

### M E C H A N I C A L E N G I N E E R I N G T E C H N I C A L D I V I S I O N

# Half Day Course on "Rolling Stock for Non- Rolling Stock Professionals"

by Mr. CHANDAN KUMAR (PMP, CEng & MIMechE)

# 22 OCTOBER 2020 THURSDAY 9:00 AM - 1:00 PM

# APPROVED CPD HOURS: 3.5 REF. NO.: IEM20/HQ/203/C (w)



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# M E C H A N I C A L E N G I N E E R I N G T E C H N I C A L D I V I S I O N

# SYNOPSIS

Various governments around the world including the Malaysian government has been investing heavily in railway infrastructure projects such as Kajang & Putrajaya KVMRT Line, Kelana Jaya LRT, Light Rail Transit Line (LRT3), East Coast Rail Link (ECRL), Malaysia-Singapore Rapid Transit System (RTS) projects currently and expected future projects such as MRT-3 and High-Speed Rail (HSR). The government is expected to spend around RM160 billion by 2030. These projects would require a large no. of skilled talents in railway domain. However, according to study done by Technology Depository Agency (TDA), there is a huge scarcity of Railway Professionals in Malaysia. As per a study carried out, the industry will require an additional 51,300 workers to support current and upcoming projects by 2021. About 16,000 of these will be required for rolling stock and maintenance. The aim of this talk is to not only acquire the concept of rolling stock but also to attract, nurture and retain top talent and raise awareness about the railway industry, especially about the rolling stock, and ensure that there are sufficient local trained personnel to minimize the human capital cost. The course is a combination of key and interesting information and concept of rolling stock, technological innovations, key features of fully automatic trains and future technology supported with informative interesting videos to make learning fun for all the participants.

# **ABOUT SPEAKER**

Chandan is currently the head of testing & commissioning for Hyundai Rotem Company who are the supplier of metro trains for Putrajaya KVMRT Line. Previous to this role, he was the head of rolling stock managing the Putrajaya Klang Valley Mass Rapid Transit (KVMRT) project overseeing the full life cycle of the project from pre-tender, design, manufacturing, to testing & commissioning of the metro trains successfully. Chandan has over 23 years of extensive and diverse experience in various types of Rolling stock ranging from 3-phase high speed to heavy freight locomotives, monorails and fully automatic metro trains. He has successfully managed and delivered multiple complex and dynamic high profile multi-billion rolling stock projects in demanding and challenging environment of Asia Pacific region. He has worked for global rolling stock companies such as Bombardier Transportation, Hyundai Rotem Company, Scomi Rail, MMC-Gamuda and MTR Corp. Hong Kong.

Chandan is a certified Project Management Professional (PMP). He also holds a degree in Mechanical Engineering and a M.S. in Consultancy Management. He is a Chartered Engineer and a member of IMechE. As emerging leader in Rail Industry, he has been invited at various international forums and conferences to present and speak on various topics of Rolling Stock - 'Future of Rolling Stock' and 'Towards a Smarter and Intelligent Rolling Stock' etc. He has also delivered courses on Rolling Stock at IMechE chapters and Gamuda Sdn. Bhd. to raise awareness and provide learning on Rolling Stock.

# MECHANICAL ENGINEERING TECHNICAL DIVISION

# PROGRAM OF THE DAY

#### 9.00 am - 9.10 am

What is a Rolling Stock, Types of Rolling Stock

#### 9.15 am - 9.30 am

Key Milestones in Rolling Stock - Global and Local Malaysia

#### 9.30 am - 10.00 am

Advantages of Trains. Electric, Metro Trains, Types of Metro Trains, Key Attributes

#### 10.00 am - 11.00 am

Various Railway Systems, Different Types of Track Gauges, Power Systems etc.

#### 11.00 am - 11.45 am

Metro Train – various Configurations, and Key Systems

#### 11.45 am - 12.30 pm

**Rolling Stock – Project Process, and How Trains are** Manufactured

#### 12.30 pm - 1.00 pm

The Future of Rolling Stock – Smarter and Intelligent. **Key Challenges & Fun-facts** 

# **REGISTRATION FEE**

GRADE	ONLINE	NORMAL (OFFLINE)
IEM STUDENT MEMBER	RM 40.00	RM 50.00
IEM GRADUATE MEMBER	RM 75.00	RM 90.00
IEM CORPORATE MEMBER	RM 125.00	RM 150.00
NON-IEM MEMBER	RM 240.00	RM 300.00

#### **Cancellation Policy**

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

Personal Data Protection Act I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at http://www.myiem.org.my and I agree to IEM's use and processing of my personal data as set out in the said notice.

#### "IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion'.

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