

2019, 2020 & 2021 Distinguished Engineers' Legacy Lectures



2019 Distinguished Engineer
Dato' Ir. Addnan Bin Mohd Razali
D.S.P.N, B.C.N., P.K.T., P.J.K



2020 Distinguished Engineer
Dato' Ir. Dr. Goh Teik Cheong
D.S.P.N., D.J.N., P.K.T.



2021 Distinguished Engineer
Dato' Ir. Rajendran P Anthony
D.S.P.N., A.M.N., B.C.N., P.K.T., P.J.K.



BEM Approved
CPD/PDP Hours: 3
Ref: IEM22/PG/424/L

Time:
9.00am-12.00pm

Venue:
Setia SPICE Convention Centre



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event.iempenang.org

Free admission

Synopsis:

Topic 1

by **Dato' Ir. Addnan Mohd Razali**

Flood Mitigation & Disaster Management in Penang Island



Floods that frequently occur in Penang Island are flash floods. The frequency and magnitude increase during South-West to North-East monsoon transition period from September to November every year. The causes of flash flood are river overflow, undersized drains, blockage by rubbish, tidal effect and poor construction site management. Floods caused by heavier than usual monsoon rains are linked to climate change.

Constraints to drainage improvements such as funding and heritage value in the core zone of the UNESCO World Heritage Site heighten the dilemma. It is therefore a never-ending challenge to mitigate flash flood in Penang Island.

The Study on Flood Mitigation & Drainage in Penang Island by Japan International Corporation Agency (JICA) which was completed in 1991, Urban Stormwater Management Manual (MSMA2) and Drainage Master Plan for North-East District, Penang by JPS completed in 2012 and 2018 respectively, all emphasized on management of stormwater.

This presentation describes the measures and plans that Majlis Bandaraya Pulau Pinang (MBPP) and Jabatan Pengairan dan Saliran (JPS) have embarked upon to mitigate flash floods in Penang Island since 2008. Hopefully, these efforts would also combat climate change in Malaysia as we expect more severe storms and floods in the future.



The Institution of Engineers, Malaysia
(Penang Branch)



Biodata of Speaker 1

Dato' Ir. Addnan Bin Mohd Razali, D.S.P.N., B.C.N., P.K.T., P.J.K.

Dato' Ir. Addnan Bin Mohd Razali, D.S.P.N., B.C.N., P.K.T., P.J.K was formerly the City Secretary of the City Council of Penang Island (MBPP). Born in 1959, he received his early primary and secondary education from Methodist School in Nibong Tebal, Penang. Dato Ir. Addnan commenced his career in 1980 with the Department of Irrigation & Drainage (DID) as Technical Assistant at DID Kedah Muda II Project after obtaining his Diploma in Civil Engineering from Mara Institute of Technology (ITM) in 1979. He later went to University of Strathclyde in 1982 under Majlis Perbandaran Pulau Pinang (MPPP) scholarship.

He joined MPPP in 1984 and had worked in various sections in the Engineering Department until his promotion to Director of Engineering in 2012 and then to City Secretary in 2018. MPPP was elevated to city status on 1.1.2015 and became Majlis Bandaraya Pulau Pinang (MBPP). Dato' Ir. Addnan retired from public service in January 2019 but was reemployed under contract as City Secretary by MBPP in January 2019 till 31.12.2021. During his 34years as Engineer in MBPP Dato' Ir. Addnan has undertaken various infrastructure projects such as widening of Jalan Masjid Negeri, Jalan Scotland, Jalan Zoo extension, construction of Jalan Bukit Kukus, Jalan Lumba Kuda extension, smart city initiatives, green initiatives, traffic improvement projects and various flood mitigation projects.

Dato' Ir. Addnan had presented technical paper on Management of National Assets in George Town World Heritage Site at a seminar in Putrajaya this year and he had also attended various courses on Traffic, Transportation, Road Maintenance and construction in Japan (YOKE / August-December 1991). In 2016 he represented the Penang State Government in Technical Programme for Rail Transport, Kaoshiung, Taiwan, for Smartcity Initiatives in Shenzhen, China in 2017 and for Penang's Nature-Based Climate Adaptation Programme, Paris in 2020.

Dato' Ir. Addnan was active with IEM (Northern Branch) till 2002 and later IEM (Penang Branch) for 25 years from 1993 to 2018. He was the Chairman for Penang G&S Section and in Penang Branch committee, he had served as Committee Member, Honorary Secretary, Vice-Chairman and Chairman (2002/2003) session. After that he continued to serve in the committee as Past Chairman for a few years until 2018.

Topic 2

by Dato' Ir. Dr. Goh Teik Cheong

Practising Engineers' involvements in Institutions of Higher Learning's Engineering Education



Engineers play an important role in our society. We would like our Institution of Higher Learnings (IHL) to produce quality engineers who are capable of performing well in the current challenging industries. The engineers must attain a minimal standard comparable to global practice. Thus, the IHL's programmes objectives and outcomes are important.

Academicians and practising engineers are encouraged to work together to achieve this common aim of producing quality engineers. Practising engineers' has a role to play in the IHL's engineering education. They are encouraged to be involved in providing industrial training to students, accommodating IHL's industrial visits, involvement in students' integrated design projects, providing talks/lectures as guest lecturers, as well as being on the panels of industry advisories, and panel evaluators for accreditation, consultancy collaboration, among others. The speaker will share his experiences and thoughts in this topic.



Biodata of Speaker 2

Dato' Ir. Dr. Goh Teik Cheong, D.S.P.N., D.J.N., P.K.T.

Dato' Ir. Dr. Goh Teik Cheong graduated with Bachelor of Engineering (Civil) from University of Malaya (1986) and Doctor of Philosophy from Faculty of Engineering, National University of Singapore (1994).

He is the Honorary Secretary General of Malaysian Geotechnical Society. He was chairman of IEM Penang Branch in years 2003-2004 and was awarded Distinguished Engineer Award 2020.

He is a council member for Engineering Accreditation Council (EAC), Board of Engineers Malaysia. He is a panel evaluator for Engineering Technology Accreditation Council (ETAC). He is also an Industry Advisory panel member for Universiti Sains Malaysia and Universiti Teknologi MARA, Pulau Pinang.

Currently, he is a director of M.E.I. Group of companies and is actively involved in the administration, management and technical matters of the group.

Topic 3

by **Dato' Ir. Rajendran P Anthony**

Meeting the Challenges of Climate Change and the Green Initiatives by City Council of Penang Island



The City Council of Penang Island has been progressively planning and implementing projects and programs for several decades to meet the challenges of climate change. The call to intensify efforts has been getting louder these past few years. However, the Council alone will not be able to achieve much without public support and cooperation. There is a greater need to instill awareness among the people.

Biodata of Speaker 3

Dato' Ir. Rajendran P Anthony D.S.P.N., A.M.N., B.C.N. P.K.T., P.J.K.



Qualification: Bachelor of Engineering in Civil Engineering
University of Hertfordshire, United Kingdom

Career:

1986	Started as an Assistant Engineer at MBPP
2002-2005	State Chief Traffic Engineer
2006-2007	Seconded as General Manager to Syarikat Bas Negeri Pulau Pinang
2011	Promoted to Deputy Director, Engineering Dept, MBPP
2018	Promoted to Director, Engineering Dept, MBPP
2022	Promoted to City Secretary

Career Highlights:

- i. Implementation of one-way streets in George Town
- ii. Introduction of Rapid Penang Bus Service in Penang and Free Shuttle Bus Service
- iii. Construction of bicycle lanes and facilities including spiral ramp at Queensbay area
- iv. Traffic improvement schemes along Jalan Masjid Negeri and Jalan Ayer Itam, Jalan Gottlieb, Jalan Bagan Jermal, Jalan Zoo including the construction of Autopont overpass and elevated U turn at Masjid Negeri; and
- v. Construction of several vehicular and pedestrian overhead bridges.