Chair	Athit Phetrak	Mahidol University	Chair Surapong Rattanakul King Mon	gkut University of Technology Thonburi	Chair	Futaba Kazama	Yamanashi University
	Room1: Water resource	e management I	Room2: Modeling	g, data utilization		Room3: San	itation I
Abstract ID	Title	Authors	Abstract Title	Authors	Abstract ID	Title	Authors
<u>A-008</u>	Formulation irrigation water resources management plan: A case of Malinao Irrigation System, Bohol, Philippines	C. Pascual, N. Alibuyog and R. dela Cruz* (RPD Consulting Inc., the Philippines)	A-003 Public acceptance of potable reuse of reclaimed water using social network data	Makito Sasano* (the University of Tokyo, Japan), Shinobu Kazama, Kumiko Oguma and Satoshi Takizawa		Sanitation greenhouse gas emissions and measures for climate change mitigation: Preliminary estimation based theoretical approach	Thammarat Koottatep, <u>Tatchai</u> <u>Pussayanavin</u> * (Ramkhamhaeng University, Thailand), Atitaya Panuvatvanich, Nawatch Surinkul, Hendra Gupta, Suraj Pradhan, Chawalit Chaiwong, Nuttapong Ploysurin and Chongrak Polprasert
	Bayesian-based machine learning algorithms for streamflow forecasting	Abhinanda Roy and <u>K. S.</u> <u>Kasiviswanathan</u> * (Indian Institute of Technology Roorkee, India)	A-081 Advances in modelling decay of chlorine and disinfection by-products in water supply systems	Sathasivan A* (Western Sydney University, Australia), Fisher I and Kastl, G.		Value addition on user interface and sanitation governance through nudge instruments	Nawa Raj Khatiwada* (Nepal Development Research Institute, Nepal) Shankar Shrestha, Monica Maharjan and Sophiya Shrestha
<u>A-084</u>	Is the Mekong truly "sustainable"? – state-of-the-art of water governance and hydropolitics in the Mekong	Hironori Hamasaki and Nguyen Dieu Linh; <u>Kilonzi Peter Muindi</u> * (Nagasaki University, Japan)	A-076 Power spectrum analysis of hydrological time-series: Interpreting springshed processes in the Indian Himalayas	Bhargabnanda Dass* (Indian Institute of Technology Roorkee, India), Nishant Saxena and Sumit Sen		Seasonal variability in greenhouse gas emissions from septic tanks in Hanoi, Vietnam	Huynh Tan Loi* (Van Lang University, Vietnam), Hidenori Harada, Shigeo Fujii Pham Nguyen Hong Lien, Thu-Huong Thi Hoang and Huynh Trung Hai

Parallel Session 2: 11:10 - 12:10 on December 13, 2022 (Day 1 AM2)

Chair	Hiroyuki Katayama	University of Tokyo	Chair	Tomohiro Tobino	University of Tokyo	Chair	Nawa Raj Khatiwada	Nepal Development Research Institute		
	Room1: Novel technologies and methods			Room2: Heavy metal risk			Room3: Sanitation II			
Abstract ID	Title	Authors	Abstract ID	Title	Authors	Abstract ID	Title	Authors		
<u>A-046</u>	Defluoridation of ground water by dual-metal hydroxide nanocomposite of Zr-Mn	<u>Jay Sharma</u> * (Indian Institute of Technology Roorkee, India), Vikrant Ranyal and Sudipta Sarkar		Preliminary study of nanosilica- chitosan coated superparamagnetic iron oxide nanoparticles as adsorbent for lead removal	Maris Asuncion L. Bayhon* (University of the Philippines Los Baños, the Philippines), Janice B. Sevilla-Nastor, Marisa J. Sobremisana and Jey-R S. Ventura	<u>A-064</u>	Performance evaluation of two- stage thermophilic septic tank for treating mixed toilet and coffeeshop wastewater	Thammarat Koottatep, <u>Tatchai</u> <u>Pussayanavin</u> * (Asian Institute of Technology, Thailand), Sopida Khamyai, Peerawit Janta, Usatip Kunsit and Chongrak Polprasert		
<u>A-078</u>	Adsorption of iodinated trihalomethanes onto ZIF-8(Zn) derived carbon	Alongorn Siri, Aunnop Wongrueng, Pharkphum Rakruam and <u>Patiparn</u> <u>Punyapalakul</u> * (Chulalongkorn University, Thailand)		Heavy metal toxicity risk assessment of pore water, sediments, and fishes in Toledo River basin, Cebu, Philippines	Jarold John Leyson, <u>Lora Mae G.</u> <u>Villegas*</u> (University of San Carlos, the Philippines), Lemuel M. Veloso, Hemres M. Alburo and Rosalyn P. Alburo	<u>A-029</u>	Optimization of nutrient recovery from urine using response surface methodology	Devasena M* (PSG Institute of Technology and Applied Research, India) and Indumathi Nambi		
	technique for detecting microorganism colony counting	Thananont Aunsiripant* (Mahidol University, Thailand) and Nawatch Surinkul	(No presentation)				Development of the city-wide inclusive sanitation in Krong Kracheh, Cambodia: A PolyUrbanWater project case study	Hendra Gupta* (Bremen Overseas Research and Development Association, Germany), Thammarat Koottatep and Richard J. Hocking		

^{*:} Presenters

Parallel Session 3: 14:25 - 15:25 on December 13, 2022 (Day 1 PM1)

Chair	Arumugam Sathasivan	Western Sydney University	Chair	Aunnop Wongrueng	Chiang Mai University	Chair	Noophan Pongsak	Kasesert University		
	Room1: Advanced water trea	tment technology I	Room2: Water quality management				Room3: Domestic wastewater treatment			
Abstrac ID	Title	Authors	Abstract ID	Title	Authors	Abstract ID	Title	Authors		
<u>A-067</u>	Removal efficiency of bacteria and virus by the coagulation process	Siriwara Maneein* (King Mongkut's University of Technology Thonburi, Thailand) and Surapong Rattanakul	<u>A-024</u>	E. coli decay behavior in the estuary of Tokyo considering inactivation effects of solar radiation and salinity: experiment and modelling	Chomphunut Poopipattana* (Northern Farm (1996) Co., Ltd., Thailand), Motoaki Suzuki and Hiroaki Furumai	<u>A-012</u>	Performance evaluation of compact package-type down-flow hanging sponge reactor operated in Khon Kaen City, Thailand	Nagano A* (Sanki Engineering Co., Ltd., Japan), Kirishima Y, Watari T, Thepubon T, Choeisai P, Hongyon C, Panjapan P, Wong-Asa T, Harada H, Matsueda T, Hatamoto M and Yamaguchi T		
<u>A-009</u>	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* (Khon Kaen University, Thailand), Santiboon Kaewsimmaporn, Thunyalux Ratpukdi, Panitan Jutaporn and Phanwatt Phungsai	<u>A-053</u>	Occurrence of artificial sweeteners acesulfame and sucralose in swimming pools: evaluating emission from swimmers	Keisuke Kuroda* (Toyama Prefectural University, Japan), Reina Ishiguro, Rina Kakinoki, Cong Li and Akihiko Hata	<u>A-039</u>	Optimization of package onsite wastewater treatment system (Johkasou) for carbon and nitrogen removal	A A Kazmi, <u>Ankur Rajpal</u> * (Indian Institute of Technology Roorkee, India), Aashutosh Garg and Abhishek Sahu		
<u>A-033</u>	Advancement of adsorption technology for wastewater treatment to remove nitrate and phosphate	Priya E* (Indian Institute of Technology Roorkee, India), Sudipta Sarkar and Pradip K. Maji	<u>A-083</u>	Groundwater nitrate concentration on intensive sugarcane growing areas in Negros Island Philippines	Virgie P. Celestial* (Sugar Regulatory Administration, the Philippines), Jayno C. Ramos, Jayson T. Tumbay, Toshihiko Anzai, Tetsuro Kikuchi and Ignacio S. Santillana	<u>A-056</u>	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* (Indian Institute of Technology Roorkee, India) and Absar Ahmad Kazmi		

Parallel Session 4: 15:55 - 17:15 on December 13, 2022 (Day 1 PM2)

Chair	Patiparn Punyapalakul	Chulalongkorn University	Chair	Charongpun Musikavong	Prince of Songkla University	Chair	Hiroyasu Satoh	University of Tokyo	
	Room1: Advanced water treat	ment technology II		Room2: Water environment			Room3: Industrial wastewater treatment		
Abstract ID	Title	Authors	Abstract ID	Title	Authors	Abstract ID	Title	Authors	
<u>A-047</u>	carbon and ceramic microfiltration membrane on reduction of dissolved organic matter and trihalomethane formation potential	Kanlayanee Yimyam, Pharkphum Rakruam, Saoharit Nitayavardhana, Prattakorn Sittisom, Phacharapol Induvesa and <u>Aunnop Wongrueng</u> * (Chiang Mai University, Thailand)	<u>A-065</u>	Low-cost Permeable Reactive Barrier (PRB) for remediation of groundwater polluted by leachate from municipal solid waste landfills	Lan Huong Nguyen* (Hanoi University of Civil Engineering, Vietnam), Hoai Son Tran, Thi Viet Nga Tran, Tien Dung Nguyen and Thuy Lien Nguyen	<u>A-025</u>	Role of ferroferric oxide particles coated powdered activated carbon in hexavalent chromium removal from aqueous solutions	Natenarin Junhavadhanasiri and Athit Phetrak* (Mahidol University, Thailand)	
<u>A-080</u>	1 3	Oing Ding* (Chuo University, Japan), Danru Zhao, Naoki Murata, Nobuhiro Aoki and Hiroshi Yamamura	<u>A-069</u>	Identification of fecal contamination source and enteric viruses in groundwater in the Special Region of Yogyakarta province, Indonesia	Shunsuke Oka* (the University of Tokyo, Japan), Shinobu Kazama, Kumiko Oguma and Satoshi Takizawa	<u>A-041</u>	Effect of initial pH level on acidification efficiency of an anaerobic up-flow acidification reactor treating tapioca starch wastewater	Thanapat Thepubon* (Khon Kaen University, Thailand), Pairaya Choeisai and Kubota Kengo	
<u>A-075</u>	coupled with enhanced coagulation	Korotta-Gamage S.M. and Sathasivan A* (Western Sydney University, Australia)	<u>A-099</u>	Mae Kha river re-imaged: The design process to enhance water quality, liveability, and community wellbeing for an atrisk 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* (Thammasat University, Thailand)	<u>A-079</u>		Gaurav Vaghela* (Indian Institute of Technology Roorkee, India), Mohd Sahil and Bhaskar Jyoti Deka	
<u>A-055</u>	electric fields on bacterial cell	Patthranit Kunlasubpreedee* (the University of Tokyo, Japan), Tomohiro Tobino and Fumiyuki Nakajima	<u>A-103</u>		A.M.S.N. Amarakoon, Aye Pyae Pyae Aung* (Asian Institute of Technology, Thailand), Quazi Syeem Al Ferdous Arnab, Chanikarn Thanasrilungkul* (Asian Institute of Technology, Thailand), 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	<u>A-106</u>	Removal of Organics and COD from rice mill wastewater in a Moving Bed Biofilm Reactor	Challa Mallikarjun, Anurag Rai, <u>Rajesh</u> <u>Roshan Dash</u> * (Indian Institute of Technology Bhubaneswara, India) and Manaswini Behera	

*: Presenters

Parallel Session 5: 9:25 - 10:25 on December 14, 2022 (Day 2 AM1) Chair Tran Thi Viet Nga Hanoi University of Civil Engineering Chair Shinobu Kar

Chair	Tran Thi Viet Nga H	anoi University of Civil Engineering	Chair	Shinobu Kazama	University of Tokyo	Chair	Tiffany Joan Sotelo	University of the Philippines Diliman	
	Room1: Water resource	ce management II	Room2: Health related microbiology			Room3: Emerging issues in the environment			
Abstrac ID	Title	Authors	Abstract ID	Title	Authors	Abstract ID	Title	Authors	
<u>A-005</u>	An assessment of water security and drought resilience in Mwingi Central subcounty Kenya	Kilonzi Peter Muindi* (Nagasaki University, Japan), Linh Dieu Nguyen and Hironori Hamasaki	<u>A-092</u>	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 <u>Kwanrawee</u> <u>Sirikanchana</u> * (Chulabhorn Research Institute, Thailand)	<u>A-063</u>	status in Thailand for addressing the issues of marine plastic waste from	Chongrak Polprasert, Sittikorn Kamngam, Kesirine Jinda* (Asian Institute of Technology, Thailand), Tatchai Pussayanavin and Thammarat Koottatep	
<u>A-018</u>	A long-term analysis of meteorological and hydrological drought indices for the Eastern Economic Corridor (EEC) region in Thailand	Sasin Jirasirirak, <u>Aksara</u> <u>Putthividhya</u> * (Chulalongkorn University, Thailand), Wimolphat Bumbudsanpharoke Kamkanya and Somkiat Prajamwong	<u>A-037</u>	Virus removal throughout wastewater treatment plant by membrane bioreactor compared with activated sludge process	<u>Tippawan Singhopon</u> * (the University of Tokyo, Japan), Vu Duc Canh and Hiroyuki Katayama	<u>A-045</u>	Imprints of COVID-19 pandemic on the prevalence of microplastic and antibiotic resistance in the ambient urban waters	Manish Kumar* (University of Petroleum and Energy Studies, India), Madhvi Joshi, Shashank Shekhar, Payal Mazumder and Vaibhav Srivastava	
<u>A-068</u>	Spatial and temporal variations of drought occurrence in Afghanistan	Rahmatullah Dost and <u>K. S.</u> <u>Kasiviswanathan</u> * (Indian Institute of Technology Roorkee, India)	<u>A-035</u>	Evaluating antibiotic resistant bacteria in the commercial fish farms water	M A Khan* (Zayed University, United Arab Emirates), Moza Beljaflah and Sara AlHemeiri	<u>A-093</u>	surface water	Montakarn Sresung, Phongsawat Paisantham, Pacharaporn Ruksakul, Akechai Kongprajug, Natcha Chyerochana, <u>Tharindu</u> Pollwatta Gallage* (Chulabhorn Royal Academy, Thailand), Thitima Srathongneam, Surapong Rattanakul, Skorn Mongkolsuk and Kwanrawee Sirikanchana	

Parallel Session 6: 10:40 - 12:00 on December 14, 2022 (Day 2 AM2)

Chair	Manish Kumar	UPES, Dehradun	Chair	Kazuaki Syutsubo National Instit	ute for Environmental Studies, Japan	Chair	Taku Fujiwara	Kyoto University	
	Room1: Disinfection and disinfection by-products			Room2: Innovative was	tewater treatment	Room3: Nutrient removal			
Abstract ID	Title	Authors	Abstract ID	Title	Authors	Abstrac ID	Title	Authors	
<u>A-027</u>	Unknown screening analysis of disinfection by-products formed by chlorine, chlorine dioxide, and chloramine disinfection of river water samples		<u>A-043</u>	Innovative wastewater treatment technologies for municipalities with declining population— evaluation and potential application	Mami Watarai* (the University of Tokyo, Japan), Shinobu Kazama and Satoshi Takizawa	<u>A-014</u>	Mainstream and sidestream of full scale partial nitritation and anammox treatment systems, case studies in Taiwan and USA	Pongsak (Lek) Noophan* (Kasetsart University, Thailand), Junko Munakata Marr and Linda Ann Figueroa	
	Fluence rate modeling using ray tracing simulation for water disinfection reactors with ultraviolet light-emitting diodes	<u>Jack Jia Xin Song</u> * (the University of Tokyo, Japan), Kumiko Oguma and Satoshi Takizawa	<u>A-066</u>	The potential of in-sewer purification technology	Satoh H* (the University of Tokyo, Japan) and Sotelo TJ	<u>A-028</u>	Pilot-scale evaluation of oxic-anoxic (OA) process under low dissolved oxygen condition for nitrogen removal from tropical wastewater	Chew Lee Leong* (Universiti Malaya, Malaysia), Seow Wah How, Mohamad Fairus Rabuni, Alijah Mohd Aris, Rose Nadiah Abu Hasan, Bee Chin Khor, Thomas P. Curtis and Adeline Seak May Chua	
<u>A-072</u>	Data analysis of virus sensitivity to ultraviolet (UV) radiation	Surapong Rattanakul* (King Mongkut's University of Technology, Thailand) and Kumiko Oguma		A non-destructive optical coherence tomography study on the removal of dissolved organic matter from water by in situ ferrate pretreatment	Bhaskar Jyoti Deka* (Indian Institute of Technology Roorkee, India), Alicia KJ An and Jiaxin Guo	A-034	Effects of sponge sizes and hydraulic retention time on Downflow Hanging Sponge reactors' organic matter and nitrogen removals	Thao Tran P* (National Institute for Environmental Studies, Japan), Yasuyuki Takemura, Masataka Aoki, Noriko Tomioka and Kazuaki Syutsubo	
<u>A-096</u>	Iodide and bromide content's effect on the formation of disinfection by-products	Charongpun Musikavong* (Prince of Songkla University, Thailand), Juthamas Jaichuedee and Warangkana Na Phatthalung	· ·	Oily wastewater treatment with composite ZnO nanoparticles omniphobic re-entrant PVDF membrane	Bhaskar Jyoti Deka* (Indian Institute of Technology Roorkee, India), Alicia KJ An and Jiaxin Guo	<u>A-049</u>	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* (Indian Institute of Technology Roorkee, India) and Absar Ahmad Kazmi	

^{*:} Presenters

Parallel Session 7: 9:25 - 10:45 on December 15, 2022 (Day 3 AM1)

Chair	Jenyuk Lohwacharin	Chulalongkorn University	Chair	Tatchai Pussayanavin	Ramkhamhaeng University	Chair	Munawwar Ali Khan	Zayed University		
	Room1: Water supply			Room2: Sludge management			Room3: Resource recovery			
Abstraction ID	Title	Authors	Abstrac ID	Title	Authors	Abstract ID	Title	Authors		
<u>A-004</u>	Fluoride intake ratios from drinking water and foods soaked or boiled in fluoride-containing water	Benyapa Sawangjang* (the University of Tokyo, Japan) and Satoshi Takizawa	A-011	Sustainability assessment of faecal sludge treatment technologies for resource recovery in Phnom Penh, Cambodia	Chea Eliyan* (Swedish University of Agricultural Sciences, Sweden), Björn Vinnerås, Christian Zurbrügg, Thammarat Koottatep, Kok Sothea and Jennifer McConville	A-013	Potential of glycerin pitch in mixed culture polyhydroxyalkanoate (PHA) production	Wai Lun Ng* (Taylor's University, Malaysia), Li Wan Yoon and Adeline Seak May Chua		
<u>A-036</u>	Development of a mobile water supply system in emergencies situation	Chotikoon Bunditboondee* (Chulalongkorn University, Thailand) and Jenyuk Lohwacharin	<u>A-016</u>	Integrated waste management through symbiotic macro culture	Atun Roy Chuodhury and <u>Arutchelvan V*</u> (Annamalai University, India)	<u>A-050</u>	An evaluation on feeding strategies in polyhydroxyalkanoates production from crude glycerol by activated sludge	Thao-Thy Nguyen-Huynh, <u>Li Wan</u> <u>Yoon</u> * (Taylor's University, Malaysia), Yin Hui Chow and Adeline Seak May Chua		
<u>A-020</u>	Changes in drinking water quality by Household Water Treatment and Storage practices in Kathmandu valley	Shekhar Khanal* (the University of Tokyo, Japan), Shinobu Kazama and Satoshi Takizawa	A-021	A mass balance approach on evaluating sludge generation during enhanced sewer self-purification by porous media	Sotelo TJ* (University of the Philippines Diliman, the Philippines) and Satoh H	<u>A-077</u>	Investigating the effects of pilot scale thermal pretreatment facility on class A biosolids production from sewage sludge	Gowtham Balasundaram* (Indian Institute of Technology Roorkee, India), Pallavi Gahlot, A.A. Kazmi and V.K Tyagi		
<u>A-015</u>	Potency of reclaimed water use in Bali island, Indonesia	Mitria Widianingtias* (the University of Tokyo, Japan), Shinobu Kazama and Satoshi Takizawa	<u>A-097</u>	Techno economics of anaerobically mediated sludge and septage management systems in rural communities	Sugato Panda, <u>Mayur Shirish Jain</u> * (Indian Institute of Technology Indore, India) and Lalit Borana	<u>A-088</u>	Sustainable phosphorus recovery from wastewater using Autoclaved Aerated Concrete waste	Son Tran Hoai* (Hanoi University of Civil Engineering, Vietnam), Huong Nguyen Lan, Nga Tran Thi Viet and Ken Kawamoto		

Parallel Session 8: 11:00 - 12:00 on December 15, 2022 (Day 3 AM2)

Chair	Kumiko Oguma	University of Tokyo	Chair	Phanwatt Phungsai	Khon Kaen University	Chair	Keisuke Kuroda	Toyama Prefectural University	
	Room1: Climate change			Room2: Mic	ropollutants	Room3: Health risk and ecotoxicity			
Abstract ID	Title	Authors	Abstract ID	Title	Authors	Abstract ID	Title	Authors	
<u>A-026</u>	Potential impacts of Stratospheric Aerosol Injection to bias corrected near-future rainfall over the National capital region, Philippines	Keane Carlo G. Lomibao* (University of the Philippines Los Baños, the Philippines), Patricia Ann J. Sanchez, Hannah W. Jose, Emmanuel Zeus S. Gapan, Catherine B. Gigantone, Jessa O. Aquino and Allan T. Tejada Jr	<u>A-019</u>	Metagenomic analysis of sewage sludge microbiota and their potential to metabolize micropollutants	Pallavi Gahlot, <u>Gowtham Balasundaram</u> * (Indian Institute of Technology Roorkee, India), A.A. Kazmi and V.K Tyagi		Impact of water quality on the growth and development of Wolbachia trans-infected aedes aegypti mosquitoes	Parinda Thayanukul* (Mahidol University, Thailand), Satita Tansukkasem and Pattamaporn Kittayapong	
<u>A-086</u>	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, <u>Hannah W.</u> <u>Jose</u> * (University of the Philippines Los Baños, the Philippines), Keane Carlo G. Lomibao, Emmanuel Zeus S. Gapan, Allan T. Tejada Jr, Catherine B. Gigantone and Jessa O. Aquino	<u>A-030</u>	Fate of plasticizers in common effluent treatment plants and removal by using nano titaniagraphene based photo-catalyst and photolysis for tertiary treatment	Muntjeer Ali* (Indian Institute of Technology Roorkee, India), Mohammed Shoiab, Mandeep Singh and A.A. Kazmi		A low concentration of lead (Pb) can affect the efficiency of the activated sludge in the wastewater treatment plant	Hong T. Pham* (Thuyloi University, Vietnam), Linh B. Hoang, Cuong Nguyen Chi, Dung Viet Pham and Khuong V. Dinh	
	A combined drought index (CDI) system for drought early warning, monitoring, and risk assessment in EEC region of Thailand	Sasin Jirasirirak, Aksara Putthividhya* (Chulalongkorn University, Thailand), Wimolphat Bumbudsanpharoke Kamkanya and Somkiat Prajamwong	<u>A-031</u>	Thermal hydrolysis of sewage sludge: Organics solubilization, methane yield, and emerging contaminants & pathogens removal	Vinay Kumar Tyagi, <u>Gowtham</u> <u>Balasundaram</u> * (Indian Institute of Technology Roorkee, India), Pallavi Gahlot and A.A. Kazmi		Toxicity of trace metals in pore water and sediments of Metro Cebu urban rivers and its potential risk to Oreochromis Noliticus		

^{*:} Presenters