## **CAD 24/25 Paper Award Ceremony**

Dr Lisa SHAM

The captioned co-organized by The Institute of Measurement and Control, HK and supported by Doctoral Society of University of South Australia Alumni Association Hong Kong, etc., was successfully held at the HKIE on 18<sup>th</sup> June 2025. Over 100 academicians and engineering professionals joined the event.

After the welcoming address by Ir Billy CHOW, Deputy OC Chairman (Academic), Ir Prof Philips WANG, Guest of Honor of the event, presented certificates and cash prizes to the awardees with Ir CHOW, Ir Prof Eddie LOCK, Deputy OC Chairman (Industry) and Ir Prof Louis LOCK, CAD Chairman.

Ir Prof L LOCK presented a Thank You Certificate to Ir Prof WANG.

Mr. Colin CHAN, the representative of an Excellence Awardee at Postgraduate Level from Department of Biomedical Engineering, City University of Hong Kong presented the paper. He highlighted the importance and the benefits of using a robotic spraying system, i.e., SprayBot, based on mixing and spraying technology to perform the high accuracy missing of protective coatings on a utility underground pipeline system.

Mr. Lin WANG, the representative of an Outstanding Awardee at Working Professional Level from NII Robot Co. Ltd delivered the paper. Mr WANG shared his views on the dynamics of whip cracking with implications for robotics and automation.

During the Q & A session, the participants expressed their interest in learning about promotion of the SprayBot in the construction industry in HK, and improvement of robotic movement by studying the dynamics of whip cracking.

Ir Prof L LOCK concluded the event with closing remarks.

Summary of the results of the submission is as below:

Levels	and Title	s of Awards	Titles of Papers and Authors
Tertiary	Level	Outstanding	Design Optimization for Green and Reusable Sand-based Motor
Award			Housing by
			- Mr. Yao Ming ZHU
			- Ms. Ziyue QIN

	-	Mr. Cho Yin MA
	-	Mr. Song Han REN
	-	Mr. Tsuen Man CHOY
	-	Mr. Tony Shek Ho WONG
Undergraduate Level	a.	The Improvement of the Existing Way for Practical
Outstanding Awards		Measurements of Lift Systems by Mr. To Chuen NG
	b	An Investigation of the Singal Integrity for Mitigation of
		Electromagnetic Interference for High-speed Connector at
		Shau Kei Wan MTR Station by Mr. Markus Chi Kit MAK
Postgraduate Level Excellence	a.	Transformable Pipeline Maintenance Robot for
Awards		Underground Pipe Rehabilitation by
		- Mr. Colin Pak Yu CHAN
		- Ms. Zijia QU
		- Mr. Kin Hei SHIU
		- Mr. Chun Ho SO
		- Dr Keng Huat KOH
		- Mr. Musthafa FARHAN
		- Ir Chun Yiu HO
		- Mr Tsz Hei WONG
		- Ir Prof King Wai Chiu LAI
		Implementation of Artificial Intelligence for District
		Cooling System (DCS) at Hong Kong-Zhuhai-Macao Bridge
		Hong Kong Port by
		- Dr Oscar Ka Chung CHAN
		- Ir Rocky Hoi Fung LAU
		- Ir Prof Chistopher Yu Hang CHAO
		The Engineering Applications of Electromagnetic Induction
		Technology for Scale Prevention in Water Processing
		Systems by  Ma Parkin Van Changa HO
		- Mr Robin Yan Cheung HO
Working Professional I1		- Ir Dr Tony Chi Chung LEE
Working Professional Level	a.	AI-driven Railway Regulator Inspection Planning System:  Enhancing Railway Safety Inspection Prioritization and
Outstanding Awards		Enhancing Railway Safety Inspection Prioritization and Incident Management by Ms. Coe Mei Yee CHIU
	b.	Enhancing Train Availability through Insulated Overlaps
	υ.	for the Overhead Rigid Conductor Rail System in the
		Shatin Central Link Project of MTR by Mr. Eric Pak Hung
		MAN
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- c. Artificial Intelligence-assisted, Data-informed Automatic Damage Identification based on Guided Ultrasonic Waves by Dr Lei XU
- d. Feasibility of Achieving Fast ROCOF-based LOM
   Protection A Case Study of Hong Kong Distribution
   Network by
  - Mr. Tony Shek Ho WONG
  - Ir Billy Man Hon CHOW
  - Ir Dr Jason Man Hin CHOW
  - Dr Di LIU
  - Dr Qiteng HONG
  - Prof Campbell BOOTH
  - Dr Adam DYSKO
- e. 阻抗匹配與鞭打發力 by
  - Mr. Lin WANG
  - Ms. Jingyuan WANG



Photo: Ir Prof E LOCK (L1), Ir Prof P WANG (L2), Ir Prof L LOCK (R2) and Ir B CHOW (R1)