



## Talk on

# "Balanced Coastal Reclamation and Environmental Conservation towards Sustainable

### **Development on Coastal Areas**"

Organised by: Environmental Engineering Technical Division, IEM Supported by: International Association for Hydro-Environment Engineering and Research (IAHR), International Association for Coastal Reservoir Research (IACRR), and University of Nottingham, Malaysia

BEM Approved CPD/PDP Hours: 2 Ref. No. IEM19/HQ/383/T

Date	: 28 <sup>th</sup> August 2019 (Wednesday)
Time	: 5.30pm – 7.30pm (Refreshments will be served at 5.00pm)
Venue	: Auditorium Malakoff, Ground Floor, Wisma IEM, Petaling Jaya
Speaker	: Prof. Ruey-Chy Kao (National Cheng Kung University, Taiwan)
SYNOPSIS	

In the early days after the World War II, with the rapid growth of the population moved to Taiwan, the demand for land, water resources and food was quite urgent. In the western coastal areas, several tidal lands have been reclaimed for agricultural production and aquaculture. In the following 30 years, the coastal areas reclamation projects increased the construction of commercial and fishing ports, the thermal and nuclear power plants, and the marine outfall of industrial and urban wastewater treatment plants, with the main purpose was to accelerate the promotion of the economy growing up.

During that time, the concept of coastal protection and environmental conservation was still weak and lacking in engineering construction. As a result, these projects have been hidden in the coming decades of operation and may have many negative environmental impacts and social disputes. And these are the painful experiences that Taiwan has made in the early stages of developing the economy in the coastal areas. Since 1980, the awareness of international environmental protection has risen, and Taiwan has begun to pay attention to this important international environmental issue. In 1994, The Environmental Impact Assessment Act Original 32 articles passed by the Legislative Yuan and promulgated by presidential order. From then on, all economic development and construction plans must be handled in accordance with law.

In 1991, the Industrial Development Bureau (IDB), Ministry of Economic Affairs (MOEA), Taiwan began planning for the construction of a large-scale offshore industrial park with an area of 2,603 hectares in the middle of west coast area, with a total investment of 27.39 billion US dollars to supply industrial development land and promote economic growth in coastal areas. The coastal reclamation of the offshore industrial park includes an industrial harbor, an independent power plant, an oil refinery, naphtha cracker plant, a steam and electricity co-generation plant, machinery shop and boiler shop, silicon wafer plant, and an elastic fiber plant. The industrial park has been in operation since 2001 and its average annual production value in 2018 exceeded 45.02 billion US dollars.

This offshore industrial park carried out detailed planning take the concept of Balanced Coastal Reclamation and Environmental Conservation at the beginning of the planning process, it follow the principle of economic production, environmental ecological conservation and people's quality of life coexistence condition in order to handle environmental impact assessment, construction and operation.

#### **SPEAKER BIODATA**

Prof. Ruey-Chy Kao was graduated with a Bachelor's Degree in the Department of Hydraulics and Ocean Engineering, National Chen Kung University in 1981. He's then pursued his further study at the National Chen Kung University for research and education. He is a Professorial Researcher of Hydraulics and Coastal Engineering and Chief Supervisor of Tainan Hydraulics Laboratory (THL), National Cheng Kung University (NCKU) in Taiwan. He is also the founder of the Ocean Energy Research Center, established by the Bureau of Energy, Ministry of Economic Affairs and the National Cheng Kung University. He has more than 35 years of research experiences related to coastal area development engineering and environment conservation and over 20 years of experience in policy coordination and implementation of water resources and land subsidence prevention and reclamation between central and local governments in Taiwan. He is the member of Chinese Taipei Committee of International Commission on Irrigation and Drainage (ICID) and the Chairman of Working Group on Sustainable Development of Tidal Area (WG-SDTA), ICID. He has over 160 publications in both popular and refereed journals.

#### **FEE ANNOUNCEMENT** (Effective: 1<sup>st</sup> October 2017)

#### Members:

(i) Registration Fee: No Charge
(ii) Administrative Fee:

(a) Online
RM15
(b) Walk-In

#### Non-Members:

(i) Registration Fee: RM50 (ii) Administrative Fee: RM20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- To secure your seat, kindly register online at <u>www.myiem.org.my</u>

#### Personal Data Protection Act:

I have read and understood IEM's Personal Data Protection Notice published on IEM's website at www.myiem.org.my and I agree to IEM's use and processing of my personal data.