

# Programme

## (Monday) Day 1 - 11<sup>th</sup> September 2017

Time	Programme	Venue
0800-1700	Conference Registration Opening Hours	Centre Core Registration, Level 3, KLCC
0900-1000	<p><b>Welcome Address</b> by  <b>Datuk Ir Abdul Kadir Mohd Din</b>, <i>MWA President</i>  <b>Ms Diane D'arras</b>, <i>IWA President</i></p> <p>Special Address &amp; Official Opening of 7th IWA-ASPIRE Conference 2017  <b>YB Datuk Seri Panglima Dr Maximus Johnity Ongkili</b>  <i>Minister of Energy, Green Technology and Water (KeTTHA)</i>            Launch of Borneo Water &amp; Wastewater Exhibition (BWWE) 2018, Sarawak</p>	Banquet Hall, Level 3, KLCC
1000-1700	Water Malaysia Exhibition 2017 Opening Hours	Grand Ballroom, Level 3, KLCC
1000-1030	AM Coffee Break	Foyer, East Wing, Level 3, KLCC
1030-1045	Press Conference	Press Centre, Level 3, KLCC
1100-1145	<p><b>Keynote 1</b>  <b>Water Sustainability 2050: From Affordability to Value Appreciation</b></p> <p><b>YBhg Dato' Seri Ir Dr Zaini Ujang</b>  <i>Secretary General, Ministry of Energy, Green Technology &amp; Water, Malaysia (KeTTHA)</i></p>	Banquet Hall, Level 3, KLCC
1145-1245	Session 1 (please refer to page 14)	(please refer to page 14)
1245-1430	Networking Lunch	Conference Hall 2, Level 3, KLCC
1430-1500	<p><b>Keynote 2</b>  <b>Water and Energy</b></p> <p><b>Professor Gustaf Olsson</b>  <i>Professor Emeritus of Lund University Sweden</i></p>	Banquet Hall, Level 3, KLCC
1430-1630	KeTTHA – MEWR Joint Committee Meeting (Bilateral Meeting) (By invitation only)	MR 305, Level 3, KLCC
1430-1730	SPAN CEO Meeting (By invitation only)	Conference Hall 3, Level 3, KLCC
1500-1615	Session 2 (please refer to page 15)	(please refer to page 15)
1615-1730	PM Coffee Break Poster Evaluation	Foyer, East Wing, Level 3, KLCC
1730-End	Networking Reception	Foyer, East Wing, Level 3, KLCC

## ■ Scientific Programme: (Monday) Day 1 - 11<sup>th</sup> September 2017

### SESSION 1

#### Session 1.1 – Water Reform

Session Chair: Mr Darryl Day

Venue: Banquet Hall, Level 3, KLCC

Time	Topic
1145-1200	<b>Featured Speaker</b> Water Management – The SEWA Way By HE Dr Rashid Aleem Chairman Sharjah Electricity and Water Authority
1200-1215	Tracking the Water Reforms in Malaysia By Chin Yoon Kheong
1215-1230	Sustainable Water Supply in Developing Countries: How Public Works Style Reformed Into Autonomous Utility Style By Yoji Matsui
1230-1245	Sapporo Waterworks Bureau's Efforts to Reduce Environmental Load By Jun Kato

#### Session 1.2 – Water Treatment

Session Chair: Mdm Fadziilah Abd Kadir

Venue: MR 302, Level 3, KLCC

Time	Topic
1145-1200	Coagulation Condition and Coagulant Production for Efficient Removal of Super-Fine Powdered Activated Carbon By Yoshifumi Nakazawa
1200-1215	Treatment of Flocculation Disturbance Water for Potable Use By Liew Wai Loan
1215-1230	Preparation and Application of Chitosan - Polyethersulfone Composite Ultrafiltration Membrane for Humic Acid Removal By Tianshi Wang
1230-1245	Analysis of Heavy Metal Content in Sediments and Water in Ex-Mining Lake (Tasik Puteri, Bukit Besi) By Sarifah Fauziah Syed Draman

#### Session 1.3 – Coastal Reservoir Management

Session Chair: Prof Zulkifli Yusop

Venue: Venue: MR 303, Level 3, KLCC

Time	Topic
1145-1200	Feasibility Study on Formation of Fresh Water Reservoir and Impounding the Surface Runoff for Urban Water Survival in a Coastal Brackish Water Region - A Hydrological and Watershed Management Perspective By T.G. Sitharam
1200-1215	Coastal Reservoir and Its Potential Application in Malaysia By Lim Sin Poh
1215-1230	Coastal Reservoir - Its Application in China and Feasibility By Shu-Qing Yang
1230-1245	Feasibility of Creating a Fresh Water Reservoir in The Arabian Sea Impounding The Flood Waters of Netravathi River: Hydrological and Geotechnical Perspectives By Sreevalsa Kolathayar

#### Session 1.4 – Water Demand Management

Session Chair: Tan Sri Dato' Ir Syed Muhammad Shahabudin

Venue: MR 304, Level 3, KLCC

Time	Topic
1145-1200	<b>Featured Speaker</b> Water Demand Management in Penang, Malaysia By Datuk Ir Jaseni Maidinsa Chief Executive Officer Perbadanan Bekalan Air Pulau Pinang Sdn Bhd (PBAPP)
1200-1215	Valuing Water By Tom Mollenkop
1215-1230	Waterworks Management in Tokyo - Realization of Public Nature and Efficiency By Kazuya Naito
1230-1245	Achieve Efficient Management of Your Water Distribution Network By Amit Thakare

#### Session 1.5 – Microalgae

Session Chair: Dr Aznah Nor Anuar

Venue: MR 305, Level 3, KLCC

Time	Topic
1145-1200	Isolation and Characterization of Sulfolane Degrading Bacteria By Chu Fang Yang
1200-1215	Biomolecular Monitoring of Toxin and Odorant - Producing Cyanobacteria in Drinking Water Reservoirs By Tsair-Fuh Lin
1215-1230	Effect of Microalga-Bacteria Interaction on Microalga Biomass Production By Tadashi Toyama
1230-1245	Biosorption Characteristics of Europium by Microalgae Acutodesmus Acuminatus For Recovery of Rare Earth Elements from Electronic Industrial Wastewater By Yasuhiro Furuhashi

#### Session 1.6 – Anaerobic Digestion

Session Chair: Ms Sushmita Mandal

Venue: MR 306, Level 3, KLCC

Time	Topic
1145-1200	<b>Featured Speaker</b> Mixing Potential of Biogas Production in Anaerobic Reactors Consequences for Digester Design By Prof Em Helmut Kroiss IWA Past President
1200-1215	Modelling Multiple Minerals Precipitation in Anaerobic Digestion Process By Yaakoubi Mohamed
1215-1230	Investigation of A Low Cost, High Rate Sulfate-Reducing Up-Flow Sludge Bed Reactor Equipped with Continuous Gas Recirculation for Mainstream Anaerobic Treatment By Bo Wang
1230-1245	Full-scale Anaerobic Endless Channel for Treating Palm Oil Mill Effluent By Kazumasa Kamachi

#### Session 1.7 – Sanitation & Health

Session Chair: Prof Gen-Shuh Wang

Venue: MR 307, Level 3, KLCC

Time	Topic
1145-1200	Removal of Mono-Nitrophenols By Slow Sand Filtration and UV Irradiation By Keiko Katayama-Hirayama
1200-1215	Impact Comparison of Pretreatment on Design and Operation of Ultrafiltration By Patrick Buchta
1215-1230	Distribution of Diarrhoeagenic E. Coli from Clinical Isolates and Environmental Water Sources in Gauteng Province, South Africa By Kousar Hoorzook
1230-1245	The Effect of Soil Borne Aspergillus Flavus Strain KRP1 on the Bioavailability of Mercury from Contaminated Soil By Evi Kurniati

## SESSION 2

### Session 2.1 – Biological Treatment

Session Chair: Dr Farrah Aini Dahalan

Venue: Banquet Hall, Level 3, KLCC

Time	Topic
1500-1515	One-Stage Nitritation/Anammox Process by a Biofilm Reactor with Two Inflows <i>By Zulkarnaini</i>
1515-1530	Nitrogen Removal by Sulfate Reduction, Denitrification / Anammox and Nitritation Process <i>By Yuka Kosugi</i>
1530-1545	Evaluation of Process Performance of a Down-Flow Hanging Sponge Reactor for Treatment Domestic Wastewater Discharged from Apartment House <i>By Mai Kada</i>
1545-1600	Enhanced Adsorption and Photo-Degradation of Bisphenol A from Aqueous Solutions by $\beta$ -Cyclodextrin Modified Sawdust <i>By Yanbo Zhou</i>

### Session 2.2 – Innovative Solution

Session Chair: Mr Hairi Basri

Venue: MR 302, Level 3, KLCC

Time	Topic
1500-1515	Energy Efficiencies of Closed-Loop Water-Wastewater Systems with Alternative Water Resources for Water-Stressed Cities <i>By Xiaoming Liu</i>
1515-1530	New Paradigm of Ultrafiltration Membrane Water Treatment Systems Fouling Analysis Through Membrane Autopsy <i>By Chun Ming Chew</i>
1530-1545	Control of Bio-Particle Combined Fouling on Reverse Osmosis Membrane Using Hypochlorite and Nanobubbles <i>By Masaki Ohno</i>
1545-1600	Removal Kinetic of Chromium by Nano-Magnetite at Different Biogeochemical Environment in Soil and Groundwater <i>By Nurul Aqilah Abdul</i>

### Session 2.3 – Disaster Associated Issues

Session Chair: Dr Sumiyati Ambran

Venue: MR 303, Level 3, KLCC

Time	Topic
1500-1515	The Approach of Expected Values in Risk Management as TWD Faces ISO 4064 Change <i>By Chia-Jung Chou</i>
1515-1530	Disaster Risk Management <i>By Tomohiro Ebizuka</i>
1530-1545	Effort of Reinforcing Earthquake-Resistant Joint of Water Distribution Pipes <i>By Eiji Omori</i>
1545-1600	Checking the Water Pressure in The Capital's Central Agencies With PHS Line in Case of Earthquake Disaster <i>By Seiji Ichinomiya</i>
1600-1615	Emergency Water Supply from Fire Hydrant and Others, Residents and Municipalities as New Providers <i>By Tomohiro Ebizuka</i>

### Session 2.4 – Chemical Contaminants

Session Chair: Ms Bushra Nishat

Venue: MR 304, Level 3, KLCC

Time	Topic
1500-1515	Preparation of Composite of Cationic Gel and Iron Hydroxide for Adsorbing Arsenic from Ground Water <i>By Takehiko Gotoh</i>
1515-1530	Removal of Heavy Metals (Pb <sup>2+</sup> and Zn <sup>2+</sup> ) Using Cactus Opuntia sp. Plant as Low Cost Adsorbent <i>By Yirga Weldu Abrha</i>
1530-1545	Reductive Defluorination of Perfluorooctanoic Acid by Vitamin B12 and Copper Nanoparticles <i>By Yu-Chi Lee</i>
1545-1600	The Effectiveness of Trihalomethanes Removal by Conventional Water Treatment Plants of Metropolitan Waterworks Authority, Thailand <i>By Supakon Sa-Nguansin</i>
1600-1615	Application of Phyto-Fenton Process to PCP-contaminated soil <i>By Keita Harada</i>

### Session 2.5 – Smart & Innovative Wastewater Treatment

Session Chair: Ms Sushmita Mandal

Venue: MR 306, Level 3, KLCC

Time	Topic
1500-1515	Introduction of Kerosene-City Gas Dual-Fuel Emergency Generator in Tokyo Sewage Treatment Plants <i>By Yusuke Sasaki</i>
1515-1530	Oxidation of Arsenic (III) in Ozone Assisted Microbubble System <i>By Snigdha Khuntia</i>
1530-1545	Study of Different Biofouling Mechanisms in Reverse Osmosis and Pressure-Retarded Osmosis Processes <i>By Taek-Seung Kim</i>
1545-1600	Nitrous Oxide Emissions Reduction by Aeration Restriction in Conventional Activated Sludge Process <i>By Atsuko Michinaka</i>
1600-1615	The Effect of Calcination and Kinetic Studies of TiO <sub>2</sub> Photocatalyst Based on Sol-gel Synthesis <i>By Fahrizal Adnan</i>

### Session 2.6 – Smart & Innovative Wastewater Treatment

Session Chair: Dr Norhayati Abdullah

Venue: MR 307, Level 3, KLCC

Time	Topic
1500-1515	Effect of Organic Wastewater Concentration and Temperature Condition on Anaerobic Fluidized Bed Reactor Using Carrier <i>By Tomohiro Ikura</i>
1515-1530	Removal of Heavy Metals from Wastewater using PAC and Modified PAC <i>By Tae-Kyoung, Kim</i>
1530-1545	Microalgal Biomass Production and Nutrient Removal by The Cultivation of Euglena Gracilis in Domestic Wastewater <i>By Michihiko Ike</i>
1545-1600	Cultivation of Aerobic Granular Sludge for Actual Domestic Wastewater Treatment at Hot and Low Humidity Climate Circumstances <i>By Aznah Nor Anuar</i>

# Programme

## (Tuesday) Day 2 - 12<sup>th</sup> September 2017

Time	Programme	Venue
0800-1700	Conference Registration Opening Hours	Centre Core Registration, Level 3, KLCC
0900-1245	Water Leaders Forum Hosted by Ministry of Energy, Green Technology and Water, Malaysia (KeTTHA) <i>(By invitation only)</i>	Conference Hall 3, Level 3, KLCC
0900-0930	<b>Keynote 3</b> <b><i>A Paradigm Shift of Urban Water Management for Asia Pacific Regions</i></b>  <b>Professor Emeritus Saburo Matsui</b> <i>Professor Emeritus of Kyoto University, Japan</i>	Banquet Hall, Level 3, KLCC
0930 -0945	Presentation by Japan Water Works Association (JWWA) on IWA World Water Congress 2018 Tokyo	Banquet Hall, Level 3, KLCC
0945-1000	AM Coffee Break	Foyer, East Wing, Level 3, KLCC
1000-1700	Water Malaysia Exhibition 2017 Opening Hours	Grand Ballroom, Level 3, KLCC
1000-1130	Session 3 <i>(please refer to page 18)</i>	<i>(please refer to page 18)</i>
1130-1245	Session 4 <i>(please refer to page 19)</i>	<i>(please refer to page 19)</i>
1245-1430	Networking Lunch	Conference Hall 2, Level 3, KLCC
1430-1500	<b>Keynote 4</b> <b><i>Kuala Lumpur Initiatives Towards Sustainable Development</i></b>  <b>Datuk Hj Mohd Najib bin Hj Mohd</b> <i>Executive Director (Planning) of City Hall Kuala Lumpur (DBKL)</i>	Banquet Hall, Level 3, KLCC
1430-1700	Water Regulators' Forum Hosted by National Water Services Commission (SPAN) <i>(By invitation only)</i>	Conference Hall 3, Level 3, KLCC
1500-1615	Session 5 <i>(please refer to page 20)</i>	<i>(please refer to page 20)</i>
1615-2000	PM Coffee Break Poster Evaluation	Foyer, East Wing, Level 3, KLCC
2000-2230	<b>Gala Dinner</b> Welcome Address by <b>Dato' Dr Tan Yew Chong</b> , <i>Steering Committee Chairman, Deputy Secretary General of Ministry of Energy, Green Technology and Water, Malaysia (KeTTHA)</i>  Guest of Honour: <b>Dato' Seri Dr Ahmad Zahid bin Hamidi</b> <i>Deputy Prime Minister of Malaysia</i>	Conference Hall 2, Level 3, KLCC

**SESSION 3****Session 3.1 – Managing Water Loss – Capturing Non-Revenue Water (NRW)**Session Chair: *Ir Mansor Abd Ghani*Venue: *Banquet Hall, Level 3, KLCC*

Time	Topic
1000-1015	Holistic NRW Program in Kuantan <i>By Sufian Sidek</i>
1015-1030	Improving Operational Efficiency Through a Holistic NRW Program <i>By Nor Suhada Hasan</i>
1030-1045	Data Logging: Acquisition and Monitoring as a Key Platform in Non-Revenue Water Reduction <i>By Andy Seng Yang Ko</i>
1045-1100	Melaka Gets Tough on Non-Revenue Water Loss Load <i>By Gary Wyeth</i>
1100-1115	NRW Reduction Technology Training and Capacity Building Project in Malaysia <i>By Phan Kieu Dung Nguyen</i>
1115-1130	Wide-Area Business Operation in Tama Area <i>By Noritumi Tashiro</i>

**Session 3.2 – Water and Communities Engagement**Session Chair: *Ir Hj Mohamad Asari Bin Daud*Venue: *MR 302, Level 3, KLCC*

Time	Topic
1000-1015	Implementation of Water Safety Plan for School Water Supply Systems in Taiwan <i>By Gen-Shuh Wang</i>
1015-1030	Drivers of Household Water Consumption of Different Socioeconomic Classes in Selected Communities in Metro Manila, Philippines <i>By Maria Anjelica P. Ancheta</i>
1030-1045	Anomaly Detection and Discrimination Using Real-time Monitoring Data in a Water Distribution System <i>By Kyoungpil Kim</i>
1045-1100	Improvement of Wastewater, Sanitation and Health Issue of Hanoi Via Integrated Wastewater Treatment System <i>By Lee Yun Fook</i>
1100-1115	Possibilities of Hamakko-Doshi The Water Significance of the Sale of Water in PET Bottles by Yokohama Waterworks Bureau <i>By Saori Horikoshi</i>
1115-1130	Factors Affecting Water Distribution in Nairobi, Kenya: A Case Study of Nairobi City Water and Sewerage Company <i>By Samuel Karanja</i>

**Session 3.3 – Flood Prediction & Mitigation**Session Chair: *Prof Zulkifli Yusop*Venue: *MR 303, Level 3, KLCC*

Time	Topic
1000-1015	Oyster Contamination with Human Norovirus Impacted by Urban Drainage and Flood in Central Vietnam <i>By Gia Thanh Nguyen</i>
1015-1030	Evaluation of The Metabolic Activity of Haloferax Mediterranei for the Reduction of Nitrate and Sulfate in RO Rejected Brine Water <i>By Elaine Chiang</i>
1030-1045	Development of Floods Predicting Method in Kelantan River Basin in Malaysia <i>By Hiroki Ohashi</i>
1045-1100	Protecting Lives in Hong Kong: A Local Approach to Flood Risk Assessment in Rural Areas - River Flood Risk Study <i>By Kenneth Chun Hai Kwok</i>
1100-1115	Performance Monitoring for Happy Valley Underground Stormwater Storage Scheme, Hong Kong <i>By Cheuk-lun Leung</i>
1115-1130	Towards Sustainable Stormwater Management in Hong Kong: The First Comprehensive Implementation at Development of Anderson Road Quarry <i>By Eric Chr-Kwok Li</i>

**Session 3.4 – Water & Energy Nexus**Session Chair: *Ms Katharine Cross*Venue: *MR 304, Level 3, KLCC*

Time	Topic
1000-1015	Utilization of Communal Sewage for Cooling Large Buildings <i>By Pal Kiss</i>
1015-1030	A Study on the Use of Sewage Treatment Plant as a Base for Circulation of Materials and Energy <i>By Toshiki Fukushima</i>
1030-1045	A New Operation and Maintenance Approach of Wastewater Treatment Plants to Achieve Both Improvement of Effluent Water Quality and Reduction of Electricity Consumption <i>By Tamayo Hashiya</i>
1045-1100	Introduction of Energy Saving System in Water Supply Stations <i>By Masaki Kawaue</i>
1100-1115	Securing Material for Recovery - Never-breaking Supply Chain <i>By Hisao Tanikawa</i>
1115-1130	Towards Smart Energy Management - An Integrated Approach Adopted in Hong Kong's Water Supplies <i>By Ping-Ho Cho</i>

**Session 3.5 – Innovative Approach**Session Chair: *Mr Hairi Basri*Venue: *MR 305, Level 3, KLCC*

Time	Topic
1000-1015	A Novel Membrane Capacitive Deionization (MCDI) - Reverse Electrodialysis (RED) Hybrid System Integrated with Reverse Osmosis (RO) for Sustainable Seawater Desalination <i>By Jongmoon Choi</i>
1015-1030	Adsorption Desalination Technology for Reclamation of Ultra-High Conductivity Industrial Wastewater <i>By Kuan-Foo Chang</i>
1030-1045	Nitrogen-cycling Functional Genes in Brackish and Freshwater Sediments in Yodo River in Japan <i>By Satoshi Soda</i>
1045-1100	Seasonal Change of Dissolved Organic Matter in Lake Ta Mock, Phnom Penh, Cambodia Determined By LC-OCD and EEM-PARAFAC Analysis <i>By Niki Yamagata</i>
1100-1115	Influence Study on Water Purification in Case of a Volcanic Eruption <i>By Yutaka Koshizawa</i>
1115-1130	Sponge City Practices Based on Finished Products and Facilities <i>By Shi Men</i>

**Session 3.6 – Anaerobic Digestion**Session Chair: *Prof Helmut Kroiss*Venue: *MR 306, Level 3, KLCC*

Time	Topic
1000-1015	Characteristic of Anaerobic Degradation of Long Chain Fatty Acids in Palm Oil Mill Effluent <i>By Kazuaki Syutsubo</i>
1015-1030	Anaerobic Digestion of Alkali Pretreatment Liquor of Aquatic Lignocellulosic Biomass: Effect of Electrocoagulation Pretreatment for Lignin Recovery <i>By Mitsuhiro Koyama</i>
1030-1045	Research on The Anaerobic-Anoxic-Oxic Process Using NADH Airflow Control <i>By Makoto Shimoike</i>
1045-1100	Influence of Sulfate on Phosphorus Removal and Growth of Filamentous Bacteria in Anaerobic-Oxic Activated Sludge Process <i>By Sui Kanazawa</i>
1100-1115	Biodegradation of Veterinary Antibiotics and Intermediate Products During Aerobic and Anaerobic Processes for Livestock Wastewater Treatment <i>By Liang-Ming Whang</i>

**Session 3.7 – Water Infrastructure Technologies & Issues**Session Chair: *Ir Mohd Haniffa Abdul Hamid*Venue: *MR 307, Level 3, KLCC*

Time	Topic
1000-1015	Measures Against Aging of Sewage Pipe <i>By Naoyuki Morikawa</i>
1015-1030	Measures Against Incineration Problems Caused by Clogging of White Smoke Prevention Preheater <i>By Masanori Hayasaka</i>
1030-1045	Analysis of The Corrosion Current on Dissimilar Metal Joint with Insulation Joint <i>By Yasuo Tomii</i>
1045-1100	Stabilization of The Power Source with The Self-Sustained Power Generation Facilities <i>By Nobuyuki Kawagoe</i>
1100-1115	Works for Improving the Performance of Aoyama Sedimentation Basin <i>By Yugo Suzuki</i>
1115-1130	'MYPBA': A Friendly Mobile App for Penang Water Consumers <i>By Mohammad Nizam Omar</i>

**SESSION 4****Session 4.1 – Capacity Building**

Session Chair: Dr Ching Too

Venue: Banquet Hall, Level 3, KLCC

Time	Topic
1130-1145	Decentralized Sewage Treatment Plants in Port Shelter, Hong Kong <i>By Andy Y Kwok</i>
1145-1200	Human Resource Development "From Hard to Soft" <i>By Mieko Oogane</i>
1200-1215	Wastewater Capacity Building: People <i>By James Oliver Warren</i>
1215-1230	Role of County Government in Water Resources Management in Nairobi City County <i>By Hamred Chungani</i>
1230-1245	PWSA: Competency Training for the Malaysian Water Industry <i>By Kah Cheong Teo</i>

**Session 4.2 – Digital Tide for Water Utilities**

Session Chair: Mr Tom Mollenkopf

Venue: MR 302, Level 3, KLCC

Time	Topic
1130-1145	Development of "Communication-Enabled Manhole Cover" by Combining IoT and Sewerage System <i>By Isamu Odaka</i>
1145-1200	TOC Online Analytics - Monitoring of Effluent Water in Wastewater Treatment Plants to Ensure Water Quality and Protecting the Environment <i>By Yong Chin Wah</i>
1200-1215	The Paradox of Intelligent Water Systems <i>By David Totman</i>
1215-1230	A Robust Process Control System in Tai Po Water Treatment Works <i>By Jeffrey Siu Ming Lai</i>
1230-1245	Root Cause Analysis for The Treated Water Pump Motor Failure in Beaufort Water Treatment Plant <i>By Sakthiaswaran Kaliappan</i>

**Session 4.3 – Smart Water Solutions**

Session Chair: Mr Beh Hong Lin

Venue: MR 303, Level 3, KLCC

Time	Topic
1130-1145	Effect of Floc Size Reduction and Ozone Concentration on Excess Sludge Reduction Process Using Ozone Nanobubbles <i>By Kurumi Hashimoto</i>
1145-1200	Applicability of Ozonized Water Treatment for Controlling Fat, Oil, and Grease Deposition onto a Drainpipe <i>By Naoyuki Kishimoto</i>
1200-1215	Recycling Waterworks Sludge into Controlled Low-Strength Materials <i>By Lei Wang</i>
1215-1230	Treatability Tests of Biological And Physicochemical Methods For Removing Styrene From Wastewater <i>By Hyeon Kim</i>
1230-1245	Development of Wastewater Treatment System with Low Greenhouse Gases Emission for Natural Rubber Industry <i>By Hideaki Sonaka</i>

**Session 4.4 – Water Conservation**

Session Chair: Ir Syed Mohd Adnan Mansor AlHabshi

Venue: MR 304, Level 3, KLCC

Time	Topic
1130-1145	Wastewater Recycling/Reuse; A Reliable Solution for Water Supply in Semnan Industrial Park, Iran <i>By Mohammad Reza Alavi Moghaddam</i>
1145-1200	Effect of First Flush Diversion on The Reliability of Urban Systems in Bangladesh <i>By Mushfiqur Rahman Khan</i>
1200-1215	Guidance Book for Management of Raw Water Turbidity Fluctuations and a Series of Water Treatment Workshops <i>By Hideaki Hoshi</i>
1215-1230	Sungai Dua: Penang's Most Highly Evolved Water Treatment Plant <i>By Chong Meng Choon</i>
1230-1245	Feasibility Study on Formation of Coastal Reservoir and Impounding the Surface Runoff for Urban Water Survival in a Coastal Brackish Water Region <i>By Sivasanareddy Araypalli</i>

**Session 4.5 – Improving Health of Waterways**

Session Chair: Dr Sumiati Ambran

Venue: MR 305, Level 3, KLCC

Time	Topic
1130-1145	Comprehensive Detection of Pathogenic Bacteria in Jar Water, Community Well Groundwater, and Environmental Water in The Kathmandu Valley, Nepal <i>By Kazunari Sei</i>
1145-1200	Biodegradation of 2-methylisoborneol Using Bacteria Enriched from Taiwan's Reservoirs <i>By Yi-Ting Chiu</i>
1200-1215	Estimation of Pollutant Loads from Pig Farming in Vietnam <i>By Pham Ngoc Bao</i>
1215-1230	Mitigation of Health and Safety Hazards and Impacts in the Sewerage Sector <i>By Ayu Surlawaty</i>
1230-1245	Septage Management in The Urban Areas of Indonesia - Case Study in Bandung and Denpasar City <i>By Pham Ngoc Bao</i>

**Session 4.6 – Membrane Bioreactor**

Session Chair: Dr Bibiana Yeoh

Venue: MR 306, Level 3, KLCC

Time	Topic
1130-1145	Anaerobic Fluidized Membrane Bioreactor for Cold-Rolling Wastewater Treatment from Steel-Making Industry <i>By Liang-Ming Whang</i>
1145-1200	Proposal of Controlling Expression of Limiting Permeate Flux in Ceramic Membrane Filtration of O/W Emulsion <i>By Yuki Suzuki</i>
1200-1215	Easy Cleaning Thermo-Responsive Polysulfone Ultrafiltration Membrane for Fouling Mitigation by Natural Organic Material <i>By Manish Kumar Sinha</i>
1215-1230	Development of a Novel Polysulfone Membrane with Embedded Zirconium Compound for Phosphate Recovery from Water <i>By Akira Hafuka</i>
1230-1245	Proper pH Adjustment Method Based on the Consideration of Suppression of Bromic Acid Formation in Drinking Water Treatment Processes <i>By Yoshihiro Kobayashi</i>

**Session 4.7 – Climate Change Resilient & Adaptation**

Session Chair: Datuk Ir Jaseni Maidinsa

Venue: MR 307, Level 3, KLCC

Time	Topic
1130-1145	<b>Featured Speaker</b> Reservoir Sustainability and Sedimentation Impacts of the Sultan Azlan Shah Dam Reservoir, Kinta <i>By Dato' Ir Mohd Isa</i>
1145-1200	Sustainable Water Sources Planning in Kelantan, Malaysia: Feasibility Study on Groundwater Subsurface Dam <i>By Wan Mohd Zamri W Ismail</i>
1200-1215	Assessment of Social and Environmental Impacts of Coastal Reservoirs <i>By Shu-Qing Yang</i>
1215-1230	Beach Water Quality Monitoring in Hong Kong: Past, Present and Future <i>By Wai Thoe</i>
1230-1245	Effect of Climate Change on Urban Flood Damage in Marikini - Pasig - San Juan River Basin, Metro-Manila, Philippines <i>By Mohamed Kefi</i>
1245-1300	The Operational and Financial Impact of Urban Water Supply and Institutional Reforms in Peninsular Malaysia <i>By Balamurugan Nallamuthu</i>

## SESSION 5

### Session 5.1 – Climate Change Resilient & Adaptation

Session Chair: Dr Tao Li

Venue: Banquet Hall, Level 3, KLCC

Time	Topic
1500-1515	<b>Featured Speaker</b> Landuse and Climate Change Impact on Water Resources in Malaysia <i>By Prof Zulkifli Yusop</i> Dean, Water Resource Sustaibailoity Research Alliance, Universiti Teknologi Malaysia
1515-1530	Sludge Transportation Network was Utilized for Risk Management of Sludge Treatment <i>By Shion Ohwa</i>
1530-1545	Evaluating Adaptation Capacity of Filtration Technology to High-Turbidity Water <i>By Hiroyuki Takino</i>
1545-1600	Risk and Value Management for a Major Water Source Expansion Project <i>By Khor Chai Hua</i>
1600-1615	Climate Resilience from Catchment to Tap <i>By Katharine Cross</i>

### Session 5.2 – Water Quality for Health

Session Chair: Ms Noor Hidayah Sanusi

Venue: MR 302, Level 3, KLCC

Time	Topic
1500-1515	Water Quality Treatment - Applied at The Source <i>By Michael Bain</i>
1515-1530	Boron Removal in Seawater Desalination - A Pilot Study <i>By Hsin-Hsu Huang</i>
1530-1545	Multivariate Analysis for Correlation Between Disinfection By-Products of Chlorine Dioxide and Water Quality <i>By Mahmoud Nasr</i>
1545-1600	Characterization of Dissolved Organic Matter (DOM) During the Processes of Advanced Wastewater Treatment Plant and Evaluation of The Effect of its Effluent on River Water Quality <i>By Kazuhiro Komatsu</i>
1600-1615	Behavior of Pesticides in Drinking Water Purification System and Their Occurrence in Water Resource <i>By Yasuko Kitamoto</i>

### Session 5.3 – Managing Microbial Risks & Impact

Session Chair: Dr Farrah Aini Dahalan

Venue: MR 303, Level 3, KLCC

Time	Topic
1500-1515	Species Identification of Antibiotic Resistant Bacteria in Activated Sludge Using Pyrosequencing <i>By Itsumi Miura</i>
1515-1530	Chlorination and Ultraviolet Light Disinfection of Antibiotic Resistant Bacteria: Survival and Potential Repair <i>By Rosi Destiani</i>
1530-1545	Engineered Biochar for Stormwater Harvesting: Removal of Metals and Bacteria by Bioretention Systems <i>By Abbe Y.T La</i>
1545-1600	Survival Responses of Gram-Negative Waterborne Pathogenic Bacteria to Simulated Gastric Fluid <i>By Atheesha Singh</i>
1600-1615	Application of Automatic Ultraviolet Photometer for Water Treatment in Sapporo <i>By Takuro Naruse</i>

### Session 5.4 – Membrane Bioreactor

Session Chair: Dr Aznah Nor Anuar

Venue: MR 304, Level 3, KLCC

Time	Topic
1500-1515	Bioaugmentation with Sphingobium Fuliginis OMI in a Lab-scale Membrane Bioreactor for 4-tert-butylphenol Degradation <i>By Kazuki Takada</i>
1515-1530	Operation of Low Energy Consumption MBR At High Flux <i>By Bibiana Yeo</i>
1530-1545	Application of Ozone Cleaning to Submerged MBR Using PVDF Hollow Fiber Membrane <i>By Yasuhiro Nakamura</i>
1545-1600	Effect of Mountain-Type Baffle Plates Set Above Air Diffusers for Generation of Big Bubbles in a Submerged MBR Using Ceramic Flat-Plate Membrane Module <i>By Tomoyo Noguchi</i>
1600-1615	Modelling of Fixed Bed Anaerobic Reactor with Coconut Shell as Media for Clogging Assessment in Batch and Continuous System <i>By Nur Indradewi</i>

### Session 5.5 – Biological Treatment

Session Chair: Ms Sushmita Mandal

Venue: MR 305, Level 3, KLCC

Time	Topic
1500-1515	Biological Decomposition of Allylthiourea during Batch Respirometry Test <i>By Bing Liu</i>
1515-1530	A Study on Dewaterability Improvement Using Aeration for Anaerobically Digested Sludge <i>By Katsuhiko Ohno</i>
1530-1545	Continuous Co-digestion of Aquatic Weeds with Food Waste and the Availability of Digested Effluent <i>By Masaki Fujiwara</i>
1545-1600	Development of Performance Prediction Index (PPI) for Small-Scale Decentralized Sewage Treatment Plants (S-DSTP) Using Microbial Respiration and SVI10 <i>By Youn-Kwon Kim</i>
1600-1615	Biodegradation of Phenol in Combined Process Sequencing Batch Reactor and Inhibitory Effect on the Nitrification Process <i>By Nik Noor Athirah Nik Yusoff</i>

### Session 5.6 – Water Conservation

Session Chair: Ir Kho Lip Khiong

Venue: MR 306, Level 3, KLCC

Time	Topic
1500-1515	System Dynamic Analysis for Developing Financially Sustainable Triple Water Supply System in Hong Kong <i>By Man Wah Tiffany Mak</i>
1515-1530	An Environmentally-Conscious Industrial Water Network Retrofit with Reuse and Recycle Strategies <i>By Cheng Seong Khor</i>
1530-1545	Economics of Wastewater Recycling <i>By Adam Saffian</i>
1545-1600	Water Resource Sustainability Through Raw Water Balance and Augmentation: The Selangor Experience <i>By Mansor Abdul Ghani</i>
1600-1615	Assessing the Impact of Technology on Management Accounting in Water Service Utility Company - A Case for Nairobi Water Company <i>By Kelvin Mwangi</i>

### Session 5.7 – Biological Treatment

Session Chair: Ms Bushra Nishat

Venue: MR 307, Level 3, KLCC

Time	Topic
1500-1515	Complete Ammonia Oxidation to Nitrate in an Activated Sludge Reactor without Air Sparging <i>By How Seow Wah</i>
1515-1530	Biological Enhancement by Phosphate Addition for Organic Matter Removal in MBR System <i>By Yongji Zhang</i>
1530-1545	Cultivation of Oil Producing Aurantiochytrium sp. L3W Using Excess Sludge <i>By Yuya Maeda</i>
1545-1600	Removal of Antimicrobial Residues and Resistance in a Combined Stabilization Ponds-Constructed Wetland Treating Urban Sewage in Thailand <i>By Chaiwat Rongsayamanont</i>

# Programme

## (Wednesday) Day 3 - 13<sup>th</sup> September 2017

Time	Programme	Venue
0800-1700	Conference Registration Opening Hours	Centre Core Registration, Level 3, KLCC
0900-0930	<p><b>Keynote 5</b> <i>Water Policy and Governance</i></p> <p><b>Dr Petra Pana</b> <i>Deputy State Secretary for Foreign Economic Affairs Ministry of Foreign Affairs and Trade of Hungary</i></p>	Banquet Hall, Level 3, KLCC
0930-1000	AM Coffee Break	Foyer, East Wing, Level 3, KLCC
1000-1200	Hungary-Malaysia Innovation and Networking Forum	MR 302, Level 3, KLCC
1000-1115	Session 6 (please refer to page 22)	(please refer to page 22)
1115-1230	Session 7 (please refer to page 23)	(please refer to page 23)
1230-1430	Networking Lunch	Conference Hall 2, Level 3, KLCC
1430-1500	<p><b>Keynote 6</b> <i>Water Resilient Development in Hong Kong</i></p> <p><b>Ir Enoch TS Lam</b> <i>Director of Water Supplies, Hong Kong</i></p>	Banquet Hall, Level 3, KLCC
1500-1630	<p><b>CLOSING CEREMONY</b> Graced by <b>Dato' Dr Tan Yew Chong</b>, <i>Steering Committee Chairman, Deputy Secretary General of Ministry of Energy, Green Technology and Water, Malaysia (KeTTHA)</i></p> <p><b>Expert Plenary Discussion</b> Water Façade: Face to Face with the Future of Global Water</p> <p><b>Award Presentation</b></p> <p><b>Handover to 8th IWA-ASPIRE Conference 2019 Host</b></p>	Banquet Hall, Level 3, KLCC
1630-1700	PM Coffee Break	Foyer, East Wing, Level 3, KLCC



## ■ Scientific Programme: (Wednesday) Day 3 - 13<sup>th</sup> September 2017

### SESSION 6

#### Session 6.1 – Pollutants Control

Session Chair: Ms Sushmita Mandal

Venue: Banquet Hall, Level 3, KLCC

Time	Topic
1000-1015	Profiling Dissolved Organic Matter at Molecular Level in Environmental and Urban Water Resources by Orbitrap Mass Spectrometry <i>By Phanwatt Phungsai</i>
1015-1030	Comparison of Al and Fe Coagulants in The Coagulation-Microfiltration Process <i>By Kana Ishii</i>
1030-1045	Evaluation of Common Reed Function in Removing Tetracycline Compound and Resistant Genes by Using Lab-Scale Constructed Wetlands <i>By Thanh Hien Pham</i>
1045-1100	The Removal of Pollutants from Runoff by Different Types of Paving Surface Materials in Permeable Pavement Systems <i>By Ziyang Zhang</i>
1100-1115	Development of Treatment System for Solid/Lipid-Rich Wastewater with Biological Desulfurization Process <i>By Takuya Fujihira</i>

#### Session 6.2 – Green Energy

Session Chair: Ms Bushra Nishat

Venue: MR 303, Level 3, KLCC

Time	Topic
1000-1015	An Anaerobic-Aerobic Sequential Batch Process with Simultaneous Denitrification And Methanogenesis for the Treatment of Intermittently Discharged Organic Wastes <i>By Shinichi Akizuki</i>
1015-1030	Energy Recovery from Sewage Sludge Using Microwave Heating <i>By Yu-Fong Huang</i>
1030-1045	Recovery of Water and Minerals from Shale Gas Produced Water by Membrane Distillation Crystallization <i>By Junghyun Kim</i>
1045-1100	Modelling and Optimisation of the Biological Used Water Treatment Process <i>By Ni Qing Puay</i>
1100-1115	Function Verification of Ultrasonic Sludge Reduction System <i>By Chen Shing-Der</i>

#### Session 6.3 – Water Pricing and Finance

Session Chair: Mr Ganesh Pangare

Venue: MR 304, Level 3, KLCC

Time	Topic
1000-1015	<b>Featured Speaker</b> Public Private Partnership for Water Infrastructure <i>By Dato' Dr Tan Yew Chong</i> <i>Deputy Secretary General</i> <i>Ministry of Energy, Green Technology &amp; Water, Malaysia (KeTTHA)</i>
1015-1030	Needed Innovation in Both Water Pricing and Procurement in The Asia Pacific Region <i>By Paul Reiter</i>
1030-1045	Financial Optimization of Condition Assessment Spending for Pipeline Replacement Programs <i>By Wilson Chua</i>
1045-1100	The Effect of Drinking Water Quality on House Price: A Conceptual Review <i>By Muhammad Najib Razali</i>

#### Session 6.4 – Water Security and Compliance

Session Chair: Mdm Amy Yew

Venue: MR 305, Level 3, KLCC

Time	Topic
1000-1015	The Role of Law in Water Security: Conflicting Evidence from The Asia Pacific Region <i>By William Garthwaite</i>
1015-1030	The History and The Current Status of Water Quality Regulation in Tokyo <i>By Manami Kawamoto</i>
1030-1045	Sustainable Service Quality (SUSSERV) of Malaysian Water and Sewerage Companies <i>By Abrari Salleh</i>
1045-1100	Spdownscale - An R-Package for Spatial Downscaling Using Bias Correction Approach <i>By Ashiq Mohamed Rahseed</i>
1100-1115	Implementation of An Automated System for Optimal Pump Control <i>By Marcus Fowler</i>

#### Session 6.5 – Biological Treatment

Session Chair: Prof Yongji Zhang

Venue: MR 306, Level 3, KLCC

Time	Topic
1000-1015	Comparison of Treatment Technologies for bis (2-Ethylhexyl) Adipate (BEHA) Removal from Industrial Wastewater <i>By Gyutae Kwon</i>
1015-1030	Biological Treatment of DMSO - Containing Wastewater from Semiconductor Industry Under Aerobic and Methanogenic Conditions <i>By Liang-Ming Whang</i>
1030-1045	Sequential Combination of Electro-Fenton and Electrochemical Chlorination Processes for Treatment of Anaerobically-Digested Food Wastewater <i>By Jaesang Lee</i>
1045-1100	Effect of Tetra-Methyl Ammonium Hydroxide (TMAH) on Biological Nitrogen Removal for Industrial Wastewater <i>By Liang-Ming Whang</i>
1100-1115	Effect of Calcination Temperature During Sol-Gel Process on Photocatalytic Activity of TiO <sub>2</sub> <i>By Fahrizal Adnan</i>

#### Session 6.6 – Industrial Wastewater Treatment

Session Chair: Ir Dr Lee Yun Fook

Venue: MR 307, Level 3, KLCC

Time	Topic
1000-1015	Prokaryotic Diversity in a Practical-Scale DHS Reactor Treating Municipal Wastewater Using Next-Generation Sequencing Analysis <i>By Akinori Iguchi</i>
1015-1030	Optimization of Zinc Removal from The Rubber Manufacturing Industrial Wastewater Through Adsorption onto Palm Shell Activated Carbon <i>By Fung Sheng, Addy Lee</i>
1030-1045	Treatment of Pulp and Paper Wastewater by Aerobic Granulation Technology <i>By Harsh Vashi</i>
1045-1100	Study on Operating Conditions for Co-Digestion of Food Waste with Sewage Sludge <i>By Sussana W K Lai</i>
1100-1115	Multiple Aerobic and Anaerobic Baffled Constructed Wetland Reactors for Simultaneous Nitrogen and Organic Compounds Removal Using Different Emergent Plants <i>By Harvinder Kaur Lehl</i>

## ■ Scientific Programme: (Wednesday) Day 3 - 13<sup>th</sup> September 2017

### SESSION 7

#### Session 7.1 – Water Resources Management

Session Chair: Dato' Teo Yen Hua

Venue: Banquet Hall, Level 3, KLCC

Time	Topic
1115-1130	<b>Featured Speaker</b> Downstream Reservoir, A Revolution to Water Industry By Dato' Noor Azahari Director General Ministry of Energy, Green Technology & Water, Malaysia (KeTTHA)
1130-1145	Analysis of Alternative Rainwater Use from Data of End-User Water Demand By Kaori Nishida
1145-1200	Quantitative and Qualitative Changes of Forest Soil Organic Matters Expected in Estuaries By Toru Watanabe
1200-1215	Effect of Dissolved and Particulate Matter on Biofouling in Reverse Osmosis Filtration By Cervinia Manalo
1215-1230	Development of Storage Prediction Model for Semenyih Dam By Siew Fang Yong

#### Session 7.2 – Innovative Approach

Session Chair: Dr Kyoung Pil Kim

Venue: MR 303, Level 3, KLCC

Time	Topic
1115-1130	Effect of Greywater Characteristics on Its Chemical Coagulation By M Mansoor Ahammed
1130-1145	Osmotic-Enhanced Dewatering (OED) Process for Enhanced Water Recovery By Jungwon Kim
1145-1200	A Natural Method to Obtain Higher Electron Density in Drinking Water By Hwang Sheng Lee
1200-1215	Comparison on Degradation of Reactive Black 5 (RB5) In Photocatalytic Fuel Cell (PFC) Under UV and Solar Light By Wan Fadhilah Wan Mohd Khalik
1215-1230	New Water Turbidity Measurement - Groundbreaking Technology By Yong Chin Wah

#### Session 7.3 – Water Related Diseases

Session Chair: Dr Hsin-Hsu Huang

Venue: MR 304, Level 3, KLCC

Time	Topic
1115-1130	Comparing Fecal Exposure Pathways in Living Environment of a Slum in Khulna City, Bangladesh By Min Li Chua
1130-1145	Detection, Characterization and Quantification of E. Coli Communities from Environmental Water Samples Using Molecular Biology Methods By Kousar Hoorzook
1145-1200	Escherichia Coli Communities in Wastewater: An Indication of New Super Gene Combinations? By Zaakirah Delair
1200-1215	Addressing the Unsafe Disposal of Child Faeces In Indonesia To Support the Healthy Family Program By Sri Irianti

#### Session 7.4 – Operational Asset Management

Session Chair: Mr Gary Wyeth

Venue: MR 305, Level 3, KLCC

Time	Topic
1115-1130	Guideline for Physical Asset Management of Sewer By Yoshinari Abe
1130-1145	Asset & Operational Risk Management Towards an Effective and Efficient Sewerage Service Delivery By Anusuyah Bai S. K. Sivalingam
1145-1200	Yuen Long Barrage Scheme, Hong Kong By Sylvia Chan
1200-1215	Management of Water Conservation Forests for Over 100 Years By Kenji Sakai
1215-1230	Quest for Optimal Asset Management By Marcus Fowler

#### Session 7.5 – Water Infrastructure & Technologies

Session Chair: Hj Mansor Abdul Ghani

Venue: MR 306, Level 3, KLCC

Time	Topic
1115-1130	Facing Up to High-Rate Anaerobic Treatment of Waste in Coastal Regions: SANI Process and Granular Sludge By Tianwei Hao
1130-1145	Elucidation of Behaviour of Bubbles and Membrane Contact Inside Immersion Type Hollow Fibre Membrane Module By Daisuke Yusa
1145-1200	Influence of Relaxation Ratio of Follow Fibre and Space Among Hollow Fibres on Bubble Flow Velocity Inside Follow Fibre Membrane Modules By Daisuke Yusa
1200-1215	Hong Kong's First Hydropower Plant By Clement Leung Man Hon
1215-1230	Challenges in The Construction of New Sg. Dara Water Treatment Plant By Lokman Abdul Rahim & Lim Soon Guan

#### Session 7.6 – Industrial Wastewater Treatment

Session Chair: Dr Mitsuhiro Koyama

Venue: MR 307, Level 3, KLCC

Time	Topic
1115-1130	Rapid and Efficient Removal/Recovery of Molybdenum from Wastewater of Etching Industry Using Zn(II)/Alpha-Al <sub>2</sub> O <sub>3</sub> Catalyst in Batch Experiments System By Shih-Jie Chou
1130-1145	Fertilization Design at The Rice Production Using Less Odor Treated Water Obtained by Reducing Odor of Sewage Treatment System with Humus Pellet Bioreactor By Hitoshi Ogawa
1145-1200	Development of Aerobic Granular Sludge in Textile Wastewater Treatment Using Modified Sequencing Batch Reactor: Effect of Nutrient Addition By Choerudin C.
1200-1215	Treatment of Cyanide and Heavy Metals in Plating Wastewater Using Electrocoagulation and Electrooxidation By Taeyeon Kim
1215-1230	Treatment of Anaerobically Digested Palm Oil Mill Effluent (POME) Using Sequencing Batch Reactor (SBR) By Anis Fahizha Fahimi