disinfection of river water samples *Thirawit Prasert*, Phanwatt Phungsai and Futoshi Kurisu*
A-038	Fluence rate modeling using ray tracing simulation for water disinfection reactors with ultraviolet light-emitting diodes *Jack Jia Xin Song*, Kumiko Oguma and Satoshi Takizawa*

ID	*Presentation Title / Authors*
Disinfection and disinfection by-products	
A-072	Data analysis of virus sensitivity to ultraviolet (UV) radiation *Surapong Rattanakul* and Kumiko Oguma*
A-096	Iodide and bromide content's effect on the formation of disinfection by-products *Charongpun Musikavong*, Juthamas Jaichuedee and Warangkana Na Phatthalung*
Innovative wastewater treatment	
A-043	Innovative wastewater treatment technologies for municipalities with declining population— evaluation and potential application *Mami Watarai*, Shinobu Kazama and Satoshi Takizawa*
A-066	The potential of in-sewer purification technology *Satoh H* and Sotelo TJ*
A-070	A non-destructive optical coherence tomography study on the removal of dissolved organic matter from water by in situ ferrate pretreatment *Bhaskar Jyoti Deka*, Alicia KJ An and Jiaxin Guo*
A-071	Oily wastewater treatment with composite ZnO nanoparticles omniphobic re-entrant PVDF membrane *Bhaskar Jyoti Deka*, Alicia KJ An and Jiaxin Guo*
Nutrient removal	
A-014	Mainstream and sidestream of full scale partial nitritation and anammox treatment systems, case studies in Taiwan and USA *Pongsak Noophan*, Junko Munakata Marr and Linda Ann Figueroa*
A-028	Pilot-scale evaluation of oxic-anoxic (OA) process under low dissolved oxygen condition for nitrogen removal from tropical wastewater *Chew Lee Leong*, Seow Wah How, Mohamad Fairus Rabuni, Alijah Mohd Aris, Rose Nadiah Abu Hasan, Bee Chin Khor, Thomas P. Curtis and Adeline Seak May Chua*
A-034	Effects of sponge sizes and hydraulic retention time on Downflow Hanging Sponge reactors' organic matter and nitrogen removals *Thao Tran P*, Yasuyuki Takemura, Masataka Aoki, Noriko Tomioka and Kazuaki Syutsubo*
A-049	Optimization of pilot-scale SBR-based STP working on simultaneous nitrification-denitrification and enhanced biological phosphorus removal processes for simultaneous nutrient (N and P) removal in Haridwar, India *Ghazal Srivastava* and Absar Ahmad Kazmi*

[Day 3: 15th December, 2022]

Parallel Session 7

ID	*Presentation Title / Authors*
Water supply	
A-004	Fluoride intake ratios from drinking water and foods soaked or boiled in fluoride-containing water *Benyapa Sawangjang* and Satoshi Takizawa*
A-036	Development of a mobile water supply system in emergencies situation *Chotikoon Bunditboondee* and Jenyuk Lohwacharin*
A-020	Changes in drinking water quality by Household Water Treatment and Storage practices in Kathmandu valley *Shekhar Khanal*, Shinobu Kazama and Satoshi Takizawa*

ID	*Presentation Title / Authors*
Water supply	
A-015	Potency of reclaimed water use in Bali island, Indonesia *Mitria Widianingtias*, Shinobu Kazama and Satoshi Takizawa*
Sludge management	
A-011	Sustainability assessment of faecal sludge treatment technologies for resource recovery in Phnom Penh, Cambodia *Chea Eliyan*, Björn Vinnerås, Christian Zurbrügg, Thammarat Koottatep, Kok Sothea and Jennifer McConville*
A-016	Integrated waste management through symbiotic macro culture *Atun Roy Chuodhury and Arutchelvan V**
A-021	A mass balance approach on evaluating sludge generation during enhanced sewer self-purification by porous media *Sotelo TJ* and Satoh H*
A-097	Techno economics of anaerobically mediated sludge and septage management systems in rural communities *Sugato Panda, Mayur Shirish Jain* and Lalit Borana*
Resource recovery	
A-013	Potential of glycerin pitch in mixed culture polyhydroxyalkanoate (PHA) production *Wai Lun Ng*, Li Wan Yoon and Adeline Seak May Chua*
A-050	An evaluation on feeding strategies in polyhydroxyalkanoates production from crude glycerol by activated sludge *Thao-Thy Nguyen-Huynh, Li Wan Yoon*, Yin Hui Chow and Adeline Seak May Chua*
A-077	Investigating the effects of pilot scale thermal pretreatment facility on class A biosolids production from sewage sludge *Gowtham Balasundaram*, Pallavi Gahlot, A.A. Kazmi and V.K Tyagi*
A-088	Sustainable phosphorus recovery from wastewater using Autoclaved Aerated Concrete waste *Son Tran Hoai*, Huong Nguyen Lan, Nga Tran Thi Viet and Ken Kawamoto*

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Climate change	
A-026	Potential impacts of Stratospheric Aerosol Injection to bias corrected near-future rainfall over the National Capital Region, Philippines *Keane Carlo G. Lomibao*, Patricia Ann J. Sanchez, Hannah W. Jose, Emmanuel Zeus S. Gapan, Catherine B. Gigantone, Jessa O. Aquino and Allan T. Tejada Jr*
A-086	Near future projections of precipitation and temperature over Lanao watershed, Philippines based on G6Solar and G6Sulfur experiments of global climate models *Patricia Ann J. Sanchez, Hannah W. Jose*, Keane Carlo G. Lomibao, Emmanuel Zeus S. Gapan, Allan T. Tejada Jr, Catherine B. Gigantone and Jessa O. Aquino*
A-017	A combined drought index (CDI) system for drought early warning, monitoring, and risk assessment in EEC region of Thailand *Sasin Jirasirirak, Aksara Putthividhya*, Wimolphat Bumbudsanpharoke Kamkanya and Somkiat Prajamwong*
Micropollutants	
A-019	Metagenomic analysis of sewage sludge microbiota and their potential to metabolize micropollutants *Pallavi Gahlot, Gowtham Balasundaram*, A.A. Kazmi and V.K Tyagi*

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Micropollutants	
A-030	Fate of plasticizers in common effluent treatment plants and removal by using nano titania-graphene based photo-catalyst and photolysis for tertiary treatment *Muntjeer Ali*, Mohammed Shoiab, Mandeep Singh and A.A. Kazmi*
A-031	Thermal hydrolysis of sewage sludge: Organics solubilization, methane yield, and emerging contaminants & pathogens removal *Vinay Kumar Tyagi, Gowtham Balasundaram*, Pallavi Gahlot and A.A. Kazmi*
Health risk and ecotoxicity	
A-023	Impact of water quality on the growth and development of Wolbachia trans-infected aedes aegypti mosquitoes *Parinda Thayanukul*, Satita Tansukkasem and Pattamaporn Kittayapong*
A-061	A low concentration of lead (Pb) can affect the efficiency of the activated sludge in the wastewater treatment plant *Hong T. Pham*, Linh B. Hoang, Cuong Nguyen Chi, Dung Viet Pham and Khuong V. Dinh*
A-091	Toxicity of trace metals in pore water and sediments of Metro Cebu urban rivers and its potential risk to Oreochromis Noliticus *Rosalyn P. Alburo*, Julia Lourdette B. Arias, Patrice Camille Borja, Irish D. Vasquez, Hemres M. Alburo and Lora Mae G. Villegas*

Remark: * indicates presenter

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