



## CHRIS HU

### MANAGER – HONG KONG

#### AREAS OF EXPERTISE

- Architectural and Studio Acoustic Design
- Noise and Vibration Measurement and Assessment
- Railway Trackform Design and Groundborne Noise Assessment
- High Speed Railway Noise Control

#### QUALIFICATIONS

- Bachelor of Engineering (Mech) (Hons) HKU
- Master of Science (Electrical Engineering, specializing in Railway Systems)

#### AFFILIATIONS

- Member, Institute of Acoustics, UK (MIOA)
- Member, Hong Kong Institute of Acoustics (MHKIOA)
- Member, The American Society of Mechanical Engineers, USA (MASME)
- Member, Institution of Engineering & Technology, UK (MIET)
- Associate Member, Institution of Mechanical Engineers, UK (AMIMEchE)
- Associate Member, China Hong Kong Railway Institution
- Associate Member, Institution of Railway Signal Engineers, UK

#### EMPLOYMENT HISTORY

Over 14 years' experience in Railway Floating Slab Trackform (FST) Design and Installation, Noise and Vibration Control, Architectural Acoustics and Noise Monitoring

- 2003 – 2006 Assistant Consultant, Wilson, Ihrig & Associates (HK) Limited
- 2006 Associate Consultant, Wilson, Crockett & Associates, Limited (Formerly Wilson, Ihrig & Associates (HK) Ltd)
- 2007 – 2011 Engineer, Wilkinson Murray (HK) Limited
- 2011 – 2013 Senior Engineer, Wilkinson Murray (HK) Limited
- 2013 – Present Manager – Hong Kong, Wilkinson Murray (HK) Limited

#### PROFILE

Chris Hu is a professional Engineer who has been practising as an Acoustic Consultant for over 14 years.

During his working career he has worked for acoustic consulting firm where he has gained a broad experience with specialised experience relating to rail noise and vibration control.

Chris has been involved in such major projects as Express Rail Link in Hong Kong, Thomson Line in Singapore and the Central Government Building Complex, Tamar, Hong Kong.

## RAILWAY NOISE & VIBRATION STUDIES

- MTRC Airborne Railway Noise Performance Test – Express Rail Link (XRL), Hong Kong
- MTRC Airborne and Groundborne Noise EIA Review Airborne Noise Test and Groundborne Noise Tunnel Impact Test – East-west Corridor and North-south Corridor, Shatin to Central Line (SCL), Hong Kong
- MTRC Airborne Noise Study for Feasibility Study and Preliminary Design for EIA – Siu Ho Wan Depot Property Development, Airport Express Line, Hong Kong
- Tsiu Hang Development, Airborne Railway Noise Assessment to MTRC East Rail Line, Pak Shek Kok, Hong Kong
- Xintian Real Estate Development, Groundborne Noise and Vibration Study to High Speed Railway, Shanghai
- Sg Buloh Serdang Putrajaya Line, Groundborne Noise and Vibration Study, Kuala Lumpur, Malaysia
- MTRC Noise study to Pat Heung Depot Residential Development – West Rail, Hong Kong
- Thomson Line, Noise and Vibration Study, Singapore
- Bangkok MRTA Blue Line, Groundborne Noise and Vibration Study, Thailand
- MTRC High Speed Rail Depot Airborne Noise Control – Express Rail Link (XRL), Hong Kong
- MTRC Groundborne Noise and Vibration Study – Diamond Hill Station, Shatin to Central Line (SCL), Hong Kong
- MTRC Groundborne Noise and Vibration Study – Kai Tak Station, Shatin to Central Line (SCL), Hong Kong
- MTRC Groundborne High Speed Rail Tunnel Ventilation Noise Control – Express Rail Link (XRL), Hong Kong
- MTRC Groundborne Noise Borehole Impact Test Study – Express Rail Link (XRL), Hong Kong
- MTRC Groundborne Noise Impact Study to Metro Broadcast – Whampoa Station, Kwun Tong (KTE), Hong Kong
- MTRC Groundborne Noise and Vibration EIA Study – Kwun Tong Extension (KTE), Hong Kong
- MTRC Airborne and Groundborne Noise EIA Study – Express Rail Link (XRL), Hong Kong
- Epping to Chatswood Rail Line Noise Model Study, Sydney
- Hong Kong Tramway Isolated Slab Track (IST) Groundborne Noise and Vibration Study
- KCRC KSL Noise Monitoring, Hong Kong
- SMRT Down Town Extension (DTE) Structural Vibration Finite Element Analysis (FEA), Singapore
- High Speed Rail Composite Viaduct Noise Study, Taiwan
- MRTA Alstom Baseplate Anchor Bolts Stress & Rail Deflection Study – Thailand Bangkok Metro Rapid Transit
- SMRT Delkor Alternative Resilient Baseplate Vibration and Rail Deflection Study – Singapore Metro Rapid Transit
- MTRC Groundborne Noise and Vibration EIA Study – West Island Line (WIL), Hong Kong
- MTRC Performance Assessment of the Vossloh Rail Damper – LAR, Hong Kong
- Taipei MRT Rapid Transit System Orange Line Extensions, Borehole Impact Tests, Taiwan
- Kaohsiung Rapid Transit Corporation (KRTC), Tunnel Impact Tests, Taiwan
- MTRC AEL Pandrol Vanguard Baseplate, Performance Assessment, Hong Kong
- KCRC East Rail Extensions: Ma On Shan Extension, Design of “Rail Absorber” and “Trackside Sound Absorption Plenum”, Station Roof Test, Train Vehicle Air-Conditioner Noise Control, Rail Damper Performance Test, Noise Monitoring
- KCRC East Rail Extensions: Tsim Sha Tsui East Extension, Impact Tests
- KCRC LMC, TBM Groundborne Vibration Study, Hong Kong
- MTRC System Wide Train Interior Noise Study, Hong Kong

## FLOATING SLAB TRACK (FST) DESIGN

- Taiwan MRT San Ying Line FST Design, Taiwan
- Taiwan MRT An Keng LRT FST Design, Taiwan
- Taiwan Taoyuan International Airport Access Rapid Transit System Extension to Zhongli TRA Station FST Design, Taiwan
- Taichung MRT Green Line FST Design, Taiwan
- Taipei MRT Rapid Transit System, Orange Line & Blue Line Extension FST Design, Taiwan

## ACOUSTIC DESIGN

- Macau Fisherman's Wharf Palace Hotel, Macau
- Macau Fisherman's Wharf Harbourview Hotel, Investigation of Mechanical Noise, Macau
- Telecom House Studios, Digital Broadcasting Corporation, Hong Kong
- New Broadcasting House of Radio Television Hong Kong Tender
- Centre of Excellence in Paediatrics Tender, Hong Kong
- Wong Chuk Hang Hospital Tender, Hong Kong
- Whampoa Studio Extension, Metro Broadcast, Hong Kong, Broadcasting Studio Design
- Phoenix Studios, Hong Kong, Broadcasting Studio Design
- Barclays Capital Workstation, Hong Kong, Partition acoustic study
- The Centre Studios, Metro Broadcast, Hong Kong, Broadcasting Studio Design
- MTRC Station Acoustic Design – Kai Tak Station, Shatin to Central Line (SCL), Hong Kong
- City University of Hong Kong, Academic & Administration Building
- Canadian Imperial Bank of Commerce (CIBC), Hong Kong office, Partition acoustic study
- Sydney Strawberry Hills Hotel
- Hong Kong Central Government Project, Tamar
- Hong Kong Airport Passenger Terminal Extension
- DBC Studios, Hong Kong

## BUILDING STRUCTURE VIBRATION ISOLATION

## OTHER

- Public Works Central Laboratory Instrument Vibration Assessment for T2 Truck Road Construction, Hong Kong
- Perth ANI Development Building Isolation Rubber Pads Design, Australia
- China Merchant Heavy Industries, Acoustics and Design Consultancy Service for Noise Barriers and Absorptive Panels for Highways and Transit Systems
- Hong Kong Movie City, "Floating Slab" Bearing for Building Base Vibration Isolation System
- Chi Ma Wan CLP Tunnel, Lantau Island, Vibration Assessment of the Tunnel Boring Machine (TBM), Hong Kong
- Hong Kong Science Park, Piling Vibration Measurement
- Rail Resilient Baseplate Acoustics Test – Laboratory Testing