

Chairman's Report (Session 2025/2026)

Introduction & Governance

It is my honour to present the Chairman's Report for the Manufacturing, Industrial & Systems (MIS) Division for the 2025/2026 session, continuing our driving theme since 2024/2025: **“Empowering New Industrialisation, The Future is Engineered.”** I am grateful to members for re-electing me as Chairman and to the President of HKIE for appointing me as Executive Observer to participate in the Headquarter (HQ) executive matters this session. The Division has been constituted, operated and supported by committed committees for Technical Programmes, Events & Publicity, Membership & Professional Development, and Young Engineers. Guided by our enduring theme, our strategic priorities for the session have been to advance professional development in smart and sustainable manufacturing, strengthening industry-academia collaboration and cross-border links, expanding early-career engagement, and proactively supporting HKIE institutional objectives through active participation and networking—all aligning with the strategic National Direction of “New Quality Productive Forces (NQPFs)” and “New Industrialisation (NI).”



Key Activities, Outreach and Corporate Engagement

Over the session the Division delivered a comprehensive programme of publications, standards engagement, international representation, technical visits, seminars, awards and corporate networking to promote best practice and to position MIS as a proactive contributor to the profession.

1. Publications & Thought Leadership – Following the published foresight cover story in the HKIE Journal titled **“Hong Kong’s Path to Future Manufacturing : Harnessing New Quality Productive Forces and New Industrialisation”** in Nov 2024, the Division further published the technical article titled **“AI enabled manufacturing for New Quality Productive Forces”** in *The Hong Kong Engineer* (Sept 2025). The piece disseminated our insights on AI-driven transformation in production systems, quality enhancement and workforce competency requirements, and served as a platform for thought leadership within HKIE and the wider engineering and industry community. MIS also participated in the AI Task Force formed by HQ to propel a wider application of AI in engineering and governance. In engineering, AI enables predictive maintenance, generative design, and real-time quality control, dramatically improving efficiency and innovation. Meanwhile, AI governance is equally critical—it ensures these powerful systems operate ethically, transparently, and in compliance with regulations, mitigating risks such as bias, security breaches, and accountability gaps. Together, both pillars allow the engineering and industry organization to harness AI's full potential responsibly.

2. Standards, Cross-sector Collaboration & Consultation – MIS participated in the HKIE Standard Forum on Low Altitude Economy (LAE) jointly with the Institution of Electrical & Electronics Engineers (IEEE), contributing to the initiation of IEEE SA P3772: **“Standard for Sandbox for the Assessment of Risks of Businesses & Services Conducted in the Low Altitude Airspace (Below 1000m Above Ground).”** This engagement underscores our role in shaping interdisciplinary standards where engineering, industrial systems, autonomy and regulatory frameworks intersect. During our industry consultation with 廣東省機械工程學會常務副理事長兼秘書長劉奕華教授, Professor Yihua Liu and I both agreed that future engineers must integrate AI-driven manufacturing and sustainable practices to revolutionize manufacturing resilience and efficiency. We also concurred that emerging technologies like digital twins and smart materials will be pivotal, urging upcoming talent to prioritize cross-disciplinary collaboration and adaptive manufacturing systems. We also

participated in consultation sessions related to the 2025 LegCo Functional Constituency (Engineering) with candidate Ir Bok Kwok Ming Aaron and Ir Wilton Fok (21 Nov 2025), contributing professional perspectives particularly on manufacturing engineer's right and benefits to public policy discourse.

3. International Representation & Symposium – I presented “**AI in Manufacturing and Body of Knowledge (BoK²) for Future Manufacturing Engineers**” at the World Federation of Engineering Organisation (WFEO) 2025 General Assembly and Global Engineering Congress in Shanghai (12–17 Oct 2025), promoting a competency framework for future manufacturing engineers and positioning MIS on the global stage. I also attended the “**Smart Engineering with AI Symposium**” organised by the Institution of Mechanical Engineers (IMechE) (11 Sept 2025), exchanging insights and building cross-institutional ties.

4. Technical Visits, Seminars & Symposium – We organised multiple technical visits to expose members to practical implementations and emerging technologies: “AI + Manufacturing and Green Energy Mobility Technology” (Jiangsu, 1–3 Dec 2025); Arup Hong Kong (16 Jan 2026); Hong Kong Civil Aviation Department (6 Feb 2026) focusing on Air Traffic Control (ATC) operations and innovative cooling systems; and CM Bakery (9 Feb 2026) to study its Intelligent Microfactory and AI-enabled optimisation in food production industry in Hong Kong. A key highlight was the technical visit to Chow Tai Fook Smart Logistics and Xpeng Motors Factory on 12 May 2026, offering members direct exposure to cutting-edge automation, AI in production, smart warehousing, and electric vehicle manufacturing practices. We chaired and hosted seminars including “Embodied Intelligence for Realising Advanced Manufacturing: From Automation to Autonomous Production” (20 Mar 2026), and convened the 2026 Annual Symposium, “Co-creation – Integration – Recognition: New Opportunities for Manufacturing & Industrial Engineers in the Era of Embodied Intelligence,” bringing together engineering, industry and academia.

5. Awards, Membership Engagement & Institutional Support – The Division organised the HKIE MIS Industry Award 2025/2026 (28 Mar 2026) and the HKIE MIS Annual Dinner cum Award Presentation (10 Apr 2026) to recognise technology excellence and foster networking in the Hong Kong engineering and industry communities. To demonstrate our proactive support for HKIE and industry success, MIS representatives actively participated in institutional and community events including: HKIE Grand 50th Annual Dinner (12 Sept 2025); the 15th Committee Member Appointment Ceremony and Hong Kong Innovation & Technology Achievement Award Presentation by the Federation of Innovative & Manufacturing Industries (27 Nov 2025); Promotion activity for the election of the engineering functional constituency by calling upon HKIE members to cast their vote (7 Dec 2025), HKIE Prizes Presentation Ceremony cum New Members’ Reception (17 Jan 2026); a Celebration Dinner hosted by Ir the Hon Bok Kwok Ming Aaron (4 Mar 2026); and the HKIE 50th Anniversary “Together We Rise” events (14–15 Mar 2026). These activities strengthened our institutional relationships and raised MIS visibility across the profession.

6. Role as Executive Observer, Impact & Outlook

In my capacity as Executive Observer, I attended HQ executive meetings to represent Division perspectives, facilitate two-way communication with HQ and ensure our activities align with HKIE strategy on professional standards, CPD and public engagement. Through this role, MIS contributed to institution-level discussions on governance, standards, member services and strategic events.

Looking Ahead

Looking forward, our focus is to scale CPD offerings, formalise the Body of Knowledge for future manufacturing engineers, secure sponsorship for larger programmes, and strengthen student transition

pathways through targeted mentorship and university partnerships. Furthermore, we will continue to track KPIs including event numbers and attendance, CPD hours delivered, new member recruitment, partnership outcomes and member satisfaction to measure impact and refine initiatives. In addition, we shall continue encouraging enterprises to utilize Professional Engineers (PEs), as PEs are crucial for maintaining professional standards and ensuring the integrity of Hong Kong's manufacturing sector. PEs, serves as a mark of quality, assure employers and the public that PEs possess the necessary competencies and adhere to the highest standards of ethical conduct. In supporting the development of NQPFs and NI, PEs contribute to the city's reputation as a hub for high-quality manufacturing and its industry-oriented value added services.

Acknowledgements & Closing

I extend sincere thanks to our Past Chairmen, Council members, committee members & volunteers, HQ's staff, industry partners, host organisations and academic collaborators for their sustained support. I am grateful to all MIS members who participated in our activities and helped deliver a productive session. With continued collaboration and active engagement from members, I am confident MIS will further contribute to HKIE's mission and the advancement of manufacturing and industrial engineering in Hong Kong and the region.

Prepared by:

Ir Raymond Ming Yin SHAN

Chairman

Manufacturing, Industrial & Systems Division

Hong Kong Institution of Engineers

Session 2025/2026

Appendix A: List of Committee Members

Ir Raymond SHAN Ming Yin	Chairman (Executive Observer & LSB Representative)
Ir Dr Eric LIU Sai Lok	Immediate Past Chairman & Ex-officio Member (DAP Representative)
Ir Dr MAK Siu Lun	Deputy Chairman
Ir Henry NGAI Tsz Kit	Honorary Secretary
Ir Dr. Sheron SIT Kwok Hung	Honorary Treasurer
Ir Peter CHAK Chi Kin	Ordinary Member
Ir Peter CHOW Hin Yan	Ordinary Member (Council Representative)
Ir Prof Simon CHEUNG	Ordinary Member
Ir Dr. Haokun YANG	Ordinary Member
Ir Lewis CHOI Ka Yin	Ordinary Member (PSC Representative)
Ir John CHOW Hon Kong	Ordinary Member
Ir Dr Vincent FUNG	Ordinary Member
Ir Timothy LEE Kin Sang	Ordinary Member
Ir Prof Louis LOCK Fat Shing	Ordinary Member
Ir Kenneth PAK Chun Wai	Ordinary Member
Ir Ferris Ronstar POON	Ordinary Member (CPDC Representative)
Ms Deborah IP	Ordinary Member (Young Member)
Ir Michelle NG Tsz Wing	Ordinary Member (Young Member)
Ir Jack LI Ka Ho	Ordinary Member (Young Member)
Mr Sze Wing Suen	Ex-officio Member (AMC Representative)
Ms. WU, Kaijun Constance	Ex-officio Member (SSC Representative)
Ir LAU, Tsz Ying Abby	Ex-officio Member (YMC Representative)
Ir Sidney WONG Wing Fai	Co-opted Member
Ir Aaron SUN Shilong	Co-opted Member
Ir Dixon PANG Yik Man	Co-opted Member

Appendix B: List of Activities Organised / Co-organised by the Division of Session 2025/2026

Date	Type	Name of Activity	Organiser(s)	Speaker(s)
9 Sep 2025	Seminar	Reshaping the Plastics Industry for Business Sustainability	HKIE MIS Division, HKPC	Various
12 Sep 2025	Seminar	AI in manufacturing technical seminar	HKIE MIS Division, HKPC	Various
28 Nov 2025	Seminar	Seminar on New Materials Technologies and Its Application	HKIE MIS Division, VTC	Various
1-3 Dec 2025	Technical Visit	Factory visit in Suzhou	HKIE MIS Division	Various
28 Jan 2026	Forum	Emerging Europe: Belarus Forthcoming investment Prospective Forum	HKIE MIS Division, GEEBA	Various
11 Feb 2026	Technical Visit	Factory visit (Made in Hong Kong: CM Bakery)	HKIE MIS Division	Various
20 Mar 2026	Seminar	Seminar on Embodied Intelligence for Future Manufacturing - From Automation to Autonomous	HKIE MIS Division, VTC	Various
28 Mar 2026	Award	HKIE MIS Industry Award 2025-26	HKIE MIS Division	Various
10 Apr 2026	Conference	Annual Conference 2026: Co-creation-Integration-Recognition: New Opportunities for Manufacturing & Industrial Engineers in the Era of Embodied Intelligence	HKIE MIS Division	Various
10 Apr 2026	Gala Dinner	HKIE MIS Division Gala Dinner	HKIE MIS Division	Various
12 May 2026	Technical Visit	參觀周大福Smart Logistic及小鵬汽車廠房	HKIE MIS Division, FHKI	Various