

Date: 15 October 2019 (Tuesday)

Time: 10:30 a.m. (Registration starts at 10:15 a.m.)

Venue: The Stage, Halls 5F-G, Level 5,

Hong Kong Convention and Exhibition Centre

1 Expo Drive, Wan Chai, Hong Kong

## **Organisers**



Hong Kong Trade Development Council

## Co-organisers







The Hong Kong Electronic Industries Association

Vocational Training Council



# VOCATIONAL TRAINING COUNCIL ELECTRONICS AND TELECOMMUNICATIONS TRAINING BOARD

## **Technology and Application Seminar on**

Hong Kong Electronic Forum –
"Micro-electronics (microLed) and Advanced Manufacturing"
微電子及先進製造

## **About Vocational Training Council**

Established in 1982, the Vocational Training Council (VTC) is the largest vocational and professional education and training provider in Hong Kong. VTC provides valuable credentials for some 250 000 students each year through a full range of pre-employment and in-service programmes with internationally recognised qualifications.

The Electronics and Telecommunications Training Board (ECTB) is established under the VTC to ascertain the manpower needs of the various industries they represent, and to recommend manpower initiatives to meet the needs.

Aiming to update the in-service personnel of the various sectors of the electronics and telecommunications industries on the latest developments of technologies and applications of Micro-electronics and Advanced Manufacturing, ECTB in collaboration with Hong Kong Trade Development Council (HKTDC), Messe Munchen International (MMI) Asia Pte Ltd. and The Hong Kong Electronic Industries Association (HKEIA) organise a joint technology and application seminar on "Micro-electronics (microLed) and Advanced Manufacturing" during the Hong Kong Electronics Fair 2019 (Autumn Edition). Four distinguished speakers are invited to deliver talks on the following areas related to the theme of the seminar:

- 1. Taking the Next Step in Manufacturing: Cloud-Driven Robot Programming with the Wandelbots TracePen;
- 2. Smart Manufacturing and Measurement;
- 3. Revolution in MiniLED & MicroLED applications beyond IMAGINATION; and
- 4. Technological Evolution of Large Scale Displays.

After the talks, there is a "Panel Discussion" Session for the audience to share their views and experience on the theme of the seminar with the speakers. At the end of the seminar, there will be a "Q & A Session".

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## Programme of the Technology and Application Seminar on

Hong Kong Electronic Forum – "Micro-electronics (microLed) and Advanced Manufacturing"

Time	Programme	Speaker
10:15 – 10:30 a.m.	Registration	
10:30 – 10:40 a.m.	Welcoming Remarks	Dr Humphrey Leung Vice Chairman Hong Kong Electronic Industries Association
	Souvenir Presentation to Speakers Group Photo with all representatives	Representative from Hong Kong Trade Development Council
		Mrs. Barbara Müller Exhibition Group Director, Messe München
10:40 – 11:00 a.m.	Taking the Next Step in Manufacturing: Cloud-Driven Robot Programming with the Wandelbots TracePen	Mr Christian Piechnick Chief Executive Officer Wandelbots GmbH
11:05 – 11:25 a.m.	Smart Manufacturing and Measurement	Mr Brian Ng Vice President, Automated Precision Inc.
11:30 – 11:50 a.m.	Revolution in MiniLED & MicroLED applications beyond IMAGINATION	Mr Raymond Wang Acting Chief Executive Officer, Solomon Systech (International) Limited
11:55 a.m. – 12:15 p.m.	Technological Evolution of Large Scale Displays	Dr Laurent Collot CEO and co-founder, Deepsky Corporation Limited
12:15 – 12:30 p.m.	Panel Discussion and Q & A Session	Moderator: Dr Lau Hing Keung, George Deputy Academic Director, IVE Engineering
12:30 p.m.	End of Forum	1

## **Bibliography of Guest Speakers**

## Mr Christian Piechnick Chief Executive Officer, Wandelbots GmbH

Mr. Christian Piechnick is one of the co-founders of the international workshop series "Model-Driven Robot Software Engineering" (MORSE) and the initiator of the "Robots in Saxony" (RoX) network. During his time as a researcher, Christian managed several national and international research projects focusing on runtime reconfiguration of software. In 2016 Christian was one of the co-founders of Ubiance, a startup focusing on human-machine interaction. In 2017 Christian was among the founders of Wandelbots joining the company in the role of CEO. Wandelbots is the leading Start-up for robotic teaching software.

**Presentation abstract:** Wandelbots has developed with the TracePen a smart, sensor-equipped, tool-like input device for training industrial robots to execute new tasks in a very short time. The user simply performs the tasks that shall be automated with the TracePen in his or her hand. The built-in sensors capture the position and orientation of the tool in the workspace, generating motion data which later allow the robot to repeat the demonstrated task.

### Mr Brian Ng Vice President, Automated Precision Inc.

Automated Precision Inc. is a world leader of advanced metrology solutions for industry. Founded by Dr Kam Lau in 1987, API has pioneered progressively higher standards of accuracy for coordinate measuring and machine tool operation. API products are installed and used by all of the world's leading automotive, aerospace, machine tool, and CMM manufacturers. API is prepared and equipped to provide hardware and software solutions for all complex problems encountered in the manufacturing industry.

### Mr Raymond Wang Acting Chief Executive Officer, Solomon Systech (International) Limited

Joining Solomon Systech for more than 10 years, Mr. Raymond Wang is the Acting Chief Executive Officer. He is a Chartered Engineer with over 30 years of professional and management experiences in the semiconductor industry and abroad respectively, including that in Motorola at senior management positions. He had also worked in the US, Canada and Israel. He graduated from the City University of Hong Kong with a bachelor's degree in electronic engineering. He obtained an MBA degree from the Victoria University of Wellington and a master of arts degree from the Chinese University of Hong Kong.

#### <u>**Dr Laurent Collot**</u> CEO and co-founder, Deepsky Corporation Limited

Dr L Collot, an Ecole Normale Supérieure, Paris, alumni, has received his Doctorat from Université P&M Curie, Paris 6, in Quantum Optics in 1994. He has contributed to the development of the emerging field of Quantum non demolition measurements in the optical domain, at the LKB laboratory in Paris and at the Max-Planck-Institute for Quantum Optics, Germany. He co-founded Deepsky Corporation Limited in Hong-Kong in 2012 with the goal of improving the dynamic range, resolution and cost of large digital displays, using chip-level LED emitters.

**Presentation abstract:** Starting from the current state of the art, the presentation will establish some scaling principles, which explain why the industry is moving towards mini or micro inorganic LEDs. We will also debate what should be improved for the micro-led displays to displace the existing technologies.

#### The Seminar is supported by: (In alphabetical order)





Hong Kong Electronics Industry Council



Information Technology Division of the Hong Kong Institution of Engineers



The Chinese Manufacturers' Association of Hong Kong



Hong Kong Electronics & Technologies Association



Institute of Electrical and Electronics Engineers IEEE Electron Devices Society







The Institution of Engineering and Technology Hong Kong