

Seminar Talks on “Railways”

Jointly organized by IMechE Malaysia, IMechE Monash University Malaysia Student Chapter
and IMechE UM Student Chapter

BEM Approved CPD / PDP hours: pending

Ref. No.: Applying

Date: 29 March 2022
Time: 2:45 p.m. – 6:00 p.m.
Venue: Online (via Zoom Platform)

Registration Fee: Free of charge

Synopsis

The IMechE Railway Seminar 2022 will be a series of talks covered by various speakers of different expertise from various countries, with the main objectives of:

1. To provide industry insights and technical knowledge on latest railway systems and their importance among IMechE young members and aspiring engineers;
2. To share knowledge and experience amongst professionals in the industry and young members;
3. To serve as a platform for young members to network with professionals in the industry;
4. Promote continuous industry exposure to all aspiring engineers, especially in the railway industry.

Many components form the backbone of a railway system, which will be the key points in this seminar programme. This seminar aims to expose the fundamentals of railway engineering to all attendees.

A total of 13 topics will be delivered in this seminar, covering 4 main areas as below:

- railway signalling
- train stock
- infrastructure, and
- rail safety

The speakers will share the latest technologies in the railway industry, and case studies based on the true and practical experiences in Malaysia and overseas, throughout many years of industry engagement / development.

Speaker(s) Profile

A. Barry Gardner

Education: Bachelor (Hons.) of Mechanical Engineering, City University of London (1971)

Working Experience (Years): 55 years

Barry Gardner is a Railway Engineering Consultant based in Malaysia. He started in 1966 as a premium apprentice in the United Kingdom at Doncaster Railway works. During his seven-year apprenticeship, he went to university to study mechanical engineering on a course that alternated six-month periods in university with similar periods in various depots, areas, and regional offices. He graduated in 1971 with an Honours Degree in Mechanical Engineering and specialises in train maintenance - from daily inspections to overhaul on locomotives, wagons, and coaching stock. From 1972 to date, he has overseen and investigated a significant number of derailments from minor to major disasters and consulted on derailment prevention.

Barry took on the post of Fleet Manager (North) in TransRail, Scotland in 1994, in preparation for the privatisation of British rail, and was responsible for all activities for the Transrail Freight organisation in the north of the UK. He steered his organisation into the private sector which an American Railway company took over in autumn 1996. He has served in Malaysia, Thailand, the Philippines, Turkey, and the USA. He

was responsible for the rolling stock for Malaysia's first LRT line, STAR (the Ampang line), and worked for Express Rail Link (ERL) when KLIA Express was introduced. Subsequently, he undertook a similar role for the underground railway in Bangkok. Gardner began consulting for railways in 2012, focusing on the Southeast Asia Region.

Barry is a Corporate Member of The Institution of Mechanical Engineers and a Chartered Engineer registered with Engineering Council in UK.

B. Chandan Kumar

Education: Bachelor of Mechanical Engineering, Shivaji University (1997)

M.S. Consultancy Management, Birla Institute of Technology and Science Pilani (2009)

Working Experience (Years): 25 years

Chandan Kumar is currently the Head of Testing and Commissioning at Hyundai Rotem Company which is the supplier of metro trains for Putrajaya KVMRT Line. Prior 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 the demanding and challenging environment of Asia Pacific region. He has worked for global rolling stock companies such as Bombardier Transportation, Hyundai Rotem Company, Scmi Rail, MMC-Gamuda and MTR Corp. Hong Kong.

Chandan is a Corporate Member of The Institution of Mechanical Engineers and a Chartered Engineer registered with Engineering Council in UK. As an 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 The Institution of Engineers, Malaysia (IEM), IMechE student chapters and Gamuda Sdn. Bhd. to raise awareness and provide learning on Rolling Stock.

C. Dave Horton

Education: Bachelor of Mechanical Engineering, Imperial College London (2007)

Working Experience (Years): 15 years

After his graduation, **Dave Horton** joined the graduate scheme at Bombardier Transportation in Derby, where he learned about train design and maintenance. After nine years with Bombardier, he became Head of Mechanical Engineering at the West Somerset Railway, followed by an appointment as Chief Mechanical Engineer at Vivarail in 2018.

During his time at Vivarail, he has led the design of three different variants of the Class 230 product:

- The diesel-battery hybrid train for Wales
- The third rail electric trains for the Isle of Wight
- The demonstration battery train for COP26

Dave is a passionate believer in the power of rail travel to help meet our decarbonisation objectives and believes that railways are here to stay.

D. Gary Moore

Education: ONC, Mechanical Engineering, Carshalton College (1992)

HNC, Mechatronics Engineering, Croydon College (1995)

Post-Graduate, Project Management, The Open University (2003)

Working Experience (Years): 42 years

With 35 years of experience in the railway industry, **Gary Moore** is currently the Integration and Testing and Commissioning Manager for Egis Rail in Abu Dhabi, the Programme Management Consultant for Stage 2 of the Etihad Rail Project which will extend the network a further 600+ Kilometres across The United Arab Emirates to link up ports and areas of major industry and resources.

Gary has previously held various roles in different companies in Malaysia, such as Construction Manager on the Kajang Line at MMC Gamuda, Migration and Testing and Commissioning Manager, and Head of

Migration and System Construction Interface for the Putrajaya Line. He was also involved in the UK's commuter lines (Mainline) and London Underground rapid transit system.

Gary is actively involved in professional bodies as below:

- A Member of Association for Project Management
- A Member of Project Management Institute
- A Corporate Member of The Institution of Engineering and Technology (IET), UK
- An Associate Member of The Institution of Railway Signal Engineers

E. Ts. Jack Tan Ka Hoe

Education: Bachelor (Hons.) of Mechanical Engineering, Universiti Teknologi Malaysia (2014)

Working Experience (Years): 9 years

Jack Tan is currently the Systems Package Manager at MMC-GAMUDA for the current Putrajaya Line MRT Project. He has been involved in Railway Platform Screen Doors (PSD) and Automatic Platform Gates (APG) Systems since 2014. His recent project includes the delivery of Platform Screen Doors (PSD) and Automatic Platform Gates (APG) Systems and Signalling and Control System Interface for Malaysia MRT Kajang Line. In 2018, he was assigned to China to look after the production of Electric Train. As a result of his exposure to excellent leadership, he aspires to be one himself.

Jack is a Professional Technologist registered with Malaysia Board of Technologists, an Associate Member of The Institution of Railway Signal Engineers, and a Malaysia's HRDF certified trainer.

F. Noel Devan

Education: Bachelor of Engineering, Universiti Sains Malaysia (1999)

Working Experience (Years): 23 years

Noel Devan has 19 years of railway experience, currently in the maintenance & operation of a high-speed railway network. He is currently the Manager of Systems with ERL Maintenance Support (E-MAS). Devan's experiences in railway systems include Overhead Contact Line, Traction Power Supply Substation, Telecommunication, Signalling, and Track Vehicles. He also closely supports other Maintenance departments such as Rolling Stock and Infrastructure, especially in electrical-related issues. He is a registered Energy Manager with the Energy Commission of Malaysia and is involved in energy efficiency projects and initiatives. In 2019, he was also a speaker at the 3rd ASEAN Rail Summit held in Kuala Lumpur.

Agenda

Time	Details
2.45 PM – 3.00 PM	Registration
3.00 PM – 3.10 PM	Welcoming remarks / Introduction
3.10 PM – 4.35 PM	Presentation of the first 7 topics
4:35 PM – 4.45 PM	Break
4:45 PM – 5.50 PM	Presentation on the next 6 topics
5:50 PM – 6.00 PM	Closing Remarks
6:00 PM	End