

Funicular Railway System of Penang Hill & The Habitat Penang Hill

Technical Visit & Talk



Time:
3.00pm – 9.30pm

Venue:
Bukit Bendera, 11300
Penang.



REGISTER ONLINE @
event.iempenang.org

IEM Member : RM160
Non-IEM Member: RM190

Registration Fees include round trip Funicular Train, Habitat Entrance Admission & Dinner only.



Speaker:
Mr. Saraavanan Rachenamoty



Speaker:
Ir. Michael Yap Wern Yian



Moderator:
Ir. Tan Yan Moy



Moderator:
Ir. Ooi Choy Hoong

Synopsis

Penang Hill covers a number of hills, with the highest point at Western Hill which is 833 m (2,733 feet) above sea level. It was used as a retreat during the British colonial period and is now a popular tourist destination in Penang. Penang Hill is a good repository of bungalows featuring a fusion of architecture from British colonial to Asian and modern architecture. The top of the hill is accessible via the Penang Hill Railway from its base station at Hill Railway Station Road.

Technical Visit & Talk 1: Funicular Railway System

The Funicular Railway System takes visitors up to the Penang Hill to enjoy the fresh cool air and also the natural flora and fauna. The funicular track stretches a distance of 1.996km over an extreme irregularity of the slope of the hill with a steepness of 27.9 degrees. The funicular system has been running for almost a century and remain as the unique experience of Penang Hill.

The funicular railway in Penang Hill commenced operation and service in 1923 and has undergone a third upgrade back in year 2010. The upgrade had made some significant changes to the railway system, increasing the efficiency, capacity and speed while utilizing the same viaduct structure built 100 years ago.

The technical visit briefing by Mr. Saraavanan which includes an introduction of the funicular system, the working principle, the safety component, the maintenance, and the operation of the funicular system.

Technical Visit & Talk 2 : The Habitat Penang Hill

The Habitat Penang Hill provides the most authentic, diverse and educational Malaysian rainforest experience. Reconnect with nature in its purest form as you immerse yourself in a nature trail within a 130-million-year-old rainforest and gazette forest reserve.

In this technical visit, Ir. Michael Yap will be sharing his knowledge on The Habitat Penang Hill. It covers the aspects of responsibility and sensitivity engineering designs to nature areas as an effective approach to achieve sustainable tourism on the Hill, as well as the design and construction of the Curtis Crest Tree Top Walk and Langur Way Canopy Walk.

Curtis Crest Tree Top Walk - the highest public viewing point in Penang Island. A metal mesh walkway running through the top canopy of the conifers was designed to eventually allow the conifers to envelop the walkway, giving visitors an intimate experience whilst allowing unobstructed views of the entire island at approximately 800 m above sea level.

Langur Way Canopy Walk is one of the most unique structures of its kind and is the only two-span ribbon bridge in the world. It is likely to be the highest Canopy Walk in the whole of Malaysia located as it is on top of Penang Hill at 700 meters above sea level and is the only concrete Canopy Walk of its kind to be built in a pristine rainforest.

About the Speakers

1. Mr. Saraavanan Rachenamoty

Funicular Railway System technical talk will be conducted by Mr. Saraavanan Rachenamoty. Mr. Saraavanan Rachenamoty obtained his Diploma in Telecommunications Engineering from Multimedia University and started his career as a Technician at Motorola Penang since 2005. Later on, he joined Osram Opto Semiconductor GmbH in 2010 to work as a Material Analysis lab Technician for the R&D Department. He joined as an Assistant Engineer with the Operations Division of Penang Hill Corporation in 2013. In year 2018, he graduated from Wawasan Open University with Bachelor of Technology (Hons) in Electronics. He continued his career with Penang Hill Corporation as an Engineer in Funicular Operation Division (FOD) since 2018. He has more than 15 years' experience in industries and operation segments. Currently, he is actively involved in projects improvement to increase the reliability of the Penang Hill funicular operations and maintenance programmes and research into the relationship of the funicular communication system and electrical interferences.

2. Ir. Michael Yap Wern Yian

The Habitat will be conducted by Ir. Michael Yap Wern Yian. He is a Civil and Structural Professional Engineer with Practicing Certificate and is based in George Town, Penang. He graduated in year 2009 with Masters Degree in Civil and Structural Engineering in Imperial College London, UK. He has more than 12 years' experience with international and local civil and structural engineering consultancies, and he has all-round exposure in engineering design and construction throughout a project life cycle. His passion includes engineering conservation and urban regeneration solutions. He also advocates in design of ecological, efficient, and responsible in environmental engineering.

Time	Description
3.00pm to 3.20pm	Registration at Lower Station of Penang Hill
3.20pm to 4.20pm	Technical Talk on Funicular Railway System by Mr Saraavanan Rachenamoty
4.20pm to 4.30pm	Funicular Train ride to Upper Station of Penang Hill (actual time : 5 min ride only).
4.30pm to 6.30pm	The Habitat Penang Hill Technical Talk on Engineering Design and Construction of Curtis Crest Tree Top Walk and Langur Way Canopy Walk (Ribbon Bridge) by Ir Michael Yap Curtis Crest Tree Top Walk and Langur Way Canopy Walk (Ribbon Bridge) Visit Tour Question & Answer
6.30pm to 7.00pm	Leisure walk and enjoy the greenery environment.
7.00pm to 9.00pm	Exit The Habitat. Adjourn to the Bellevue The Penang Hill Hotel for Dinner and Sunset & Night Viewing.
9.00pm to 9.30pm	Boarding the Funicular Train to the Lower Station of Penang Hill (Last train trip is at 10.00pm)



Special Note:

IEM Penang Branch (IEMPG) practices safety, thus, Participants must adhere to the following:

- SOP & all safety instructions given by the officers in charge and the signages.
- No slipper, sandals and high heels footwear are allowed.
- IEMPG shall not be held responsible to any unwanted incidents happened during the visit.
- Participants must arrange their own food/drinks & transport to the Train Station of Penang Hill.
- IEMPG will not be liable to any loss or damage incurred.