









# Metrology Symposium 2019 計量學研討會 2019

Date: 11 January 2019 (Friday) Time: 2:00 p.m. to 5:30 p.m.

Venue: D0309, 3/F, Jockey Club Campus, The Open University of Hong Kong

81 Chung Hau Street, Ho Man Tin, Hong Kong

日期: 2019年1月11日(星期五) 時間: 下午2時至下午5時30分

地點: 九龍何文田忠孝街81號香港公開大學賽馬會校園3樓D0309演講廳



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### Introduction引言

May 20, 2019 will make its mark in history as the memorable day of the implementation of the revised International System of Units (SI). On that day, there will be a major revision of the SI, the foundation of measurements. Four of the seven SI base units namely kilogram, ampere, kelvin and mole will be redefined based on the fundamental constants, which remove the current limitations imposed by the use of artefact standards. The change will bring significant impacts and further developments to the modern world.

The poster designed by SCL was selected as the poster of the World Metrology Day 2019. The design ideas were based on modern world is becoming smarter with many smart technologies such as artificial intelligence (AI), big data, robotics, virtual reality (VR), 5G and autonomous vehicles etc., in which they are all built on smart sensors and transducers and rely on precision measurements. With better foundation of metrology, a better and smarter world can be built. This Symposium attempts to unfold to the local testing and certification industry as well as the parties interested in metrology how the revision of SI will enable us to embrace further improvements in measurement science and technology for a better and smarter world.

2019年5月20日將會是實施新修訂國際單位制(SI)的歷史性日子。作為測量基礎的SI將於當天作出重大修訂。 SI的七個基本單位當中,有四個會以基本物理常數而被重新定義,打破現有使用實物標準的局限。是次修訂將 為新時代帶來關鍵的影響並促進未來發展。

標準及校正實驗所(SCL)設計的海報獲選為 2019 年世界計量日的宣傳海報。設計概念圍繞現今世界採用的先進技術如人工智能(AI)、大數據、機械人技術、虛擬實境(VR)、5G 和無人駕駛汽車等,均建基於講求精確測量的智能感應器及轉換器。通過更完善的計量基礎,可以建立一個更美好、更智慧的世界。這個研討會將向香港的檢測和認證業,以及對計量學有興趣的人士,介紹 SI 的修訂將如何使我們能夠進一步提升測量的科學與技術,以建立一個更美好,更智慧的世界。

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Venue	D0309, 3/F, Jockey Club Campus,
地點	The Open University of Hong Kong
	香港公開大學賽馬會校園 3 樓 D0309 演講廳
Language	English
語言	英語
Fee	Free admission
費用	免費入場



## Programme of the Symposium 研討會內容

Time 時間	Programme 程序				
2:00 p.m.	Registration and Poster Session 登記與海報環節				
2:30 p.m.	<b>Welcoming Address 歡迎致辭 Prof. Reggie Kwan Ching Ping,</b> Vice President, The Open University of Hong Kong 香港公開大學 副校長 <b>關清平教授</b>				
2:35 p.m.	<b>Opening Remarks 開場致辭 Mr. W.W. Wong,</b> Assistant Commissioner, Innovation and Technology Commission 創新科技署 助理署長 <b>黃宏華先生</b>				
2:40 p.m.	Guest Photo 嘉賓合照				
2:45 p.m.	Keynote Speech – The new SI and its implications 專題演講:新國際單位制及其含義 Dr. Della Sin, Government Chemist, Government Laboratory 政府化驗所 政府化驗師 單慧媚博士				
3:05 p.m.	Keynote Speech – Metrology for a smarter world 專題演講:計量帶來智慧世界 Ir. Y.K. Yan, Head of Laboratory, Standards and Calibration Laboratory 標準及校正實驗所 主管 <b>甄銳權先生</b>				
3:25 p.m.	Speech by the Guest of Honour – The new kilogramme - now approachable for extraterrestrials and nonhumans also 嘉賓演講 新公斤 – 向全新領域邁進 DrIng. Prof. h. c. Frank Härtig, Head of Division Mechanics and Acoustics, PTB, Germany 德國國家實驗所 機械及聲學部 主管 DrIng. Prof. h. c. Frank Härtig				
3:45 p.m.	Break and Poster Session 小休與海報環節				
4:05 p.m.	Mole: Definition and facts, now and in the future 摩爾: 現在與將來的定義和境況 Dr. Wai-fun Wong, Chemist, Government Laboratory 政府化驗所 化驗師 黃偉芬博士				
4:25 p.m.	The metric system is of so much interest 公制系統多有趣 Ir. Raymond Leung, Electrical and Mechanical Engineer, Standards and Calibration Laboratory 標準及校正實驗所 機電工程師 <b>梁偉文先生</b>				
4:45 p.m.	Small changes in electrical units, a big step forward in electrical and medical metrology 電量單位的小改變,造就電氣醫療計量的大躍進 Ir. Dr. Steven Yang, Electronics Engineer, Standards and Calibration Laboratory 標準及校正實驗所 電子工程師 <b>楊承隆博士</b>				
5:05 p.m.	Optical clocks and the future of the second 光鐘與秒的未來 Ir. Dr. Terry Lai, Electronics Engineer, Standards and Calibration Laboratory 標準及校正實驗所 電子工程師 <b>黎孝華博士</b>				
5:25 p.m.	Q&A Session 答問環節				

Note: The organisers reserve the right to alter the symposium programme without prior notice. 注意: 主辦方保留更改專題研討會計劃的權利,恕不另行通知。

#### Enrolment Form 報名表格

To enrol, please complete and return this e-Form by email on or before 28 December 2018 (Friday). You can also submit the completed form by fax.

如欲報名,請於 2018 年 12 月 28 日 (星期五)或之前,填妥本電子報名表格以電郵交回。閣下亦可以傳真方式遞交 報名表格。

Email 電郵: metrology2019@icc.com.hk or 或 Fax 傳真: 2547 9528

Seats are subject to availability. Confirmation of seating will be notified by phone or email starting from 4 January 2019

研討會座位供應須視乎情況。我們將在 2019 年 1 月 4 日 (星期五) 起以電話或電郵確認座位預留。

Enquiries 查詢: Ms Ivy Ng 伍小姐 Tel 電話 : 2559 9973 Email 電郵: metrology2019@icc.com.hk

Name of Contact Person 聯絡人姓名		
Organisation 機構		
Email 電郵		
Tel 電話	Fax 傳真	
Date 日期		

The following representative(s	s) would like to attend the sympo	osium 下列代表擬出席研討領	會:					
Name 姓名	Position 職位	Email 電郵		Telephone 電話				
<sup>#</sup> Type of Industry 行業種類								
☐ Calibration, Testing & Certification 校正、檢測及認證業	☐ Healthcare 醫療健康業	Manufacturing 製造業	☐ Construction 建築業					
□ Trading and Services 貿易及服務業	□ Public Utilities 公用事業	Education/Academia 教育 / 學術界	☐ Research and Development 研究及開發界					
□ Others, please specify 其他,請註明								
How did you know about this Sympo	osium? (Can choose more than one) 閣下	是如何得知是次研討會(可選多於-	−項)					
☐ By Invitation E-mail 電郵	☐ Hong Kong Council for Testing and Certification Website 香港檢測和認證局網頁							
◯ Others, please specify 其他,請註明:								
# Please nut a * in the hov as annronr	iata : 詩於滴觉空杦加上v.ºº 。							

#### Notes 注意事項:

- (1)The organisers have engaged International Conference Consultants Ltd as the event co-ordinator for the symposium to handle logistics and all enrolment matters.
  - 主辦機構聘請了國際會議顧問有限公司協助籌辦是次研討會,包括處理行政和報名等事宜。
- (2)The personal data provided in this form will be used for enrolment to the symposium and other symposium-related purposes. The symposium organisers and the event co-ordinator will be able to access such personal data.
  - 在本報名表格內所提供的個人資料,將用於研討會報名以及其他與研討會有關的事宜上。主辦機構及代理機構均會取得這些個人資料。
- (3)Information collected in the Enrolment Form will be destroyed within one month after the symposium is held. 本表格上的報名資料將於研討會舉行後一個月內銷毀。
- (4) For correction of or access to personal data after submission of the Enrolment Form, please contact the event co-ordinator under Enquiries above. 提交報名表格後,如欲更改或查詢個人資料,請按上述查詢辦法提出。