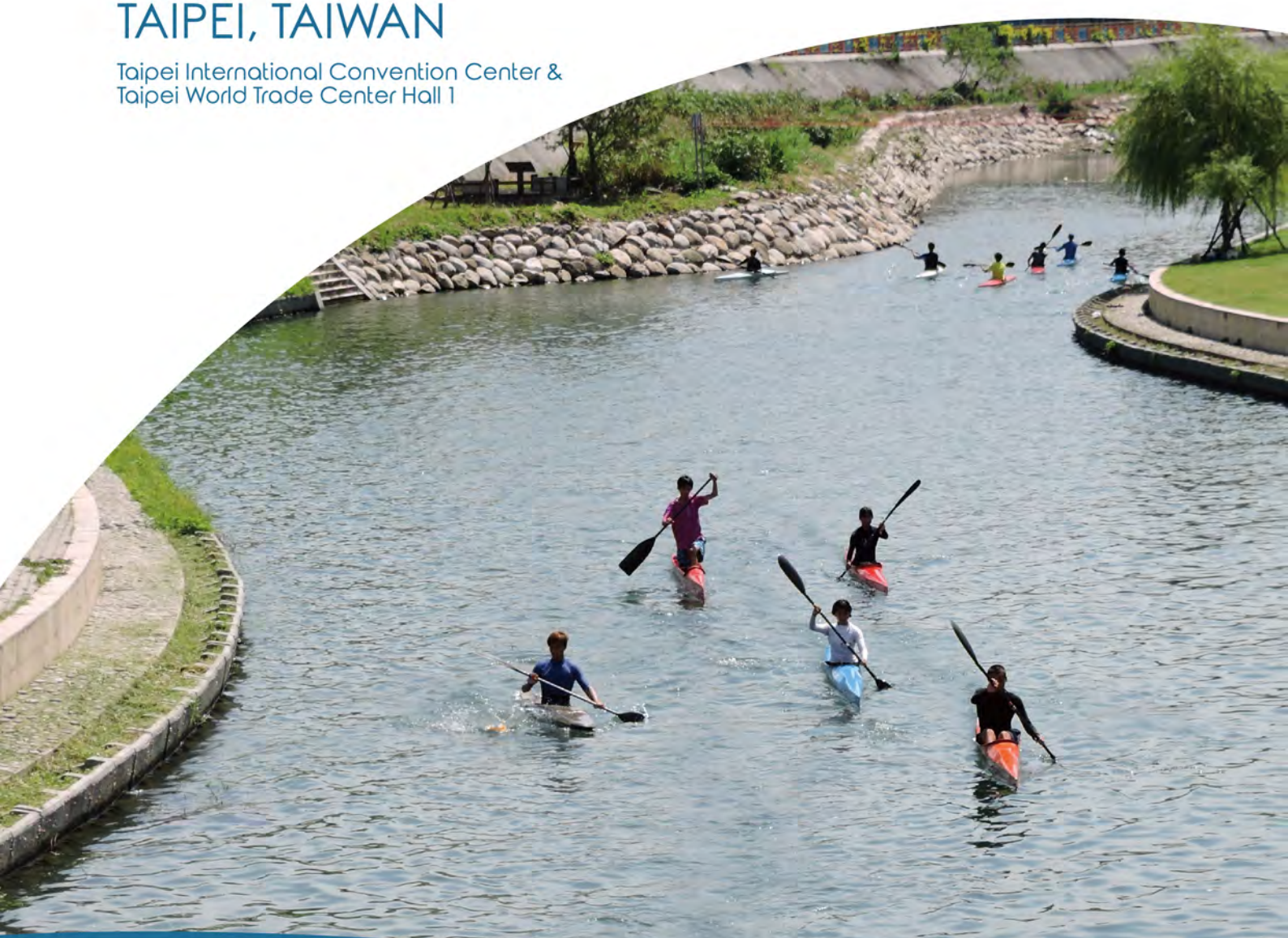
TAIWAN INT'L WATER WEEK

Water for the Future summit&expo 2019

Sep. 26-28

TAIPEI, TAIWAN

Taipei International Convention Center &
Taipei World Trade Center Hall 1



Programme Book

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Water for the Future
summit&expo 2019

Water is the essential resource for all life on this planet. Robust hydraulic infrastructure is a key element to support social development, including industry and business activities, sustainable agriculture and healthy water environment.

Taiwan is located across the tropical and subtropical areas with steep topography. The geological characteristics is unfavorable for water management but brings an opportunity for smart water technology application and emerging development of the water business. Following the global trend “Water for Human”, Taiwan is aggressively promoting multidisciplinary cooperation and introducing smart water technologies to optimize our water infrastructure. We may thus improve water supply improvement, prevent water shortage and achieve the environmental resilience.

In the event “Water for the Future Summit & Expo 2019”, you may find out our effort to create a better water future. In this program, we invite a variety of experts from private and public sectors. Experiences from governmental agencies, academic and research institutes, as well as enterprises can be fully discussed, shared, and exchanged to elucidate the optimal water strategies to face climate change. Through the 28 international forums and the three theme halls in our pavilion composed by 52 Taiwan water enterprises, we proudly present to the global participants the abundant capacity of Taiwanese enterprises, their close connections with international markets, and our achievement of private-public-partnership .

Programme at a Glance

September 26-28 Programme

	Thursday Sep. 26	Friday Sep. 27	Saturday Sep. 28
09:00 | 12:00	**FORUM 1-** Taiwan Water Projects Conference (4 sessions)	***Water Leaders Summit: Water for the Future***	**TECHNICAL 3-** Water in Our Life (1 session)
	TECHNICAL 1- Advanced Water Treatment (1 session)	**FORUM 2-** The 24th Hydraulic Engineering Conference (4 sessions)	**BUSINESS MATCHING-** Water Life, Wonderful Water
	TECHNICAL 4- Innovative Business Models (1 session)		**BUSINESS MATCHING-** Sponge City and Rainwater Harvesting in the Buildings
14:00 | 17:00	**FORUM 2-** The 24th Hydraulic Engineering Conference (4 sessions)	**Keynote Speech: Water for Safety (14:30)**	
	TECHNICAL 1- Advanced Water Treatment (1 session)	**FORUM 1-** Taiwan Water Projects Conference (2sessions)	
		TECHNICAL 1- Advanced Water Treatment (2 sessions)	
		TECHNICAL 2- Smart Water Management (1 session)	
	BUSINESS MATCHING- Innovative Water Business Based on New Technologies	**TECHNICAL 3-** Water in Our Life (1 session)	
		BUSINESS MATCHING- Water Reclamation Facilities and Services in Taiwan : A Outlook	

September 26 Programme

SCHEDULE	ROOM 201A	ROOM 201B	ROOM 201C	ROOM 201D	ROOM 201E	ROOM 201F
SESSION 1 09:00 – 10:00	**FORUM 1** Taiwan Water Projects Conference Session A	**FORUM 1** Taiwan Water Projects Conference Session B	**FORUM 1** Taiwan Water Projects Conference Session C	**FORUM 1** Taiwan Water Projects Conference Session D	**TECHNICAL 4** SDGs and Enterprise Development	**TECHNICAL 1** Total Solutions for Sustainable Water Use in Industry
BREAK 10:00 – 10:15						
SESSION 2 10:15 – 12:00						
LUNCH 12:00 – 14:00						
SESSION 3 14:00 – 15:00	**FORUM 2** The 24th Hydraulic Engineering Conference Session A	**FORUM 2** The 24th Hydraulic Engineering Conference Session B	**FORUM 2** The 24th Hydraulic Engineering Conference Session C	**FORUM 2** The 24th Hydraulic Engineering Conference Session D	**BUSSINESS MATCHING** Innovative Water Business Based on New Technologies	**TECHNICAL 1** The Recent Innovation of Resource Recovery from Wastewater
BREAK 15:00 – 15:15						
SESSION 4 15:00 – 17:00						
Taiwan International Water Week Expo 9:30-17:30						
Opening Ceremony of Water Theme Pavilion and the Expo Tour 10:00-12:00						

Programme at a Glance

September 27 Programme

SCHEDULE	ROOM 201A	ROOM 201B	ROOM 201C	ROOM 201D	ROOM 201E	ROOM 201F
SESSION 1 09:00 – 11:20	***Water Leaders Summit: Water for the Future*** **(09:00-11:20)**					
LUNCH 11:20 – 14:00						
SESSION 2 14:00 – 15:00	**TECHNICAL 3** The Innovation on Water Networks	**BUSINESS MATCHING** Water Reclamation Facilities and Services in Taiwan : A Outlook	**Keynote Speech:** **Water for Safety** **(14:30-16:30)**		**TECHNICAL 1** Water Treatment and Circulation in New Era	**TECHNICAL 1** Opportunities and Challenges of Advanced Water Treatment Industrial
BREAK 15:00 – 15:15						
SESSION 3 15:00 – 17:00						

SCHEDULE	NORTH LOUNGE	SOUTH LOUNGE	JOY LOUNGE	ROOM 203
SESSION 1 09:00 – 10:00	**FORUM 2** The 24th Hydraulic Engineering Conference Session E	**FORUM 2** The 24th Hydraulic Engineering Conference Session F	**FORUM 2** The 24th Hydraulic Engineering Conference Session G	**FORUM 2** The 24th Hydraulic Engineering Conference Session H
BREAK 10:00 – 10:15				
SESSION 2 10:15 – 12:00				
LUNCH 12:00 – 14:00				
SESSION 3 14:00 – 15:00	**TECHNICAL 2** Water Management in Smart City: Innovation and Implementation	**FORUM 1** Taiwan Water Projects Conference Section E (12:40-14:15)	**FORUM 1** Taiwan Water Projects Conference Section F (12:40-14:15)	
BREAK 15:00 – 15:15				
SESSION 4 15:00 – 17:00				
Taiwan International Water Week Expo 9:30-17:30				

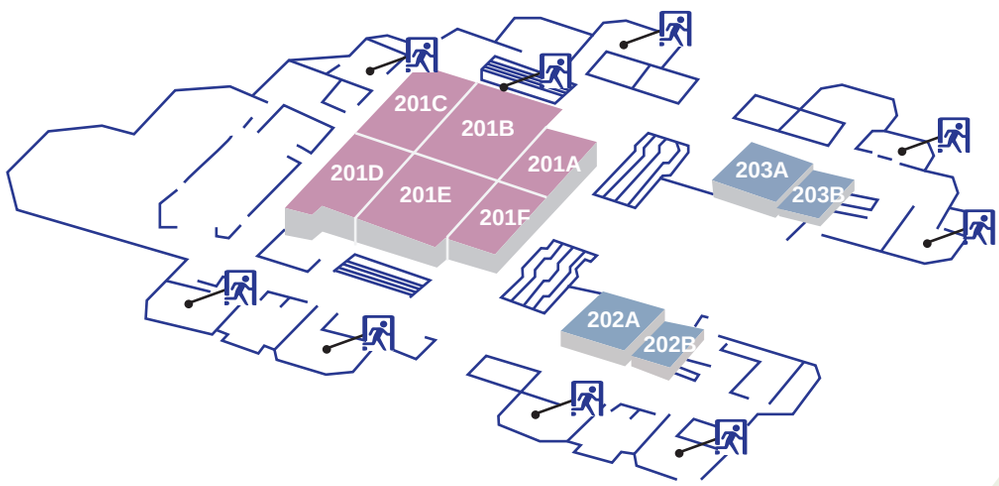
September 28 Programme

SCHEDULE	ROOM 201A	ROOM 201B	ROOM 201C
SESSION 1 09:00 – 10:00	**TECHNICAL 3** Water for Human	**BUSINESS MATCHING** Water Life, Wonderful Water	**BUSINESS MATCHING** Sponge City and Rainwater Harvesting in the Buildings
BREAK 10:00 – 10:15			
SESSION 2 10:15 – 12:00			
Taiwan International Water Week Expo 9:30-17:00			

Floor Plan

September 26-28 Taipei International Convention Center

2F



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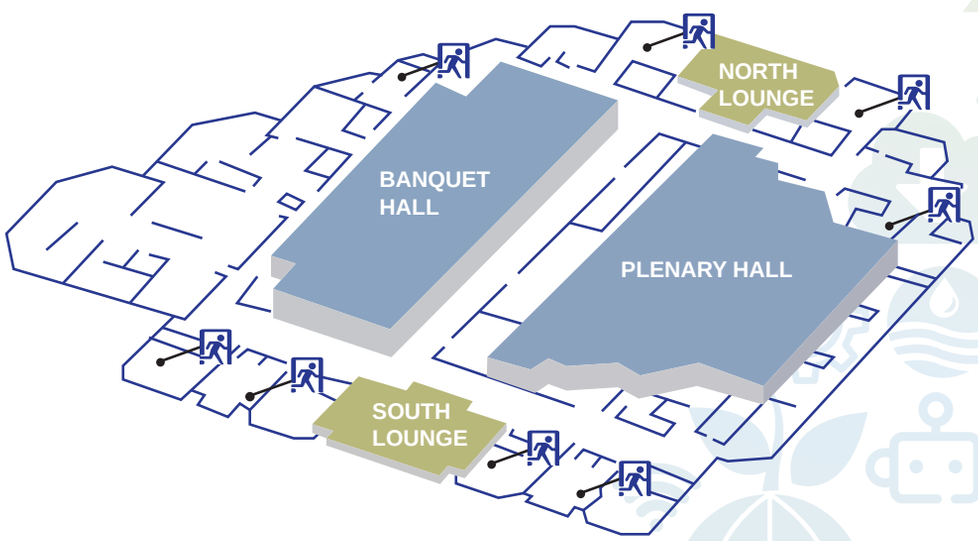

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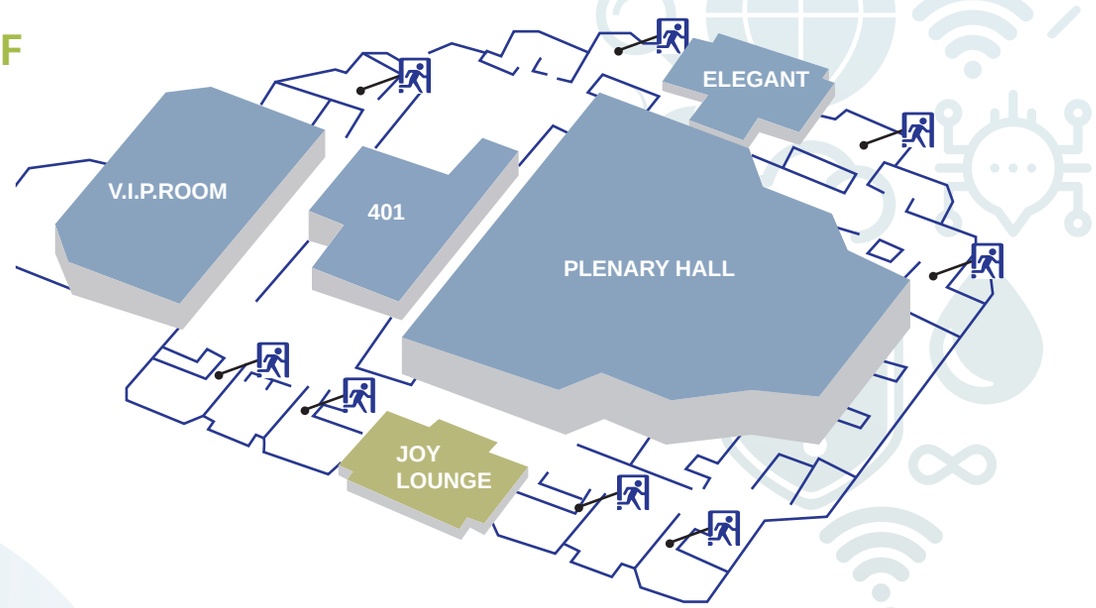

Session Guide

Forum 1 Taiwan Water Projects Conference

DATE	Time	Category	Venue
Sep. 26	09:00-12:00	Taiwan Water Projects Conference SessionA	R201A
	09:00-12:00	Taiwan Water Projects Conference SessionB	R201B
	09:00-12:00	Taiwan Water Projects Conference SessionC	R201C
	09:00-12:00	Taiwan Water Projects Conference SessionD	R201D
Sep. 27	12:40-14:15	Taiwan Water Projects Conference SessionE	SOUTH LOUNGE
	12:40-14:15	Taiwan Water Projects Conference SessionF	JOY LOUNGE

Forum 2 The 24th Hydraulic Engineering Conference

DATE	Time	Category	Venue
Sep. 26	13:40-17:30	The 24th Hydraulic Engineering Conference SessionA	R201A
	13:40-17:30	The 24th Hydraulic Engineering Conference SessionB	R201B
	13:40-17:30	The 24th Hydraulic Engineering Conference SessionC	R201C
	13:40-17:30	The 24th Hydraulic Engineering Conference SessionD	R201D
Sep. 27	08:20-12:00	The 24th Hydraulic Engineering Conference SessionE	NORTH LOUNGE
	08:20-12:00	The 24th Hydraulic Engineering Conference SessionF	SOUTH LOUNGE
	08:20-12:00	The 24th Hydraulic Engineering Conference SessionG	JOY LOUNGE
	08:20-12:00	The 24th Hydraulic Engineering Conference SessionH	R203

Technical 1 Advanced Water Treatment

DATE	Time	Category	Venue
Sep. 26	09:00-12:00	Total Solutions for Sustainable Water Use in Industry	R201F
	14:00-17:00	The Recent Innovation of Resource Recovery from Wastewater	R201F
Sep. 27	14:00-17:00	Water Treatment and Circulation in New Era	R201E
	14:00-17:00	Opportunities and Challenges of Advanced Water Treatment Industrial of Taiwan in ASEAN Countries	R201F

Session Guide

Technical 2 Smart Water Management

DATE	Time	Category	Venue
Sep. 27	**14:00-17:00**	Water Management in Smart City: Innovation and Implementation	NORTH LOUNGE

Technical 3 Water in Our Life

DATE	Time	Category	Venue
Sep. 27	**14:00-17:00**	The Innovation on Water Networks	R201A
Sep. 28	**09:00-12:00**	Water for Human	R201A

Technical 4 Innovative Business Models

DATE	Time	Category	Venue
Sep. 26	**09:00-12:00**	SDGs and Enterprise Development	R201E

Business Matching

DATE	Time	Category	Venue
Sep. 26	14:00-17:00	Innovative Water Business Based on New Technologies	R201E
Sep. 27	14:00-17:00	Water Reclamation Facilities and Services in Taiwan: A Outlook	R201B
Sep. 28	09:00-12:00	Wonderful Life, Wonderful Water	R201B
	09:00-12:00	Sponge City and Rainwater Harvesting in the Buildings	R201C

Water Leaders Summit

Keynote Speakers

Kala Vairavamoorthy

IWA Executive Director

Professor Kala Vairavamoorthy is an internationally recognised water resource management expert, with particular expertise in urban water issues. He combines a strong engineering background with practical international experience. He has published extensively and has a strong international profile working closely with the World Bank, UN-Habitat, UNESCO, GWP, SIWI and the EU. Prior to joining the International Water Association, he was the Deputy Director General for Research at the International Water Management Institute.

Kala has been a member of many International Scientific Committees. Currently he serves on the Stockholm's World Water Week's Scientific Program Committee and the Global Water Partnership's Technical Committee. He was Co-chair of IWA's Cities of the Future Program and also a member of Singapore International Water Week's Program Committee.

Graham Duxbury

Chief Executive Officer, Groundwork, UK

Graham Duxbury is Chief Executive of Groundwork UK, a leading NGO promoting community-led solutions to social, economic and environmental challenges in the UK. Graham was appointed Chief Executive in March 2014, having worked for Groundwork UK in a number of national roles for the previous 15 years. His responsibilities have encompassed building national relationships and partnerships, generating income, developing national programmes and leading on policy and strategic communications. Graham joined Groundwork UK in 1998, prior to which he undertook a number of communications roles in the voluntary, public and private sectors.

Shan-Shan Guo

Vice Chairman of Delta Electronics Foundation

- Defined corporate's branding strategy and consolidated its positioning under the "Smarter. Greener. Together."
- Led Delta branding initiatives to be named as Best Taiwan Global Brand from 2011 to 2018.
- Organized World's first 8K environmental documentary "Water with Life in Taiwan"
- Hosted Delta official side event at the COP24 UN Climate Change Conference to promote technological innovation for energy resilience.
- Invited by ICLEI for a speech during the COP23 UN Climate Change Conference, and shared Delta's endeavors in nurturing green buildings and low-carbon mobility.
- Curated "Delta21@ COP21" Green Building Exhibition, organized Delta official UN side event, and delivered a keynote speech at German Pavilion at COP21, Paris.
- Curator of "Run for Water, Water for Run Exhibition" and "Delta Green Building Exhibition" globally.

Water Leaders Summit

September 27 (Friday)

R201 | Water for the Future

Time	Program	Speaker	Topic
08:00-09:00		Registration	
09:00-09:10		Opening Remarks	
09:10-09:20	introduction	Chien-Hsin Lai Director-General, Water Resources Agency, MOEA, Taiwan	Share and Reciprocity of Water Resources in Taiwan
09:20-09:45	Keynote Speech	Kala Vairavamoorthy Executive Director, IWA, UK	Transformation Changes in the Water Sector- Preparing for the “New Normal”
09:45-10:10		Graham Duxbury Chief Executive Officer, Groundwork, UK	Promoting Community Resilience and Place-based Climate Action
10:10-10:35		Shan-Shan Guo Vice Chairman of Delta Electronics Foundation, Taiwan	Water with Life: Looking into the Truth About Water and Climate
10:35-11:20		Panel Discussion	

Keynote Speech

Keynote Speech Speakers

Charles Ray Alexander

Director of Contingency Operations and Homeland Security,
U.S. Army Corps of Engineers

Mr. Alexander is the Director of Contingency Operations and Homeland Security. His portfolio includes command and control of USACE civil and military contingency operations during disaster incidents, programs in flood risk management and critical water resources infrastructure.

Appointed to the Senior Executive Service in November 2014, Mr. Alexander has over 38 years of combined federal and private sector experience. From 2013 to 2014, he served as Senior Director for Response Policy on the National Security Council Staff in the White House. Previously, he was Chief of Interagency and International Services (IIS) at Headquarters USACE.

Tjitte Albert Nauta

Manager, Regional Manager Asia, Deltares

Mr. Nauta has a broad experience in the fields of Integrated Water Management, WRM action planning, flood risk management, capacity building and mathematical modelling and monitoring studies. His consultancy experience as expert advisor and project manager at Deltares includes studies on mentioned aspects for freshwater and coastal water systems in numerous countries.

Keynote Speech

September 27 (Friday)

R201 CD | Water for Safety

Time	Program	Speaker	Topic	Moderator
14:00-14:30		Registration		
14:30-14:35	Opening	Opening Remarks		
14:35-15:10		Charles Ray Alexander Director of Contingency Operations and Homeland Security, USACE	Overview of the Mississippi River and Missouri River Basin Flooding Event	
15:10-15:45	Keynote Speech	Tjitte Albert Nauta Manager, Regional Manager Asia, Deltares	Flood Management and Urban Resilience	Ke-Sheng Cheng Director, Hydrotech Research Institute, National Taiwan University
15:45-16:20		Joaquín Vallejo Loreto Program Manager, Pan American Development Foundation	PADF's Community-Based Flood Risk Reduction Project in Belize	
		Ravindra Gavali National Institute of Rural Development and panchayati Raj, Hyderabad	Water Resources in India	
16:20-16:30	Closing	Group Photo		

Water for the Future
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Daily Programme

Collaborative River Restoration Workshop

September 25 (Wednesday) p.m.

Venue | WRA 1st meeting room

(9F., 41-3, Sec. 3, Xinyi Rd., Da'an Dist., Taipei, Taiwan)

Water Resources Agency (WRA) has been on good relationship and friendship with the Japan Riverfront Research Center (RFC) for almost 20 years through the systematic technical exchange. This year WRA has invited the two experts from RFC, President Takehiko Ono and Director Nobuyuki Tsuchiya, to Taiwan and share their river restoration experiences with the public-private partnership. WRA hopes this program can enhance the power of society to protect our rivers and rebuild the harmonious relationship between people and river environment, for the purpose of restoring the natural ecology in Taiwan water bodies and the vitality of river environment.

Time	Program	Remark	
14:30~14:40		Opening Remarks	
14:40~15:00	Introduction of RFC	Takehiko Ono President, Japan Riverfront Research Center	
15:00~16:00	Collaborative Nature Restoration in Japan	Nobuyuki Tsuchiya Director, Japan Riverfront Research Center	
16:00~16:20	Tea Break		
16:20~16:50	A Case Study for Collaborative River Restoration in Taiwan	Chun Shen Chen Chief, Water Resources Planning Institute	
16:50~17:30	Discussion		

Daily Programme Speakers

September 26 (Thursday) a.m.

R201E | SDGs and Enterprise Development

Tain-Tsair Hsu
Chairman, Commerce Development Research Institute, Taiwan

Tain-Tsair Hsu is a Taiwanese politician who served as the mayor of Tainan City for 9 years, as well as the member of Legislative Yuan for 14 years. He is an economics expert in transformation of the digital economy, economic strategy and policy, and business cycle forecasting. Currently, he is the chairman of the CDRI (Commerce Development Research Institute).

Greg Rogers
Founder, Eratothenes LLC, USA

Dr. Rogers is the founder of Eratosthenes LLC and predecessor of Advanced Environmental Dimensions LLC, a research and consulting firm specializing in the estimation, reporting and management of environmental liabilities and risks since 2005. His research includes regulatory and private-sector standards on internal control, enterprise risk management, the fiduciary duty of care to exercise reasonable oversight, and climate-related financial disclosure.

Cheng-Chung Huang
Managing Director, KPMG Sustainability Consulting Co., Ltd, Taiwan

Dr. Niven Huang has been the Managing Director of KPMG Sustainability Consulting Co., Ltd., and was the chairman of the Advisory Board of ASrIA. Dr. Huang is a pioneer in CSR, sustainability reporting, ESG investment, corporate sustainability strategy and carbon management. He is the advisory board member of NDCi. Global, a new international community for promoting climate finance.

Avi Slonim
Legal Advisor, Israeli Water Authority, Israel

Avi Slonim has vast experience in water and infrastructure regulation and has been advising the IWA on establishing a long term economic regulation of the water sector; shaping standards and report requirements from water and sewerage corporations; supervision and regulation over ‘Mekorot’, Israel’s national water company; forming cost and tariff methodology for the water sector.

KC Chou
Vice President, Taiwan Alliance for Sustainable Supply, Taiwan

Mr. Chou is the senior vice president of ASE Group Kaohsiung site. He is also the Vice President of Supply Management Institute, Taiwan, Vice President of Taiwan Alliance for Sustainable Supply, the Director of Center for Corporate Sustainability, Honorary Director of Taiwan Printed Circuit Association, and Honorary President of Taiwan Export Processing Zone Electrical and Electronic Manufactures Association.

*in order of the presentation in agenda

Daily Programme **Speakers**

September 26 (Thursday) p.m.

R201E | Innovative Water Business Based on New Technologies

POPO
President, Acer Being Communication, Taiwan

Mr. PO is the president of Acer Being Communication. He was the procurement head of Acer Computer, technical assistant of corporate CEO and product director of ITGO. He took his EMBA degree at National Chengchi University (NCCU) and MA degree of electrical engineering at National Taiwan University of Science and Technology (NTUST).

Juan Gutiérrez
Principal Engineer, HR Wallingford, UK

Juan is a Principal Engineer at HR Wallingford (Innovyze channel partner for Taiwan) for 15 years, covering fields as diverse as hydrodynamic computational modelling, physical hydraulic modelling and motorway design. As a drainage modeller Juan has hands-on experience of the latest InfoWorks ICM modelling package. Juan is responsible for the technical support to InfoWorks ICM users in Hong Kong, Taiwan and Thailand.

Chou Lai
Assistant General Manager, MSIG Mingtai Insurance Company, Taiwan

Mr. Lai's research topic is focusing on risk management in insurance industry. Having 20 years experiences in MSIG Mingtai Insurance Company, he specializes in loss prevention engineering, underwriting, claim, reinsurance, IT, business process reengineering in Fintech areas. Mr. Lai is the committee member of Engineering Insurance Association, Vice Chairman of IT Committee, and Non-Life Insurance Association.

Chris Zevenbergen
Professor, Water Engineering Department of IHE Delft, The Netherlands

Chris Zevenbergen is the professor at the water engineering department of IHE Delft and the department of hydraulic engineering, faculty of civil engineering of the TU Delft, the Netherlands. He is also the project director of DeltaCap, a capacity development program funded by the Dutch government to support the implementation of the Delta plan in Bangladesh, and of AFMA.

Fons Nelen
Managing Director, Nelen & Schuurmans, The Netherlands

Fons worked at the engineering firm DHV in Amersfoort until 1998. Since 2009, in the event of 10th anniversary of Nelen en Schuurmans, he started the development of 3Di Water Management in order to help people manage water problems in an interactive, visualized and accurate way that can be easily understood by the public without the water domain knowledge.

*in order of the presentation in agenda

Daily Programme Speakers

September 26 (Thursday) a.m.

R201F | Total Solutions for Sustainable Water Use in Industry

Kiyoshi Ida
General Manager, Water Processing Division, Sumitomo Electric Industries, Ltd., Japan

Kiyoshi Ida has been engaged in multi-cellular PTFE products development, manufacturing and related businesses. In order to contribute to the world water environmental improvement, Kiyoshi has been participating in the same products water treatment business establishment plans, devoted himself to the product-developing as a role of Technical Director since 2000.

Koji Fujiwara
Section Manager, Toray Industries Inc., Japan

Koji Fujiwara is a manager of the Technical Service Section of Water Treatment Technical Dept., Toray Industries Inc.in Japan. Later, he entered Toray and has engaged in the development of RO products until 2000. Since 2001, he has been devoting himself in RO technical services in the Middle East and Southeast Asia. He is in charge of seawater desalination, drinking water production and wastewater treatment and reuse.

Jimmy Wang
Manager, Taiwan Semiconductor Manufacturing Company, Ltd., Taiwan

Mr. Wang obtained the Water Conservation Outstanding Performance Award from Taiwan Water Resources Agency in 2007. He has devoted to establishing water conservation strategies and policies using the Distributed Control System (DCS), Facility Monitor and Control System (FMCS) and several monitoring and management systems.

Jin-Wei Kuo
Section Head, Water Treatment Plant, China Steel Corporation, Taiwan

Mr. Kuo has three years of working experiences at China Steel Machinery Corporation (CSMC). He is a professional of arranging project schedules and costs, procuring the material and contracting out projects. With five years of experiences in water treatment plants at China Steel Corporation (CSC). Mr. Kuo is knowledgeable in wastewater treatment and circulating water systems operation. He completed his Master of Engineering at National Cheng Kung University, and his Bachelor of Engineering degree at National Cheng Kung University.

Ching-I Wang
Technician, Sinotech Engineering Services Ltd., Taiwan

Mr. Ching-Yi Wang has published research on the recycling technology and use evaluation of sludge in water treatment plants. Mr. Wang has also been involved in practical projects of water treatment project planning and design, pipeline system and sludge treatment scheming, as well as other environmental engineering operation management

*in order of the presentation in agenda

Daily Programme Speakers

September 26 (Thursday) p.m.

R201F |The Recent Innovation of Resource Recovery from Wastewater

Zhaokang Wang
Director, METAWATER Co., Ltd., Japan

Mr. Zhaokang Wang is the Manager in the International Business Planning Department, METAWATER Co., Ltd. Prior to this position, Manager Wang has served in the International Business Planning Department and the International Business Division. He is also the Professional Engineer of Japan in the field of Water Supply & Sewerage.

Ryouichirou Watabiki
Director, Maezawa Industries Inc., Japan

Mr. Ryouichiro Watabiki is the director in the environmental R&D production department, Maezawa Industries Inc. Prior to this position, he has served as the general manager and manager in the Technology Development Center and the manager and section manager in the Sewerage Water Treatment System Planning Department. He had a Master's degree from the Graduate school of Civil Engineering, Kyushu University.

Yu-Jen Huang
Manager, Ever-Clear Environmental Engineering Corporation, Taiwan

Dr. Huang's main research field is in industrial wastewater treatment and advanced treatment process. He has been working in Ever-Clear for about 10 years, and the major work is in research and evaluation of innovative wastewater treatment technologies. Dr. Huang has been rewarded with several publication rewards and has been an invited speaker in universities, foreign water treatment conferences and forums.

Chung-Ching Lee
Deputy Director, Solar Applied Materials Technology Corporation, Taiwan

Dr. Lee is working on recycling of wastewater resources in optoelectronic industry. Prior to this position, Dr. Lee was the researcher in the Industrial Technology Research Institute. Dr. Lee graduated from the institute of chemistry, National Taiwan University in 2002. His specialty is in the field of inorganic chemistry, organometallic chemistry, recovery & refining of precious & rare metals.

Richard Yeh
Chairman, Hydroionic Technologies Inc., Taiwan

Mr. Yeh is the co-founder and Chairman of Hydroionic Technologies. He has directed the research, development and commercialization of the Company's proprietary hydrometallurgical wastewater treatment and heavy metal recycling process suite. With over 35 global patents, Mr. Yeh serves as a Director, and President, of Hydroionic's Taiwanese operating subsidiary, HydroionicEnviroTec.

*in order of the presentation in agenda

Daily Programme

September 26 (Thursday) R201 AB

R 201 A Forum 1	Taiwan Water Projects Conference Session A	R 201 B Forum 1	Taiwan Water Projects Conference Session B
Session 1	**09:00-10:15**		
Moderator	Yuan-Peng Lin, Deputy Chief Engineer Jyh-Min Chen, Board Director	**Moderator**	Mong-Yuan Tsai, Deputy Chief Engineer Yi-Fang Shih, President
09:00	Water Resources Risk Management Project-Daan River, Dajia River, and Zhuoshui River Yu Lin	**09:00**	An Executive Mechanism Plan of Runoff Allocation and Outflow Control Wei-Ting Chen
09:20	Smart Water Resources Allocation and Management-Water Resources Inventory Development and Integration Integration Hwa-Lung Yu	**09:20**	Test Program on Risk Assessment and Safety of Hydraulic Structure at Kaoping River Basin Yi-Hsiu Lu
09:40	Feasibility Planning of Groundwater Development in Puli Basin Ahain Yang	**09:40**	Application of Multifunctional Flood Detention Basins and Implementation Strategies Chin-Hsien Liao
Break	**10:00-10:15**		
Session 2	**10:15-16:00**		
Moderator	Yuan-Peng Lin, Deputy Chief Engineer Jyh-Min Chen, Board Director	**Moderator**	Mong-Yuan Tsai, Deputy Chief Engineer Yi-Fang Shih, President
10:15	Integrated Water Supply Operation Planning for Water Resource Utilization in Taipei & Taoyuan-Increases water supply improvement plan for Water Resource Utilization in Hsinchu Shih-Liang Huang	**10:15**	The Study of Compensation Measures for Coastal Development Affecting The Protective Facility Wei-Po Huang
10:35	Distribution Project Investigation & Planning and Pipe Network Analysis of Tainan Desalination Plant Aaron Lee	**10:35**	Study on Levee Failure due to Soil Liquefaction and its Countermeasures Ho-Ji Chen
10:55	Survey Planning for Backup Development of Hyporheic Flow in Wuxi River in Central Taiwan Kang-Nan Chen	**10:55**	Environmental Planning Of Agongdian River Robin Chi-Feng Huang
11:15	Image documentary for the Remediation Plan Results of Shimen Reservoir and its Catchment Area Yu-Chi Chen	**11:15**	Investigation on the Environmental Situation of the General Seawall in Tainan Coast Yin-Sung Hsu
Discussion	**11:35-12:00**		
Lunch	**12:00-13:30**		
Expo Visiting	**13:30-16:00**		
R 201 A Forum 2	**The 24 Hydraulic Engineer Conference Session A**	**R 201 B Forum 2**	**The 24 Hydraulic Engineer Conference Session B**
Session 3	**13:40-15:50**		
13:40	Smart Water Management and Disaster Reduction	**13:40**	Sustainable Water Resource
Break	**15:20-15:50**		
15:50	Smart Water Management and Disaster Reduction	**15:50**	Sustainable Water Resource

Daily Programme

September 26 (Thursday) R201 CD

R 201 C Forum 1	Taiwan Water Projects Conference Session C	R 201 D Forum 1	Taiwan Water Projects Conference Session D
Session 1	**09:00-10:15**		
Moderator	Jau-Pao Wang, Director Der-Ren Song, Commissioner	**Moderator**	Kuo-Chiang Chang, Deputy Chief Engineer Jaw-Lieh Wang, President
09:00	Apply Very Low Magnetic Electricity Wave Inventory Technique in Hot spring Resource Conservation and Management Tzu-How Chu	**09:00**	Application of Hydro Digital Elevation Model on High Resolution Inundation Modeling Chih-Hung Hsu
09:20	A Study on the Assessment of Criticality of Water Supply Facilities to Public Safety and Serviceability Risk Gee-Yu Liu	**09:20**	Operational Testing of Flood Early Warning System Che-Hao Chang
09:40	Improvement of Monitoring and Response technologies for Harmful Cyanobacteria in Public Water Supply Systems and Reservoirs Yi-Ting Chiu	**09:40**	Study of Inundation Warning Based on Historical Inundation Disaster and Hydrologic Information Chih-We Huang
Break	**10:00-10:15**		
Session 2	**10:15-16:00**		
Moderator	Jau-Pao Wang, Director Der-Ren Song, Commissioner	**Moderator**	Kuo-Chiang Chang, Deputy Chief Engineer Jaw-Lieh Wang, President
10:15	The Plan and Promotion of Low Impact Development in Reservoir Watershed Yu-Jia Chiu	**10:15**	Research and Promotion of Information and CommunicationTechnology on Flood Warning System Chao-Kuan Chen
10:35	Implementation of Ecological Checks on Civil Engineering Projects in Zengwen Reservoir Watershed, Mudan Reservoir Watershed, Agongdian Reservoir Watershed, Jiaxian Weir Watershed and Gaoping River Weir Watershed Chia-Yu Tsai	**10:35**	Advanced Reasearch and Development of Decision-making Support Platform for Flood Risk Maps, 2018 Tsang-Jung Chang
10:55	Application of Intelligent Image Interpretation Technology to Water Resources Management of Catchment Areas Chih-Hao Fan	**10:55**	The Study on Flood Decision Support System and Display Interface Development Jhih-Cyuan Shen
11:15	The Project To Advance The Water Resources Reservation Community of Central Taiwan in 2018 Chia-Chen Hsu	**11:15**	Improvement for Community-Based Flood Risk Management of 2017 Yi-Chi Tan
Discussion		**11:35-12:00**	
Lunch		**12:00-13:30**	
Expo Visiting		**13:30-16:00**	
R 201 A Forum 2	**The 24 Hydraulic Engineer Conference Session C**	**R 201 D Forum 2**	**The 24 Hydraulic Engineer Conference Session D**
Session 3	**13:40-15:50**		
13:40	Sustainable Water Environment	**13:40**	Innovative Water Technologies
Break		**15:20-15:50**	
15:50	Smart Water Management and Disaster Reduction	**15:50**	Other Themes

Daily Programme

September 26 (Thursday) R201 EF a.m.

R 201 E Technical 4	SDGs and Enterprise Development	R 201 F Technical 1	Total Solutions for Sustainable Water Use in Industry
Session 1	**09:00-10:15**		
Moderator	Wei-Fuu Yang, Chairman, Taiwan Power Company, Taiwan	**Moderator**	Masaru Kurihara, President, Asia Pacific Desalination Association (APDA)
09:00	Introduction by Moderator	**09:00**	Opening Remark Hsiang Shihyen, Chairman, Sustainable & Circular Economy Development Association, Taiwan
09:05	SDGs and Development Opportunities for SMEs Tain-Tsair Hsu, Chairman, Commerce Development Research Institute, Taiwan	**09:05**	Introduction by Moderator
		09:10	Introduction of Water Treatment Technology by PTFE Membrane Kiyoshi Ida, General Manager, Sumitomo Electric Industries, Ltd., Water Processing Division, Japan
09:30	Accounting for Climate Change Greg Rogers, Founder, Eratothenes LLC, USA	**09:35**	Case Study for Membrane Technology Applied in Wastewater Reclamation Koji Fujiwara, Section Manager, Toray Industries Inc., Japan
Break	**09:55-10:15**	**Break**	**10:00 – 10:15**
Session 2	**10:15-12:00**		
Moderator	Hua-Ping Tsao, Deputy Director- General, Water Resources Agency, MOEA, Taiwan	**Moderator**	Rui-De Wang, Former Counselor, Ministry of Economic Affairs, R.O.C, Taiwan
10:15	Introduction by Moderator	**10:15**	Introduction by Moderator
10:20	Water Circular Management for SDGs – Business Actions for Future Cheng-Chung Huang, Managing Director, KPMG Sustainability Consulting Co., Ltd, Taiwan	**10:20**	TSMC's Experience in Water Resources Management and Circular Economy Jimmy Wang, Manager, Taiwan Semiconductor Manufacturing Company, Ltd., Taiwan
10:45	Economic regulation of the water sector in Israel Avi Slonim ,Legal Advisor, Israeli Water Authority, Israel	**10:45**	Diversified Water Resources of CSC Jin-Wei Kuo, Section Head, China Steel Corporation, Water Treatment Plant, Taiwan
11:10	Water Management in IC Packaging KC Chou, Vice President, Taiwan Alliance for Sustainable Supply, Taiwan	**11:10**	Integrated Design of Sewer Treatment Plant and Reclamation Water Center Ching-I Wang, Technician, Sinotech Engineering Services Ltd. , Taiwan
Panel Discussion		**11:35-12:00**	
Lunch		**12:00**	

Daily Programme

September 26 (Thursday) R201 EF p.m.

R 201 E Business Matching	Innovative Water Business Based on New Technologies	R 201 F Technical 1	The Recent Innovation of Resource Recovery from Wastewater
Session 1	**14:00-15:15**		
Moderator	Chi-Ming Peng, President, Civil IoT Industry Alliance, Taiwan	**Moderator**	Tien-Jin Chang, Chairman, The Chinese Institute of Environmental Engineering, Taiwan
14:00	Introduction by Moderator	**14:00**	Introduction by Moderator
14:05	Using Technology to Improve Our Life POPO, President, Acer Being Communication, Taiwan	**14:05**	Pre-treated Trickling Filter System (PTF) Zhaokang Wang, Director, METAWATER Co., Ltd., Japan
14:30	Flood and water management in UK Juan Gutiérrez, Principal Engineer, HR Wallingford, UK	**14:30**	Highly Efficient Solid-Liquid Separation System with the Circular Type Nitrification Reactor Ryouichirou Watabiki, Director, Maezawa Industries Inc., Japan
Break	**14:55-15:15**		
Session 2	**15:15-17:00**		
Moderator	Shun-Hsing Chuang, Chairman, Taiwan Water Environment Association, Taiwan	**Moderator**	Jyh-Woei Chen, Director, Sewer Engineering Office, Construction and Planning Agency, Ministry of the Interior, Taiwan
15:15	Introduction by Moderator	**15:15**	Introduction by Moderator
15:20	Smart City and New Insurance services Chou Lai, Assistant Manager, MSIG Mingtai Insurance Company, Taiwan	**15:20**	Advanced Tertiary Treatment Technologies in Wastewater Treatment and Water Reuse Yu-Jen Huang, Manager, Ever-Clear Environmental Engineering Corporation, Taiwan
15:45	Smart data management on soil, degradation &ground water monitoring Chris Zevenbergen, Professor, Water Engineering Department of IHE Delft, The Netherlands	**15:45**	Introduction of Recycling of Wastewater Resources in Optoelectronic Industry Chung-Ching Lee, Deputy Director, Solar Applied Materials Technology Corporation, Taiwan
16:10	IT consultancy service and flood simulation for water management Fons Nelen, Managing Director, Nelen & Schuurmans, The Nethlands	**16:10**	Wastewater and heavy metal recycling through Hydrometalurgical Processing Richard Yeh, Chairman, Hydroionic Technologies Inc., Taiwan
Panel Discussion		**16:35-17:00**	
Farewell	**17:00**		

Daily Programme Speakers

September 27 (Friday) p.m.

R201A | The Innovation on Water Networks

Masuko Atsushi
Former Director, Bureau of Waterworks, Tokyo Metropolitan Government, Japan

Mr. Masuko has been working in the tap water field for over 30 years. He was the director of the Bureau of Waterworks, Tokyo Metropolitan Government between 2011 and 13. From 2013 to 2019, he is the president of Tokyo Suido Services (TSS). Currently, he is the committee member of the National Comprehensive Development Plan, and the Japanese Representative of the UNESCO-IHP (International Hydrological Programme).

Jia-Rung Lee
Vice President, Taiwan Water Corporation

Mr. Lee is the Vice President of Taiwan Water Corporation with the experiences as Director at Department of Public Works and Deputy Director at Department of Water Supply. He is a qualified civil engineer both in Grade Three Grassroots Special Civil Service Examination and Senior Qualification Examination for Professional and Technical Personnel.

Jiin-Shyang Chen
Commissioner, Taipei Water Department, Taipei City Government, Taiwan

Mr. Chen's achievements in the water supply are much diversified both in hardware construction and water management (water price setting, smart water management and many other innovative fields). He promises to supply good and safe drinking water that possess the trusts from consumers, making Taipei a more livable and sustainable city than ever.

Jiin-Shyang Chen
Chunghwa Telecom Co., ltd

Huang Tsai received the MA degree in Electrical Engineering from the National Taiwan University in 1994. The main researches are artificial intelligence internet of things (AIoT) platform technology, intelligent environments network system (iEN), smart city and other product developments.

POPO
President, Acer Being Communication, Taiwan

Mr. PO is the president of Acer Being Communication. He was the procurement head of Acer Computer, technical assistant of corporate CEO and product director of ITGO. He took his EMBA degree at National Chengchi University (NCCU) and MA degree of electrical engineering at National Taiwan University of Science and Technology (NTUST).

Shih-En Fan
Manager, Taiwan Secom Co., Ltd.

Mr. Fan has 31 years in Taiwan Secom Co., Ltd. Previously, he was the executive & section manager of Taipei Branch, manager of Taoyuan Branch, manager of Business Planning Room, director of Access Control Department, director of North District Business Department in Taiwan Secom Co., Ltd.

*in order of the presentation in agenda

Daily Programme **Speakers**

September 27 (Friday) p.m.

R201B | Water Reclamation Facilities and Services in Taiwan: A Outlook

Yu-Jung Chang
Director, Advanced Water Treatment, AECOM, USA

Yu-Jung has 29 years of experiences in water/wastewater design, process optimization, troubleshooting, technology evaluation, and applied research for municipal and industrial clients. He has experiences in treating emerging contaminants. Director Chang currently serves as the Chair of American Water Works Association (AWWA) Membrane Process Committee, and he is a Full Affiliate Professor at the University of Washington.

Yang-Chung Pai
General Manager, Star Enprotech Corp., Taiwan

Yang-Chung Pai is one of the co-founders of Star Enprotech Corporation started in 1977. He has been in the environmental engineering businesses for more than 40 years with expertise in the fields of ion-exchange processing, anaerobic technology, wastewater recycling engineering, and cleanroom laundry technology. He also expands his water treatment plants and other related experiences to Southeast Asia and China.

Edward Chen
Executive Director, AECOM, Taiwan

Edward Chen, an environmental engineer with 30 years of experiences in river remediation, water and wastewater treatment projects. He is the executive director in the Water and Urban Development Department at AECOM, and has participated in many large-scale water treatment projects. Additionally, he has been actively engaged in reclaimed water projects in Taiwan over recent years.

Tsung-Ming Liao
General Manager, Forest Water Environmental Eng'g Co., Ltd., Taiwan

Mr. Liao has ample experiences in the field of environmental engineering for over thirty-three years. The national projects that he was involved in include the Nan-Zhi Sewerage System Project in Kaohsiung, Luo-Dong Sewerage system Project in Yilan, Guanyin Industrial Wastewater Treatment Plant Project, Yong-Kang Water Reclamation Plants in Tainan, and Wai-Pu Compost Plant Project in Taichung.

Ke-Chiang Hsieh
Associate Chief Engineer, CTCI Corporation, Taiwan

As the Associate Chief Engineer at CTCI Corporation, the biggest E&C Company in Taiwan, the main task for Mr. Hsieh is the execution of large-scale domestic or international environmental protection turnkey projects. He dedicates his overall career in CTCI Corporation and is involved in environmental engineering related services from feasibility studies, engineering planning and design, commissioning to turnkey project execution.

*in order of the presentation in agenda

Daily Programme Speakers

September 27 (Friday) p.m.

R201E | Water Treatment and Circulation in New Era

Chia-Lung Chen
Deputy Director, Environmental & Water Technology Centre of Innovation (EWTCOI), Ngee Ann Polytechnic, Singapore

Dr. Chen is currently focusing on applied R&D and consultancy projects at EWTCOI. With 20 years' passion for biological and environmental sciences, he published more than 60 journal and conference papers in biotechnology, environmental microbiology and waste/ wastewater treatment related areas.

Han-Lin Lin
Researcher, Material and Chemical Research Laboratories, Industrial Technology Research Institute, Taiwan

Han-Lin Lin is the researcher from the Industrial Technology Research Institute and China Steel Corporation. He is also a substitute teacher lecturing Bioreactor Design at the Department of Environmental Engineering, National Cheng Kung University.

Yun-Hsuan Huang
Researcher, Material and Chemical Research Laboratories, Industrial Technology Research Institute (ITRI), Taiwan

Doctor Huang is the present researcher of ITRI. She used to be the R&D assistant manager at Three Royal Chemical Industry Co. Ltd. In addition, she was an experienced postdoctoral research fellow at R&D Center for Membrane Technology, Chung Yuan Christian University (CYCU).

Chang-Yu Liao
Researcher, Material and Chemical Engineering Laboratories, Industrial Technology Research Institute, Taiwan

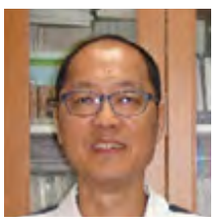
Dr. Liao is a researcher at Material and Chemical Engineering Laboratories in Industrial Technology Research Institute. Prior to this, he was a Project Engineer in AECOM, involving in water and urban development projects.

*in order of the presentation in agenda

Daily Programme **Speakers**

September 27 (Friday) p.m.

R201E | Water Treatment and Circulation in New Era



Yuan-Liang Tai
Researcher, Material and Chemical Research Laboratories, Industrial Technology Research Institute (ITRI), Taiwan

Daniel Tai has worked for over ten years in the consulting industry of civil engineering, water and wastewater treatment before he joined ITRI in 2010. He works in the area of wastewater reclamation with a special interest in membrane technology.

Wayne Lo
Senior Researcher, Material and Chemical Research Laboratories, Industrial Technology Research Institute, Taiwan

Dr. Lo worked as government staff, engineering consultant, scientific/engineering researcher in Canada and Taiwan. He is an adjunct assistant professor from National I-Lan University. He specializes in applying online sensing and real-time control to water and wastewater treatment.

Jacky Chang
Manager, Advantech Co., Ltd, Taiwan

Jacky Chang worked in the field of intelligent buildings at Advantech intelligent Co., Ltd. He is an entitled business Group/ project management professional (PMP Number1467098) and IGB Accredited Professional (Number 10101006). Also, he is qualified for exclusive wastewater treatment (Number GB280146).

*in order of the presentation in agenda

Daily Programme Speakers

September 27 (Friday) p.m.

R201F | Opportunities and Challenges of Advanced Water Treatment Industrial of Taiwan in ASEAN Countries

Warit Jawjit
Dean, School of Public Health, Walailak University, Thailand

Professor Warit Jawjit is the dean of School of Public Health, Walailak University. Prior to this, Professor Jawjit was the dean of School of Allied Health Science and the lecturer in the Rajamangala University of Technology Srivijaya and Prince of Songkhla University. His research areas target to Industrial Ecology, Green Productivity, Pollution Prevention and Environmental Footprint.

Eddy Setiadi Soedjono
Dean, School of Public Health, Walailak University, Thailand

Professor Soedjono's research is mainly dealing with domestic wastewater. Working in this field for at least 15 years, Professor Soedjono develops both national and international collaborations for proper access to water and sanitation for low-income communities to meet the Sustainable Development Goals (SDGs).

Tseng-Hsian Lin
President, HT Green Co, Taiwan

Mr. Lin is an expert in water treatment, wastewater treatment technology, especially in Waterworks, Textile Dyeing & Finishing, Pulp & Paper Mills, Food Processing, Chemical Industry, and Leather Industry. He has conducted on-site investigations over 1,000 factories.

Chia-Hung Hou
Associate Professor, Graduate Institute of Environmental Engineering, National Taiwan University, Taiwan

Dr. Hou's research interests include the synthesis of multi-functional carbon-based materials, energy-efficient desalination technologies, and electrochemically-modulated selective separation of ions. He has published over 50 scientific papers. In 2018, he received a Da-You Wu Memorial Award from Ministry of Science and Technology (MOST), Taiwan.

Ching-Jung Chuang
Professor, Department of Chemical Engineering, Chung Yuan Christian University, Taiwan

Dr. Ching-Jung Chuang is the deputy director in the R&D Center for Membrane Technology. Professor Chuang's research interests include membrane science and engineering, electrokinetics enhanced membrane filtration, membrane distillation, membrane characterization and osmotic distillation.

Fung-Ching Lin
Chairman, King Membrane Energy Technology Inc., Taiwan

Dr. Fung-Ching Lin is the chairman of King Membrane Energy Technology Inc. Prior to this, he was the chairman of Yitongyuan Technology Inc. and Kingpro Mediatek Inc. Dr. Lin's works focus on polymeric membrane production, osmotic distillation, membrane filtration, disc factory management, bio-ethanol purification and recycling.

*in order of the presentation in agenda

Daily Programme

Speakers

September 27 (Friday) p.m.

North Lounge | Water Management in Smart City: Innovation and Implementation

Shih-Bin Lin
Division Chief, Public Works Department, Taipei City Government, Taiwan

Mr. Lin has received the Master degree of Science in Environment and Resource Management, Vrije University Amsterdam. He is the Deputy Chief Engineer of Hydraulic Engineering Office at Taipei City Government, and a registered Civil Engineer in Taiwan.

Yasuyuki Shimizu
Professor, Hokkaido University, Japan

Professor Shimizu has specializations on Hydraulics, River Engineering, and Sediment Transport. He is the membership in Professional Societies JSCE, Japan Society of Hydrology and Water Resources, JSFM, IAHR, ASCE, IAHR, and APD. Previous awards include the 4th M Selim Yalin Lifetime Achievement Award (IAHR) and Excellent Paper Award (ISRS2013).

André Struker
Senior Advisor, Waternet, The Netherlands

At Waternet, André works on strategic issues and integrated solutions within the water cycle. Since 2012, he has also been managing the R&D program Waternet Climate Neutral in 2020 as well as the Corporate Social Responsibility Program since 2016. Together with the Port of Amsterdam and the waste to the energy company, AEB, he started Clean Capital to upgrade waste streams.

Tsang-Jung Chang
Professor, National Taiwan University Department of Bio-environmental Systems Engineering/ Hydrotech Research Institute, Taiwan

Prof. Chang is a professor with outstanding performance stipend at Dept. of Bioenvironmental Systems Engineering and Hydrotech Research Institute, NTU. His specialties are computational hydraulics, environmental fluid mechanics, flood and inundation modelling, flood risk analysis. He currently serves as the associate editor Of Journal of Energy Engineering, ASCE (SCI, IF=1.944) and the Editor-in-Chief of Journal of Taiwan Agricultural Engineering (EI).

Kuang-Chin Lu
Chief Researcher, Telecommunication Laboratories, Chunghwa Telecom Co., Ltd., Taiwan

Kuang-Chin Lu received the outstanding engineer award in 2014 from the Chinese Institute of Engineers. His researches are power electronics, grid-connected PV system, and intelligent control theories. He is project manager at the IoT laboratory, Chunghwa Telecom Co., Ltd. (CHTTL) to develop smart energy, smart street lights, and smart water management.

*in order of the presentation in agenda

Daily Programme

September 27 (Friday) R201 AB p.m.

R 201 A Technical 3	The Innovation on Water Networks	R 201 B Business Matching	Water Reclamation Facilities and Services in Taiwan: A Outlook
Session 1	**09:00-10:15**		
Moderator	Wan-jiun Liao, Professor, National Taiwan University Department of Electrical Engineering	**Moderator**	Wen-Yu Cheng, Chairman, AECOM Taiwan
14:00	Introduction by Moderator	**14:00**	Introduction by Moderator
14:05	Smart Water Experiences In Tokyo Masuko Atsushi, former Director, Tokyo Suidou Service, Japan	**14:05**	The Challenge in Monitoring & Treatment for a Group of Emerging Contaminant: PFAS Yu-Jung Chang, Director, Advanced Water Treatment, AECOM, USA
14:30	The Situation and Prospect of the Intelligent Promotion of Water Supply Management of Taiwan Water Corporation Jia-Rung, Lee, Vice President, Taiwan Water Corporation	**14:30**	Prospects of Pure Water Treatment Equipment in Taiwan Yang-Chung Pai, General Manager, Star Enprotech Corp., Taiwan
Break	**09:55-10:15**		
Session 2	**15:15-17:00**		
Moderator	Yi-Fung Wang, Deputy Director- General, Water Resources Agency, MOEA	**Moderator**	Jin-Jing Lee, Deputy Director General, Department of Water Resources, Taoyuan
15:15	Introduction by Moderator	**15:15**	Introduction by Moderator
15:20	Facilitation of Smart Water Network In Taipei Water Supply Areas Jiin-shyang Chen, Commissioner, Taipei Water Department, Taipei City Government	**15:20**	Challenges on the Management of Public Sewer Effluent Reclamation Plant in Taiwan Edward Chen, Executive Director, AECOM Taiwan
15:45	Water Resources Management and Application Tsai Huang, Chunghwa Telecom Co., ltd	**15:45**	Effluent Reclamation in Taiwan: EPC Experiences and Case Study in Yongkang Reclaimed Water Treatment Plant Tsung-Ming Liao, General Manager, Forest Water Environmental Eng'g Co., Ltd., Taiwan
16:10	The Challenge and Prospect of Smart Water Meter POPO, President, Acer Being Communication	**16:10**	CTCI EPC Turnkey Execution in Water Treatment Project – A Case Report in CPC Ta-Lin Plant Wastewater Reclamation Project Ke-Chiang Hsieh, Associate Chief Engineer, CTCI Corporation, Taiwan
16:35	Application of Smart Water Meter in Property Management Shih-En Fan, Manager, Taiwan Secom Company	**16:35**	Panel Discussion
Farewell	**17:00**		

Daily Programme

September 27 (Friday) R201 EF p.m.

R 201 E Technical 1	Water Treatment and Circulation in New Era	R 201 F Technical 1	Opportunities and Challenges of Advanced Water Treatment Industrial of Taiwan in ASEAN Countries
Session 1	**14:00-15:15**		
Moderator	Chiou-Chu Lai, Deputy General Director, Material and Chemical Research Laboratories, Industrial Technology Research Institute, Taiwan	**Moderator**	Fi-John Chang, Distinguished Professor, Department of Bioenvironmental Systems Engineering, National Taiwan University, Taiwan
14:00	Introduction by Moderator	**14:00**	Introduction by Moderator
14:05	Water Reclamation and Reuse in Singapore Chia-Lung Chen, Deputy Director, Environmental & Water Technology Centre of Innovation (EWTCOI), Ngee Ann Polytechnic, Singapore	**14:05**	Water Resource and Market Opportunity in Thailand Warit Jawjit, Dean, School of Public Health, Walailak University, Thailand
14:30	Application of BioNET on Water Reclamation: From Sewage to Industrial Wastewater Han-Lin Lin, Researcher Material and Chemical Research Laboratories,Industrial Technology Research Institute, Taiwan	**14:30**	Important Water Issues and Market Development in Indonesia Eddy Setiadi Soedjono, Professor, Department of Environmental Engineering, Sepuluh Nopember Institute of Technology, Indonesia
Break	**14:55 – 15:15**		
Session 2	**15:15-17:00**		
Moderator	Shih-Yi Fan, Director, Water Resource Bureau, Taichung City Government, Taiwan	**Moderator**	Jia-Rung Lee, Vice President, Taiwan Water Corporation
15:15	Introduction by Moderator	**15:15**	Introduction by Moderator
15:20	A Case Study on Municipal Wastewater Reclamation by Nano-Filtration (NF) Process Yun-Hsuan Huang, Researcher Material and Chemical Research Laboratories,Industrial Technology Research Institute, Taiwan	**15:20**	Ceramic Membrane Technology & Water resource monitoring Tseng-Hsian Lin, President, HT Green Co, Taiwan
15:45	A Case Study on the Industrial Wastewater Recovery Using Electro-Dialysis Reversal Chang-Yu Liao, Researcher, Material and Chemical Engineering Laboratories, Industrial Technology Research Institute, Taiwan	**15:40**	Capacitive Deionization Technology for the Reclamation of Domestic Wastewater Effluents: Emerging opportunities and challenges in Taiwan Chia-Hung Hou, Associate Professor, Graduate Institute of Environmental Engineering, National Taiwan University, Taiwan
16:10	Industrial Wastewater Treatment and Reclamation-Practices and Opportunities Yuan-Liang Tai, Researcher, Material and Chemical Research Laboratories, Industrial Technology Research Institute, Taiwan	**16:00**	Membrane distillation pilot test for reclaiming water from warm wastewater Ching-Jung Chuang, Professor, Department of Chemical Engineering, Chung Yuan Christian University, Taiwan
16:35	Accelerating Digital Transformation of the Water Industry by AIoT Innovation Technology Wayne Lo, Senior Researcher, Senior Researcher, Material and Chemical Research Laboratories, Industrial Technology Research Institute, Taiwan Jacky Chang, Manager, Advantech Co., Ltd, Taiwan	**16:20**	UF Membrane Application in Filtration of Wastewater with Higher Content of Suspended Solids Fung-Ching Lin, Chairman, King Membrane Energy Technology Inc., Taiwan
		16:40	Panel Discussion
Farewell	**17:00**		

Daily Programme

September 27 (Friday) North Lounge & South Lounge

North Lounge Forum 2	The 24 Hydraulic Engineer Conference Session E	South Lounge Forum 2	The 24 Hydraulic Engineer Conference Session F
Session 1	**08:20-10:20**		
08:20	Student Paper Contest	**08:20**	Sustainable Water Resource
Break	**10:00-10:20**		
Session 2	**10:20-12:00**		
10:20	Student Paper Contest	**10:20**	Student Session

North Lounge Technical 2	Water Management in Smart City: Innovation and Implementation	South Lounge Forum 1	Taiwan Water Projects Conference Session E
Session 1	**14:00-15:15**	**Session 1**	**12:40-14:15**
Moderator	Te-Chuan Li, Deputy Secretary-General, Taipei City Government, Taiwan	**Moderator**	Chen-Yang Lee, Director Chih-Hao Fan, Secretary-general
14:00	Introduction by Moderator		
14:05	Water Environment Governance in Taipei: Sustainable Strategies and Action Programs Shih-Bin Lin, Division Chief, Public Works Department,Taipei City Government, Taiwan	**12:40**	Drought Risk Assessment of Water Resources Facilities under Climate Change Scenarios Pao-Shan Yu
14:30	Computational Challenges in River Morphodynamics Yasuyuki Shimizu, Professor, Hokkaido University, Japan	**13:00**	The Third Stage Management Project of Climate Change Impacts and Adaptation on Water Environment Yu Lin
Break	**14:55-15:15**		
Session 2	**15:15-17:00**		
Moderator	Chaur-Kong Jong, Deputy Director- General, Water Resources Agency, MOEA, Taiwan		
15:15	Introduction by Moderator		
15:20	Smart Water Management in the Netherlands Andre Struker, Senior Advior, Waternet , The Netherlands	**13:20**	A Study on Assessment Framework and Adaptation Strategies for Water Resilient Cities Pao-Shan Yu
15:45	Perspective of Urban Real-Time Pluvial Inundation Prediction Tsang-Jung Chang, Professor, National Taiwan University Dept. of Bio-environmental Systems Engineering/ Hydrotech Research Institute, Taiwan	**13:40**	Technical Analysis and Planning of Transdisciplinary Dynamic Strategies in Water Environment under Climate Change Yu-Pin Lin
16:10	IoT applications and smart water management. Kuang-Chin Lu, Chief Researcher, Telecommunication Laboratories, Chunghwa Telecom Co., Ltd, Taiwan		
Panel Discussion	**16:35-17:00**	**Discussion**	**14:00-14:15**
Farewell	**17:00**		

Daily Programme

September 27 (Friday) Joy Lounge & R203

Joy Lounge Forum 2	The 24 Hydraulic Engineer Conference Session G	R203 Forum 2	The 24 Hydraulic Engineer Conference Session H
Session 1	**08:20-10:20**		
08:20	Student Session	**08:20**	Smart Water Management and Disaster Reduction
Break	**10:00-10:20**		
Session 2	**10:20-12:00**		
10:20	Student Session	**10:20**	Smart Water Management and Disaster Reduction

Joy Lounge Forum 1	Taiwan Water Projects Conference Session F
Session 1	**12:40-14:15**
Moderator	Kuo-Chiang Chang, Deputy Chief Engineer Ray-Shyan Wu, President
12:40	The Project for Annual Work Plan of Land-Subsidence Prevention and Reclamation in 2018 Jung-Ting Hsu
13:00	Study on Database Setup of Warning Stage for River and Drainage systems Administered by Central Government Keh-Chia Yeh
13:20	Construction of Emergency Backup Well Network in Kaohsiung/Pingtung Area Ahain Yang
13:40	Discharge Measurement and Coefficient Validation in the Third River Management Office Yen-Chang Chen
Discussion	**14:00-14:15**

Daily Programme Speakers

September 28 (Saturday) a.m.

R201A | Water for Human

Graham Duxbury
Chief Executive Officer, Groundwork, UK

Mr. Duxbury is the Chief Executive Officer of Groundwork UK, which is a leading NGO promoting community-led solutions to social, economic and environmental challenges in the UK. Graham has worked in numbers of national roles for the previous 15 years. His responsibilities have encompassed building national relationships and partnerships, generating income, developing national programmes and leading on policy and strategic communications.

Toyohiro Watanabe
Chief Executive Officer, Groundwork Mishima, Japan

Prof. Toyohiro “Jumbo” Watanabe is an environmental activist who facilitated the civic action with the co-organization of resident, NGO, government and enterprise to restore the polluted Genbe River and successfully made the firefly and Mishima-Baikamo come back to this habitat for living and reproduction.

Fei-Yu Kuo
Deputy Minister, National Development Council, Taiwan

Deputy Minister Kuo leads Taiwan’s national spatial planning, sustainable development, climate change adaptation, offshore islands development, and major infrastructure projects. She is drafting national spatial conservation plan, supporting sustainable development policy guidelines, and completing the adaptation strategy to climate change in Taiwan, national strategic plan for regional revitalization.

Yang-Chien Chang
Chief Executive Officer, Delta Electronics Foundation, Taiwan

Mr. Yang-Chien Chang served as the member of 16th Sustainable Development Committee. Besides, on behalf of the Delta Electronic Culture and Education Foundation, CEO Chang has participated in the observation and interview of the UNFCCC Conference and its affiliated meeting nine times. CEO Chang is working on the issues about risk communication and framework research.

Mao-Cheng Wu
Chief Executive Officer, Taikang Branch, Tainan Community University, Taiwan

Mr. Wu has been a local reporter, community planner, environmental worker, an educator for Taikang Culture and college lecturer. He has dedicated to the community development, river environment education, watershed management, public participation and revolution action to cultivate the active citizen and initiate the Taikang Culture action.

*in order of the presentation in agenda

Daily Programme

Speakers

September 28 (Saturday) a.m.

R201B | Wonderful Life, Wonderful Water

Oded Distel

Former Director, Israel NewTech & Ecosystems, Ministry of Economy and Industry, Israel

Oded Distel was the Founder and Director of “Israel NewTech”. The pioneering program has spearheaded Israel’s water and energy eco-system since 2007. Oded played a pivotal role in leading the program, and he is recognized both in Israel and internationally as the leading expert on Israel’s water and energy industries.

Gal Zohar

Chief Executive Officer, IDE Technologies, Israel

Mr. Gal Zohar is the CEO of IDE Technologies since 2018, he in charge of global management of the company, including O&M of IDE plants worldwide, the concessionaires and water production and sales activities.

Tzu-Yuan Chou

Director of Experiential Marketing, Leoburnett, Taiwan

Mr. Chou is the Chief Experience Officer (CXO) of Leo Burnett Taiwan. He is well-known of his business insight, social trend, OMO communication, data innovation and marketing in Taiwanese creative industry. With Clients of McDonald’s, Samsung, Diageo, Mercedes Benz, Lay’s, Chunghwa Telecom and Electrolux, his company collaborates in sculpturing wonderful user brand experiences.

Chien-Hung Chen

General Manager, Elecclean, Taiwan

Chien-Hung Chen has obtained many awards, including the Outstanding Youth Engineer Award from Chinese Institute of Engineers, the Outstanding Contribution Award – a silver medal from Industrial technology research institute (ITRI). In 2016, Chien Hung, Chen created a startup company named ELECLEAN Co., Ltd, which is a spin-off from ITRI.

Kuo-Chung Cheng

Chairman, Taiwan Yes Deep Ocean Water Co., Ltd., a member of Taiwan Fertilizer Group, Taiwan

Kuo-Chung Cheng is the first Presbyterian minister to engage in politics as a politician. He was the council member of Taiwan Provincial Consultative Council (10th), member of the Legislative Yuan (2002-2008), director of Department of Information and International Relations, Tainan, and director of Department of Civil Affairs, Tainan. Currently, he is the chairman of Taiwan Yes Deep Ocean Water Co., Ltd.

Chen-Shiuan Fan

General Manager, Powerpure Technology Co., Ltd., Taiwan

As the General Manager at Powerpure Technology Co., Ltd, Dr. Fan specializes in the CDI technology and offer customized CDI system sizing to reach client needs for Water Softening and Water Reclamation. Various services including design and production of CDI module. Device and system are provided at Powerpure Technology Co., Ltd.

*in order of the presentation in agenda

Daily Programme Speakers

September 28 (Saturday) a.m.

R201C | Sponge City and Rainwater Harvesting in the Buildings

Kieran Williams
Environmental Monitoring Solutions, UK

Kieran is the Business Development Director for EMS responsible for improving the company market position. He has over 17 years' experiences in the UK water sector and is proven in the identification of sector needs and the development and integration of innovative solutions.

Chi-Ming Peng
General Manager, WeatherRisk Explore Inc., Taiwan

Dr. Peng obtained a PhD degree in atmospheric science and founded the first private weather company WeatherRisk in Taiwan. Dr. Peng is also a college professor, weather presenter, host and Taiwan or international open data and disaster prevention promoter. Additionally, he dedicated to promoting weather, climate change, environmental prevention, open data and disaster prevention topics.

Eric Hsu
President, Taiwan Institute of Landscape Architects, Taiwan

Eric served as the Adjunct Associate Professor at Chinese Culture University. He is also the president of the Taiwan Institute of Landscape Architects, the principal of the CNHW Planning & Design Consultants, Landscape General Consultant of Tainan, Keelung, New Taipei City, and the Committee of Taipei City Urban design and land Application Committee.

Vivian Chien
Public Affairs and Communication Director, Swire Coca-Cola, Taiwan

Ms. Chien currently serves as the Public Affairs and Communication Director in Swire Coca-Cola and with the company for 10 years. She is responsible for corporate social responsibility, external communication, and marketing PR for the Coca-Cola system in Taiwan.

Guan-Yu Lin
Chairman, Taipei Professional Hydraulic Engineer Association, Taiwan

As the Chairman of the Taipei Professional Hydraulic Engineer Association, Mr. Kuan-Yu Lin has abundant experiences in water engineering and sewage construction. Mr. Lin is an accredited hydraulic technician and has worked in several engineering consultant companies.

Chao-Hsien Liaw
Professor, National Taiwan Ocean University, Harbor and River Engineering Department, Taiwan

Professor Liaw's research focuses on water management, rainwater usage, and water environment economy. As the President of International Rainwater Catchment Systems Association (IRCSA), he specializes in urban flooding management, rain-harvesting, and green rainwater management. He is the President of International Rainwater Catchment Systems Association (IRCSA).

*in order of the presentation in agenda

Daily Programme

September 28 (Saturday) R201 AB

R 201 A Technical 3	Water for Human	R 201 B Business Matching	Wonderful Life, Wonderful Water
Session 1	**09:00-10:40**	**Session 1**	**09:00-10:15**
09:00	Opening Remark Chien-Hsin Lai, Director-General, Water Resources Agency, MOEA	**Moderator**	Lichung Jen, Director, Global Branding and Marketing Research Center
		09:00	Introduction by Moderator
	Distinguished Guest's Remark Mei-Ling Chen, Chairperson, National Development Council	**09:05**	Israel's Experience in Water Management Oded Distel, Former Director Israel NewTech & Ecosystems, Ministry of Economy and Industry, Israel
09:10	Engaging Communities in the Management of Water Resources – learning from the UK. Graham Duxbury, Chief Executive Officer, Groundwork, UK	**09:30**	Desalination in Taiwan- Looking to the future with IDE Gal Zohar,Chief Executive Officer, IDE Technologies, Israel
09:45	The Approaches of Water Environment Transformation by Public Participation Toyohiro Watanabe, Chief Executive Officer, Groundwork Mishima, Japan		
Break	**10:20-10:40**	**Break**	**09:55-10:15**
Session 2	**10:40-12:00**	**Session 2**	**10:15-12:00**
10:40	National Strategic Plan for Regional Revitalization Fei-Yu Kuo, Deputy Minister, National Development Council	**Moderator**	Cynthia Kiang, Director General Ministry of Economic Affairs Department of International Cooperation
		10:15	Introduction by Moderator
11:05	Water Education under Climate Change Yang-Chien Chang, Chief Executive Officer, Delta Electronics Foundation	**10:20**	The Experience Economy for New Water Products Tzu-Yuan Chou, Director of Experiential Marketing, Leoburnett
		10:45	Branding Strategies for Innovative Water Products Chien-Hung Chen, General Manager, Elecclean
11:30	From Disaster to Safety-Symbiotic and Resilient System of Social and Ecology at Taikang Mao-Cheng Wu, Chief Executive Officer, Taikang Branch, Tainan Community University.	**11:10**	Development and Future of Deep Ocean Water in Taiwan Kuo-Chung Cheng, Chairman, Taiwan Fertilizer group - Taiwan Yes Deep Ocean Water Co., Ltd.
		11:35	Practical Applications and Future of Energy-Efficient Capacitive Deionization System Chen-Shiuan Fan, General Manager, Powerpure Technology Co., Ltd.
Conclusion	**11:55-12:00**		
Lunch	**12:00**		

Daily Programme

September 28 (Saturday) R201 C

R 201 C Business Matching	Sponge City and Rainwater Harvesting in the Buildings
Session 1	**09:00-10:15**
Moderator	Shen-Hsien Chen, Chairman of the Board, Sinotech Engineering Consultants, Ltd., Taiwan
09:00	Introduction by Moderator
09:05	Urban Flood Alleviation using local network storage capacity Kieran Williams, Environmental Monitoring Solutions, UK
09:30	Aquaculture created by the public-private partnership Chi-Ming Peng, General Manager, WeatherRisk Explore Inc., Taiwan
Break	**09:55-10:15**
Session 2	**10:15-12:00**
Moderator	Chien-Pin Wang, Vice President, Commerce Development Research Institute, Taiwan
10:15	Introduction by Moderator
10:20	Creating a sponge city with landscape design Eric Hsu, President, Taiwan Institute of Landscape Architects, Taiwan
10:45	Corporate Sustainability-Local Water Resources Conservation Plans of Coca Cola Vivian Chien, Public Affairs and Communication Director, Swire Coca-Cola, Taiwan
11:10	Rainwater Harvesting and Discharging at the Construction Bases Guan-Yu Lin, Chairman, Taipei Professional Hydraulic Engineer Association, Taiwan
11:35	Facilitation of Rainwater Harvesting in Taiwan Chao-Hsien Liaw, Professor, National Taiwan Ocean University, Harbor and River Engineering Department, Taiwan
Lunch	**12:00**

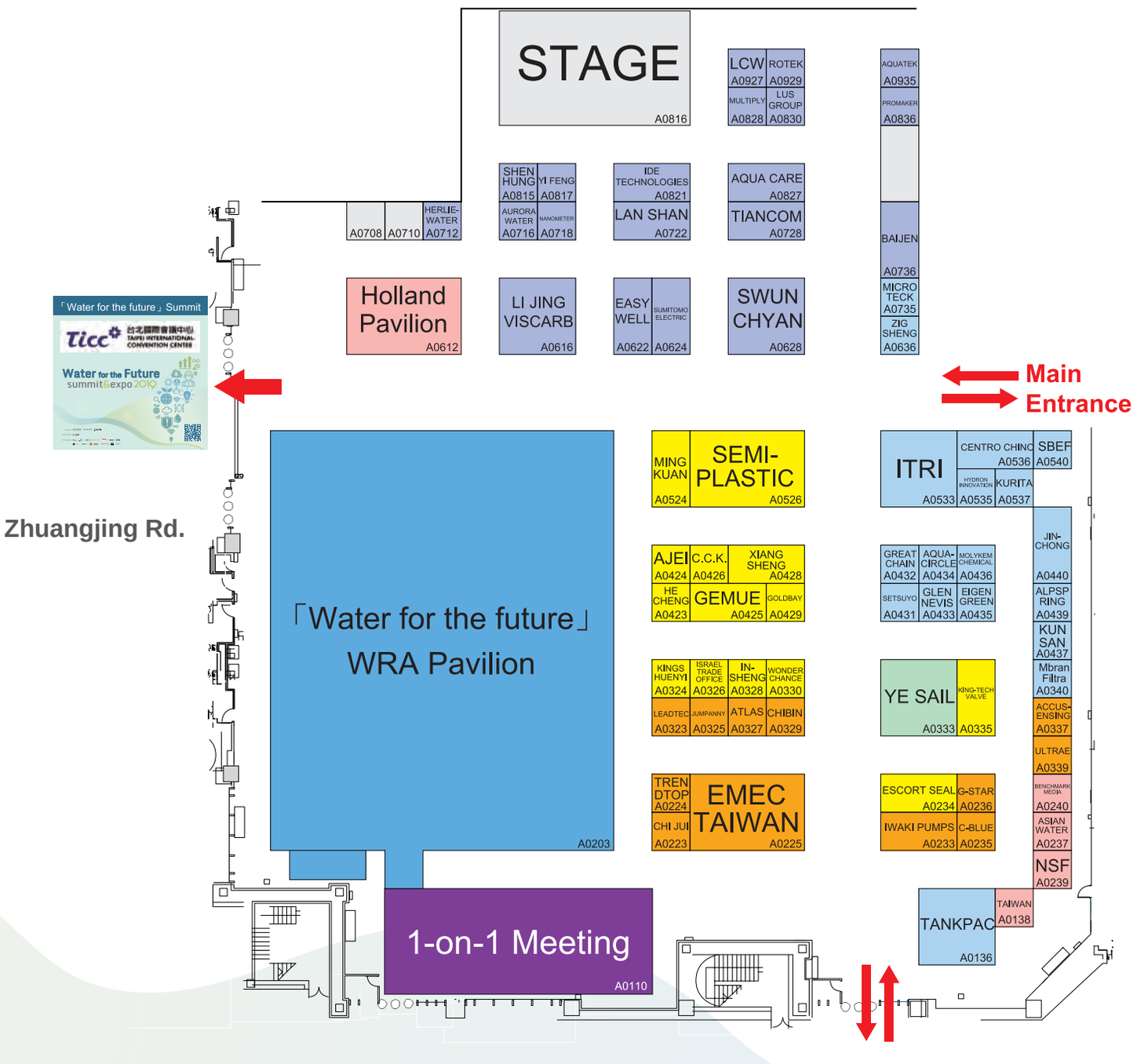
Water for the Future
summit&expo 2019

Exhibition

Floor Plan

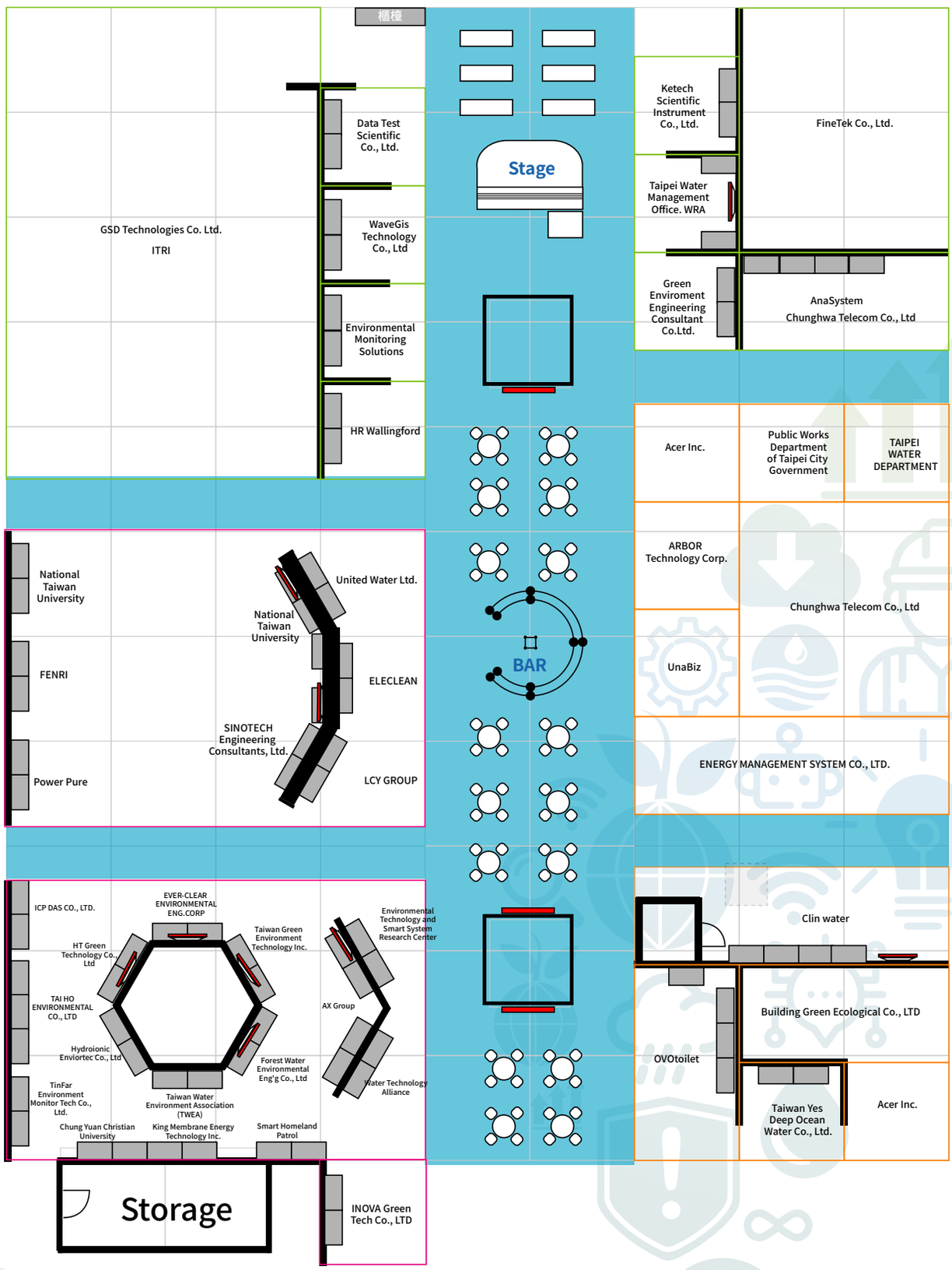
Taipei World Trade Center Hall 1

- Reclaimed Water & Treatment
- Transport & Storage
- Green Infrastructure
- 「Water for the future」WRA Pavilion
- Water Purification Equipment & Drinking Water
- Process Control Technology & Process Automation
- Public Sector & Related Services



Floor Plan

Water For the Future Booth Floor Plan



Exhibitor Profiles

Public Works Department (PWD), Taipei City Government

https://pwd.gov.taipei/

Company Profile

・PWD was established in 1945. Responsible for major public construction work in Taipei City, including New Construction Office, Hydraulic Engineering Office, Parks & Street Lights Office, Sewerage Systems Office and Geotechnical Engineering Office.

Product Description

Taipei water environment policy:Sponge City

・Taipei adopts the sponge city concept as the core of its water environment policy. Gradually transforming Taipei into a safe, sustainable, water-friendly, ecological water-front city.

The rapid Cellular-Automaton urban flooding model

・To reduce flooding disasters, PWD and NTU (National Taiwan University) have executed a scientific research plan together which conducts real-time flood assessment and early warning.

Taipei Water Department

https://www.water.gov.taipei/

Company Profile

・Taipei Water Department (TWD) was established in 1907. It has been established for more than 100 years. The service area covers Taipei City, Sanchong, Xindian , Yonghe, Zhonghe districts and 7 Li's of Xizhi District.

Product Description

District Smart Metering(DSM)

・Taipei Water Department (TWD) has divided the water distribution network into 319 DMAs as of 2018, and also built relevant management systems to provide long-term results for analysis of water network efficiency. The revenue water rate has reached up to 90%.

Direct Drinking

・More than 500 potable drinking fountains installed across Taipei area are accessible by citizens for their easy use, and the fountain app is also available for citizens to find the nearby ones to drink.

Taipei Water Management Office

https://www.wratb.gov.tw/

Company Profile

・Taipei water source district is located in the southeastern of Taipei Metropolitan. The administrative district covers 717 square kilometers, including five districts: Pinglin, Wulai, Shihding, Shuangxi and Xindian; equivilent to one third of New Taipei City.

Product Description

Taipei Water Management Office: Smart Security System

・The system integrates the information including rainfall, water level, landslides, turbidity, etc., and forecasts water level, landslides and turbidity through multiple machine learning algorithms. The customized management interface is developed on the foundation of the integrated information and presents the information regarding to turbidity forecast, which assists Taipei Water Management Office to enhance the management efficiency.

Exhibitor Profiles

Acer Being Communication Inc.

Company Profile

・Acer Being Communication Co.,Ltd is a company focusing on Business IoT solution.

Product Description

Micro Water Quality Monitoring Station

・The existing water quality monitoring station has issues on size, cost, not real time, and 2nd pollution concern.

Smart Meter

・Acer Being Communication proposes upgrading existing meters to smart meters via the “Add-on” concept.

Water Harvesting + IoT

・With IoT, information concerning water levels, flow speed, and quality is available. What’s more, gate control of water flow can be implemented.

ANASYSTEM, INC.

http://www.anasystem.com.tw/home-en/

Company Profile

・AnaSystem applies IoT and AI technologies on smart city and industrial IoT. The fundamentals of building an IoT system include front-end transmitters, 4G/NB-IoT/LoRaWAN telecommunications and back-end cloud system. Those key fundamental technologies are developed by AnaSystem ourself.

Product Description

SensMini A4

・SensMini A4 accomdate with various of industrial sensors(water level, water quality). The sensoring data can be transmitted to Senslink through 4G/NB-IoT/LoRaWAN, and passed multiple industrial tests and can work under harsh environment.

ARBOR Technology Corp.

http://www.arbor-technology.com

Company Profile

・ARBOR is a global provider of dedicated industrial IoT computing and mobility solutions. ARBOR offers comprehensive system integration, customer-centric design services, embedded systems, automation products, and global logistics support. We cooperate closely with our partners to develop complete solutions for a wide array of applications across a diverse range of industries.

Product Description

IB002 Smart Water Mete

AXIOM INTERNATIONAL ENVIRONMENTAL ENGINEERING CORP.

http://www.axgroup.com.tw/index.php?lang=tw

Company Profile

・AX GROUP is a large-scale environmental protection engineering company that provides domestic market with a variety of MOR services of sewerage system, including science parks, industrial parks, airports and schools.

Product Description

Improved Nitrogen removal process in WWTP of science park

・The ammonia removal is greater than 97% and 85% by well operation (AO+MBR, 55,000 CMD) and biological carrier/Bio-code application (Nitrification, 90,000CMD) in biological treatment, respectively.

Water Quality Monitoring and Sewer Camera Inspection

・Introducing the (1) Zoom lens equipment, (2) automatic mobile vehicle with TV inspection and developing (3) mobile water monitoring system to improve inspection process.

Exhibitor Profiles

Building Green Ecological Co.,Ltd.

https://ecozl.com/

Company Profile

・Building Green dedicates sponge city material to develop several our own water conservation/infiltration green infrastructure facilities all are manufactured in Taiwan.

Product Description

Water Harvesting Module

・Assembling water harvesting module on site become an underground stormwater tank and could suit for all current regulations.

Shallow Water Harvesting Module

・For Sidewalk, parking lot and square area. And Shallow water harvesting module could suit for all current regulations.

Ecological Grass Pervious Paving

・For parking lot, square greening etc. and it's also can be use as ecological pervious base course for pervious paving.

ELECLEAN

http://www.eleclean.com.tw

Company Profile

・The establishment of ELECLEAN is to provide the society safer, more powerful, more economical and more convenient disinfectant products. ELECLEAN has attempted to reduce the risk of disinfectant for humans and to protect them in a better way while disinfecting. With advanced and innovative electrochemical technology, ELECLEAN has developed a wider range of disinfectant products.

Product Description

ELECLEAN disinfectant spray

・ELECLEAN disinfectant spray using advanced electrochemical technology manufactures disinfectant within 15 minutes. Water is the only reagent and directly transformed into ROS (Reactive Oxygen Species) that effectively destroys viruses and bacteria by oxidizing method. It is featured with safety, powerful anti-virus/bacteria, saving energy and convenience.

Data Test Scientific Co., LTD

http://www.datatest.com.tw/

Company Profile

・Established for nearly 30 years, the company has been responsible for water quality toxicity monitoring instruments for nearly 25 years. It has considerable experience in various water quality monitoring and planning.

Product Description

Microtox LX

・Modern Water developed Microtox technology to address limitations of conventional bioassay toxicity analysis.

Microtox® CTM

・The Microtox CTM makes fully automatic, continuous, on-line testing a reality.

AMBC

・Membrane Brine Concentration. AMBC is a major technological breakthrough in brine enrichment technology that reduces the amount of brine and significantly reduces the operating costs of ZLD equipment.

Energy Management System CO.,LTD

http://www.ems.com.tw

Company Profile

・Energy Management System Co., Ltd. (EMS) founded in 1991, over 20 years of professional experiences in developing/manufacturing smart digital water meter (Bulk/ Domestic Smart Meters).

Product Description

Smart Water Meter

・Showing leakage symbol and to remind consumers of the possibility of leakage.

・Smart water meters functions, including forwars/ reverse flow, and daily/weekly/monthly consumption logs.

・Achieve AMR and remote data monitoring by means of IoT technology so as to build water network management platform.

Exhibitor Profiles

Environmental Monitoring Solutions

http://www.em-solutions.co.uk

Company Profile

- Environmental Monitoring Solutions Ltd (EMS) is a UK based company that helps businesses meet and maintain environmental compliance by providing services, products and equipment hire for water and wastewater monitoring.

Product Description

- EMS have developed a range of Smart Wastewater solutions to improve efficiency and reduce environmental impact. CENTAUR™, SMART Sewer™ and Ironman™ are autonomous systems for wastewater networks and treatment works to improve efficiency and reduce environmental impact.

Fenri Co., Ltd.

http://www.fenri.com.tw/

Company Profile

- Fenri predominantly offers cloud monitoring and continuous water quality monitoring services. Industrial wastewater treatment plant in northern Taiwan has gained an abundance of practical experiences in the past five years.

Product Description

Fenri Cloud Collection (FCC)

- FCC is IoT application product. It is equipped with multi-functional electronic components. Hope to change the impression that the water quality monitoring equipment is numerous and connection operations complicated.

Fenri Cloud Collection-Mobile

- Application in domestic water management system, irrigation water monitoring, aquaculture water quality warning system, remote monitoring system and sewage discharge port short-term real-time monitoring.

EVER-CLEAR ENVIRONMENTAL ENG. CORP

http://www.ever-clear.com.tw/

Company Profile

- Ever-Clear, as a water treatment total solution provider established in 1999, offers our customers the service of water treatment evaluation/ design/construction/ commissioning. Ever-Clear is specialized in wastewater treatment and develops several patent wastewater treatment reactors.

Product Description

Fluidized-Bed Fenton Reactor (FBR-Fenton)

- FBR-Fenton is one innovative technology combined with Fluidized-Bed Crystallization (FBC) and Fenton technology. It is widely used in wastewater tertiary treatment in different industries.

FeRed-Fenton Reactor

- FeRed-Fenton is one powerful organics oxidation and ferrous saving technology. It is specialized in high COD wastewater oxidation or detoxification.

FineTek Co., Ltd.

http://www.fine-tek.com

Company Profile

- Established in 1978 , FineTek business model is based on providing complete customized solutions for a wide range of industrial automation process applications.

Product Description

EPD Series Electromagnetic Flowmeter

- EPD offers the industry's widest range of liners, electrodes and sizes to meet the needs of even the most demanding process applications in sectors as diverse as chemical, power, oil & gas and metals & mining.

EPR Paddle Wheel Flow Meter

- Paddle wheel flow meter consists of the paddle wheel sensor, the pipe fitting and the display/controller.

JFR3 FMCW Radar Level Transmitter

- JFR3 FMCW radar level transmitter is a non-contact measuring device, suitable for liquid measurement in most tanks.

Exhibitor Profiles

Foresr Water Environmental Engineering Co., Ltd.

https://www.mfw.com.tw

Company Profile

・FOREST WATER Company was established in June 2004 and was listed on September 8, 2016. Since the construction of the initial urban sewage sewer system and the operation and maintenance of the sewage treatment plant, it has gradually developed into industrial wastewater treatment engineering, desalination and waste.

Product Description

Kaohsiung Nanzhi Sewerage System

Yilan Luodong Sewerage System

Guanyin Industrial Sewage

GSD Technologies Co.,Ltd.

http://www.gsd.net.tw

Company Profile

・GSD Technologies Co., Ltd is a leading company in Environmental equipments whole-sales, development production, also, provides the total solution and technical proposal service to its clients.

Product Description

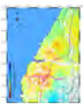
SMART PUMP & SMART WASTE WATER EQUIPMENT

・The equipment working data acquisition system. Through GSD cloud platform, all the data, information, analysis, can be collected for equipment/system working management use.

Green Environmental Engineering Consultant Co. LTD

http://geec.com.tw

Company Profile



・Green Environmental Engineering Consultant Co. LTD specializes in the application of multi-sensor monitoring system including InSAR, GPS, Leveling and Multi-layer compaction monitoring.

Product Description

Gloud GNSS Early Warning System for Surface Deformation

・For the highly automatic procedure of GNSS measurements imported,data processing and deformation analysis to announce early warning of land deformation.

Multi Temporal InSAR, MT-InSAR

・Multi temporal InSAR has high spatial sampling density and high measurement accuracy.

Multi-layer Compaction Automatic Monitoring Equipment

・Multi-layer compaction automatic monitoring equipment include 36 sensors Inside and automatically detect aquifer compaction in the land subsidence area.

HR Wallingford

http://www.hrallingford.com

Company Profile

・HR Wallingford is an independent civil engineering and environmental hydraulics organisation. HR Wallingford deliver practical solutions to the complex water-related challenges faced by our international clients. With a 70 year track record of achievement, our unique mix of know-how, assets and facilities includes state of the art physical modelling laboratories, a full range of numerical modelling tools and, above all, enthusiastic people with world-renowned skills and expertise.

Product Description

Flood Product Testing

・HR Wallingford is approved by the British Standards Institution (BSI) as the national laboratory for assessing the leakage of flood protection products under their kitemark scheme.

Exhibitor Profiles

HTGreen Technology Co., Ltd

https://www.htgreen.com.tw

Company Profile

- HTG was established by Mr. Tseng-Hsian Lin in 2013. Mr. Lin has experience on environmental engineering more than 32 years.

Product Description

Product 1

- Combined Cloud data processing and IOT technology to remote control and diagnosing wastewater treatment facilities and to make good performance steady.

Product 2

- make advanced UAS to take water samples and detect water quality directly.

Product 3

- Build a ceramic membrane bioreactor (MBR) which can do wastewater treatment and water recycling.

ICP DAS CO., LTD.

http://www.icpdas.com/index_tc.php

Company Profile

- ICP DAS, established in 1993, focuses on innovation and improving the industrial automation technology.

Product Description

PMC-5231 Industrial IoT Power Meter Concentrator

- PMC-5231 is the new generation of Power Meter Concentrator for meeting the trend of energy saving and carbon reduction in the Industry 4.0 age.

WISE-5231 IIoT Edge Controller

- WISE (Web Inside, Smart Engine) is a control units for use in remote logic control and monitoring in various industrial applications.

iSN-101 Liquid Leak Detection Module

- The iSN-101 Liquid Leak Detection Module is a low-cost intelligent liquid leak detection device.

HYDROIONIC ENVIROTEC CO., LTD

www.hydro-envirotec.com.tw

Company Profile

- The " Hydrometalurgical Processing " developed by HYDROIONIC ENVIROTEC is the use of ion exchange resin adsorption of nickel, copper, zinc or chromium metals for separation and purification treatment.

Product Description

Nickel sulfate crystal

- The crystal is soluble to water and the solution is acid. This product is for the plating industry and to be the material for positive electrode of battery in the electric vehicle.

Nickel sulfate solutionr

- This product is the high concentration and high purity of nickel sulfate solution. Presented as dark green color. We could provide the solution with the range of concentration in 110,000-140,000 mg/L.

INOVA GreenTech Co., LTD.

https://www.inova.co/

Company Profile

- INOVA GreenTech focuses on energy medicine, preventive medicine, and naturopathy. To improve human health and protect the environment, and to consistently keep launching natural additive-free products and smart eco-friendly devices.

Product Description

iWater Drinking system (Digital iFaucet)

- Obtained certification from the world's most authoritative water quality testing agency, the NSF International, and is compliant with NSF/ANSI Standard 42/53/401.It has also achieved the class I drinking water standard.

eWater cleaning water

- eWater consists of 100% water with its molecules restructured to enhance their cleansing capacity.

Exhibitor Profiles

Industrial Technology Research Institute

http://www.itriwater.org.tw/

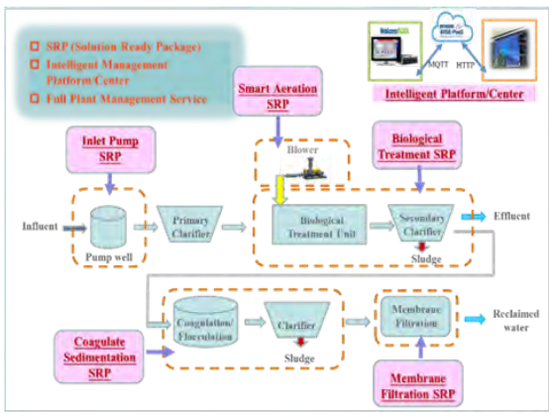
Company Profile

・ITRI's water technology team has devoted to water technology development covering a wide range of applications by working with various research organizations and industrial partners.

Product Description

Intelligent Water Treatment

・It is able to respond to the variation of the environment. This technology integrates AIoT, automation and water treatment domain knowledge.



King Membrane Energy Technology Inc

www.kingmembrane.com.tw

Company Profile

・King Membrane Energy Technology Inc. was established in 2007, dedicated to develop and produce the polymeric membrane module with high intensity for the purpose of water treatment and liquid/solid separation.

Product Description

MBR Module

・All units and designs of the module are made in Taiwan.

Membrane system of heavy metal wastewater treatment

Membrane system of emulsified wastewater

Ketech Scientific Instrument Co., Ltd.

http://www.ketech.com.tw/

Company Profile

・Ketech Scientific Instrument Co., Ltd. (KETECH) founded in 1992, over 25 years of experience in liquid analysis. Ketech has developed its own brand, Chemmit, since 1999 and has been recognized as a professional liquid analyzer provider ever since.

Product Description

Chemmit W3000 Series on-line Analyzer

Chemmit A7300 Portable Analyzer

Chemmit A7500 In-line Photometer

LCY Chemical Corp.

https://www.lcygroup.com

Company Profile

・LCY has been in petrochemical business for more than 50 years. LCY integrates into the business divisions of methanol, solvents, electronic-grade chemicals, rubber, performance plastics, energy, and environmental friendly green products.

Product Description

Membrane Bioreactor, MBR

・Membrane bioreactor (MBR) is a combination unit of ultrafiltration films and an activated sludge bioreactor. It can separate sludge to derive high quality of permeate water.

Exhibitor Profiles

National Taiwan University CapPure

http://enve.ntu.edu.tw

Company Profile

- We focus on developing water-energy sustainable technologies.

Product Description

Renewable Energy-Driven CDI System

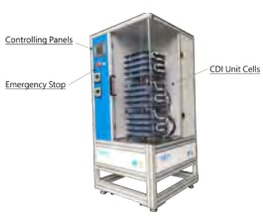
- Renewable Energy-Driven CDI System aims to utilize solar energy as the main energy resource to meet the goals of energy independence and sustainability.

i-Smart

- i-smart is household water purifier. This system can remove harmful ions and reduce the hardness in water.

Industrial Grade CDI Prototype

- Industrial Grade CDI Prototype is made up of lots of CDI unit cells, meeting the requirements of industrial grade.



NCTU Water Technology Alliance

http://etss.nctu.edu.tw/apwpt/

Product Description

IS Water treatment system

- This system is easy to operate, and convenient to maintain, low in power consumption, and the operating cost are cheaper and more durable and the IS Water module is highly feasible in the future.
- The IS water treatment system. (Wufeng Township, Hsinchu County)

High performance coagulant: PACl & PSI

- High performance PACl (PACl-H) coagulants contain high content of polymerized Al, which can improve turbid matter removal rate.
- Left to right: Raw water, after coagulation/sedimentation, PACl coagulant, PSI coagulant.

North Taiwan Business Group Chunghwa Telecom Co., Ltd.

http://www.cht.com.tw

Company Profile

- Chunghwa Telecom is the largest integrated telecommunication service provider in Taiwan and actively involved in corporate social responsibility initiatives and has attained various domestic and international awards and recognition.

Product Description

iEN water resource management service

- Providing water resource management solution for water reservoir, agricultural irrigation, water network, factory, and so on.

NB-IoT/LTE-M mobile communication network and Mobile IOT Gateway

- The intelligent monitoring solution integrates CloudIOT communication and devices

OVO toilet

http://www.ovotoilet.com

Company Profile

- OVO toilet is a local brand in Taiwan. OVO design carries out a series of product planning, aiming to meet the needs of different spaces and roles for bathroom.

Product Description

Overall Automatic toilet C301

- Automatic toilet seat can be opened/closed by remote operation
- Wire-less remote control, can be adjusted in five stages

One-piece toilet C3317B

- Siphon jet flushing
- Gold-grade water-saving seal, great water saving

The single-hole faucet for basin F8037

- A variety of shapes and materials
- ECO faucet, energy saving and carbon reduction

Exhibitor Profiles

Powerpure Technology Co., Ltd.

Company Profile

・POWERPURE, which specializes in capacitive deionization (CDI) technology. We offer customized CDI system sizing to reach client needs for Water Softening and Water Reclamation.

Product Description

・Capacitive deionization (CDI) technology, an emerging electro-chemical water treatment technology for facile removal of charged ionic species from aqueous solution; Low energy usage, high water recovery, reduction in the use of chemicals, environment friendly, and concentrate reuse possible.

Research and Development Center for Membrane Technology of Chung Yuan Christian University

http://membrane.cycu.edu.tw/

Company Profile

・The Center's founding objectives lies in promoting the development of membrane technology.

Product Description

Membrane Distillation System

・Quality is better than RO.
・For high temperature or high salinity wastewater.
・When there is sufficient waste heat source available, thecost is lower than RO.

Supported Liquid Membrane System

・Feed tank
・Organic solution with strip dispersion tank
・Control panel
・Shaftless pump
・Mixer

Southern Taiwan Business Group Chunghwa

http://www.cht.com.tw

Company Profile

・Chunghwa Telecom is the largest integrated telecommunication service provider in Taiwan, with leading offerings in domestic and international fixed communication, mobile communication, broadband, and internet services.

Product Description

Line-Type flood sensor

・Utilizing Chunghwa Telecom's copper cable as the transmission medium, the line-type flood sensor developed is suitable for metropolitan areas, where solar power is difficult to access.

NB-Type flood sensor

・The NB-IoT flood sensor can be deployed in a variety of fields and has power autonomy.

Settway Energy Technology Corp.

https://solar.settway.com

Company Profile

・Applying solar energy system in power-pumping water supply offers convenience in reducing manual workload, facilitating healthy drinking water supply timely accessible to villagers at rural areas.

Product Description

Gravity Water Purification System

・The high flux ultrafiltration device enables nano-filtering capability of 10-30nm pore sizes, capable of removing most contaminants from the water.

Solar Energy Pumping System

・It's essential to build high efficiency to achieve best water power-pumping operations.

HVAC Water Purification Device

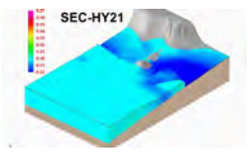
・The device works to water purification purpose when connecting with HVAC water circulatory system.

Exhibitor Profiles

Sinotech Engineering Consultants, Inc.

https://www.sinotech.org.tw/zh/

Company Profile



- Sinotech Inc. has four research centers and two laboratories, which are Civil & Hydraulic Engineering and Railway Transportation Research Center, Geotechnical Engineering, Disaster Prevention Technology, and Environmental Engineering Research Center, Geotechnical Testing Laboratory and Environmental Examination Laboratory.

Product Description

- Environmental Examination Laboratory is certified by the Environmental Protection Administration as a qualified examination institute.
- Hydraulic analysis model and related software (SEC-HY21) are developed using computation fluid dynamics and computation hydraulics technologies.

Smart Homeland Patrol

Company Profile

- We are a research and development alliance of LASS, with members from the National Taipei University of Technology, the Institute of Textile Industry, the ECOCEO Open Community, and civil environmental engineers.

Product Description

Water box

- The standard is equipped with three sensing data of pH value, conductivity EC and water temperature. According to different requirements, various sensing items and control structures can be amplified and plugged in, and the battery life can be maintained in the wild by charging with solar energy.

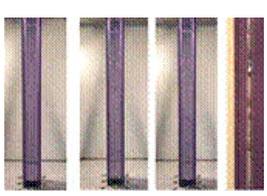
Tainan Hydraulics Laboratory, National Cheng Kung University

http://www.thl.ncku.edu.tw

Company Profile

- Founded by the National Hydraulic Research Institute, Ministry of Economic Affairs (MOEA) and the Taiwan Provincial College of Engineer (predecessor of National Cheng Kung University in 1950.

Product Description



- The objective is to investigate the optimization of aeration, fouling and energy saving for membrane bioreactors (MBR), the fluid dynamics mechanism of the aerated bubble of the flat sheet MBR will be investigated through physical model tests and computational fluid dynamics (CFD) model and a laboratory-scale MBR tests. Results will be fed back to the aeration operation mode to achieve the best operating parameters of the flat sheet MBR aeration system.

TAI HO ENVIRONMENTAL ENTERPRISES CO., LTD

http://www.dewater.com.tw

Company Profile

- TAI HO is an equipment manufacturer which produces equipment. The main products of our company are wastewater UF, filter presses in various types and sludge dryers.

Product Description

VACUUM DRYING FILTER PRESS

- Solidified ratio of filtered sludge can reach 99%; moisture content is lower than 1%, dehydrating and drying process together in one shift rather than separated into several sections.

Dehumidification Sludge Dryer

- The DHD Dryer operates by forcing phase changes of water, the liquid water in the sludge comes in contact with dry air.

Exhibitor Profiles

Taiwan Green Environment Technology Inc.

www.twget.com.tw

Company Profile

・Taiwan Green Environment Technology Inc. was founded in 1989, and became public listed company in 2001. The paid-in capital is NT$ 170 million.

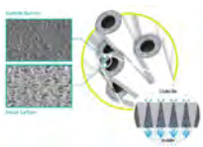
Product Description

SUIKEN EM Under Pressure Valve Installation System

・Can be made a branch or install a valve without shutdown or interruption of water service.

ECONITY MBR System

・Membrane can be defined to selectively separate solid and liquid from mixed material or solution. The pore size of our hollow-fiber membrane is o.4 micron (HDPE)/ 0.1 micron (PVDF).



Taiwan Water Environment Association (TWEA)

Company Profile

・Taiwan Water Environment Association (TWEA) was established in the Engineer's Day on June 6, 2001. The purpose of this juridical association is to accelerate the water environment regeneration in Taiwan, resources recovery technology development/ research/ promotion and training.

・TWEA has given guidance over 100 cases to recycle and apply the reclaimed water. Furthermore, TWEA has assisted the field of government and engineering to compile all kinds of technical regulation, technical journal, manual, guidance, etc. to improve the level of water environment technology in Taiwan.

Taiwan Yes Deep Ocean Water Co., Ltd.

www.taiwanyes-dow.com.tw

Company Profile

・Taiwan Yes establishes the largest deep ocean water factory of Asia at Hualien in Taiwan. Taiwan Yes aims to become the “Expert of Deep Ocean Water”.

Product Description

Deep Ocean Minerals Concentrate

・We apply reverse osmosis and low-temperature vacuum evaporation equipment to draw enriched minerals and trace elements in the deep ocean water and obtain precious and balanced NATURAL minerals.

Health Water Hai-Kuan1400

・Hai-Kuan1400, which is made of Deep Ocean Water, is the only water product with certification for blood fat regulation, beneficial to lowering total cholesterol in blood.

The Chinese Institute of Environmental Engineering (CIEnvE)

Company Profile

・The Chinese Institute of Environmental Engineering was foundg in 1988 to enhance the expert’s connection, technology development and engineering promotion.

・There are 20 committees, including financial, membership, institute journal, academic journal, academics, water environmental engineering, waste and renewable resource engineering, air environmental engineering, environmental planning and management, environmental information, soil and groundwater, environmental education and publication, election and award, international and cross-strait, service, young people work, environmental sanitation, industry-academia cooperation, NGO cooperation and sustainable policy to manage all the related affairs in the institute.

Exhibitor Profiles

ThinkTron ltd

https://www.thinktronltd.com/

Company Profile

・ThinkTron Ltd: Smart Service Operator with the combined strength of Sinotech INC. in civil engineering and by Japan Asia Group subsidiary's expertise. (Kokusai Kogyo Co., Ltd.)

Product Description

Smart Disaster Prevention for Hillslope Communities

・Providing the decision support tool to help the communities on hill slopes prevent from the disasters proactively through implementing IoT monitoring network, the visualized management platform and the notification broadcasting.

UnaBiz

https://www.unabiz.com/

Company Profile

・UnaBiz is an end-to-end Internet of Things(IoT) solutions company dedicated to accelerate the adoption of IoT worldwide.

Product Description

・The Meter Interface Unit(MIU) for Taipei Water Department(TWD) uses Sigfox IoT technology and Automatic Meter Reading (AMR) to read the data of water meter transmitting directly to Automatic Meter Reading (AMR) without manual meter reading. The data is compressed by Automatic Meter Reading (AMR), transmitted to the backend of the UnaBiz cloud via Sigfox network.

TINFAR ENVIRONMENT MONITOR TECH CO.,LTD.

http://www.tinfar.com.tw

Company Profile

・TINFAR diverse list of customers includes every field such as government, biotechnology, environment protection, food, and electricity, provide best solutions that excel customers' performances and efficiency by integrating new technologies such as Cloud Computing, Internet of Things (IoT), Big Data, and Industry 4.0.

Product Description

Versatile SMS Alert System

・With 6 sets AI input, expendable to 30 output channels.
・Convenient to manage: no need APP, direct monitoring via the web.
・Set up channels with Chinese names, multiple languages interface available.

United Water, Ltd.

http://uniwater.com.tw

Company Profile

・United Water, Ltd. is a membrane-based integrated environmental solutions provider specializing in water and wastewater treatment, water supply and recycling.

Product Description

Memstar MBR

・Memstar has pioneered the development of a proprietary thermally induced phase separation (TIPS) PVDF hollow fiber and innovative Energy Saving Air Scouring (ESAS) to minimize capital and life cycle costs.

Memstar UF

・Pressurized UF modules are used to remove suspended solids, including bacteria, viruses, and organic and inorganic compounds. Typical applications include the treatment of tertiary wastewater, surface water, and seawater for RO pre-treatment.

Exhibitor Profiles

WaveGIS Technology Co., Ltd.

www.wavegis.com.tw

Company Profile

- Founded in 2004, WaveGIS's core strength has been its diverse range of software and hardware solutions that connect all data to the management system –including locations, sensors and operation process compliant with industrial standards and cloud technologies.

Product Description

LPWAN Data Transmitter

- Collect and store data from sensor, and transmit data wirelessly to the cloud which can be accessed at any time for further analysis.

IoT water level sensor

- With MEMS pressure sensor and low-power transmission technology, it has atmospheric pressure correction, temperature compensation, high precision and low error. It is suitable in different fields for long term use.

Memo

Conference Organisation

Organizer

中華民國經濟部
Ministry of Economic Affairs, R.O.C.(Taiwan)

經濟部水利署
Water Resources Agency, MOEA

Taiwan External Trade Development Council
TAITRA

Implementer

商業發展研究院
Commerce Development Research Institute

Co-organizer

Holland
荷蘭貿易暨投資辦事處
Netherlands Trade and Investment Office

Israel Economic & Trade Mission in Taipei

臺北市政府工務局
Public Works Department, Taipei City Government

臺北自來水事業處
TAIPEI WATER DEPARTMENT

天下雜誌

SCEDA 永續循環經濟發展協進會
Sustainable & Circular Economy Development Association

ITRI
Industrial Technology Research Institute

中華民國環境工程學會
The Chinese Institute of Environmental Engineering

AECOM Imagine it. Delivered.

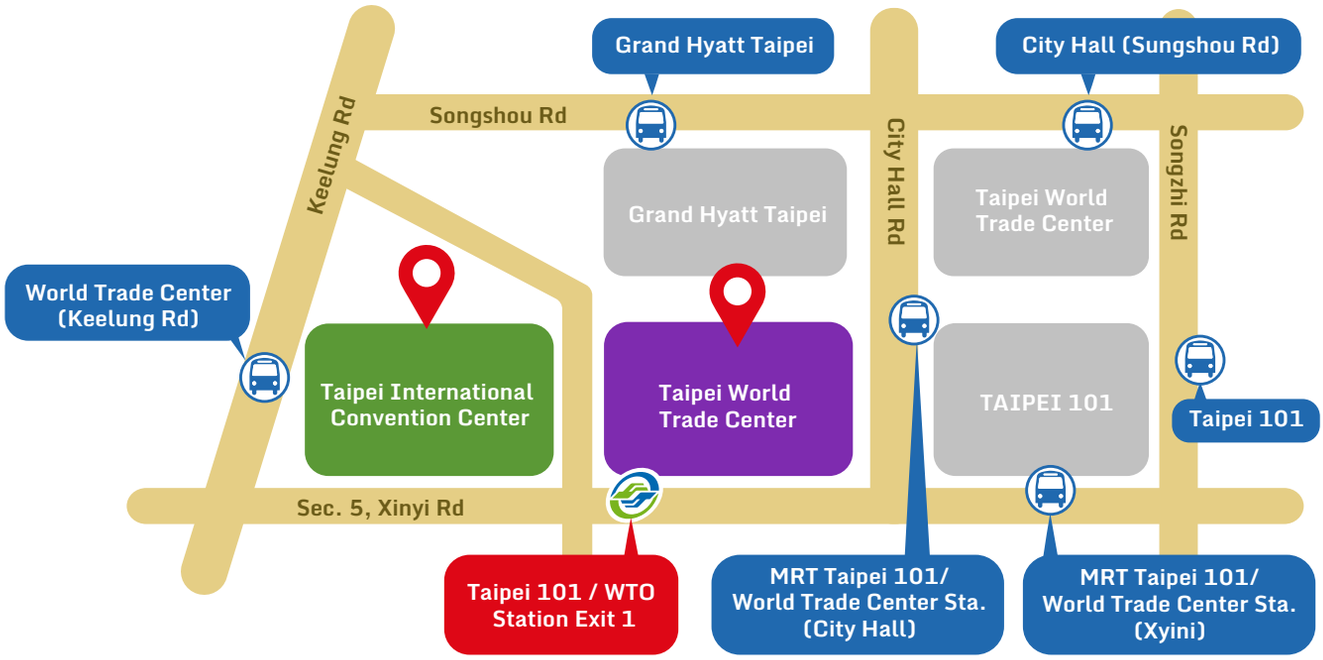
中原大學
Chung Yuan Christian University

財團法人中興工程顧問社
SINOTECH ENGINEERING CONSULTANTS, INC.

台灣水環境再生協會
Taiwan Water Environmental Association

跨界策略
XCreative Consulting

General Information



Taipei International Convention

MRT Tamsui-Xinyi Line:**Taipei 101 / WTO Station Exit 1**

BUS World Trade Center (Keelung Rd):

<20>、<37>、<284>、<611>、<650>、<935>、<1032>、<1503>、<1551>、<1552>、<2025>、<9001>、<9009>、< NS-Shuanghe>

Taipei World Trade Center

MRT Tamsui-Xinyi Line:**Taipei 101 / WTO Station Exit 1**

BUS MRT Taipei 101/World Trade Center Sta.(City Hall):

<28>、<281>、<537>、<647>、<915>、<BR6>、<BR7>、<BR18>、<BR21>、<G1>

MRT Taipei 101/World Trade Center Sta.(Xyini):

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Taipei 101:

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City Hall (Sungshou Rd):

<20>、<202>、<284>、<611>、<612>、<612 區 >、<650>、<665>

Grand Hyatt Taipei:

<1960>

***BR:Brown, BL:Blue**

Organizer/

Ministry of Economic Affairs, R.O.C.

Water Resources Agency, MOEA

TAITRA Taiwan External Trade Development Council

Implementer/

CDRI Commerce Development Research Institute

Co-organizer/

Holland

SCEDA

ITRI

AECOM