



# **Asia Pacific Metrology Programme**

## **Report**

**EURAMET  
May 2019**

**Borås, Sweden**

**APMP Report to EURAMET  
May 2019**

**Website:** [www.apmpweb.org](http://www.apmpweb.org)

**1. Membership**

APMP has 44 member institutes from 26 Full Member economies, with the Measurement Standard Laboratory (MSL-BD), Brunei Darussalam joining in April 2018. APMP Full Members are:

Australia, Bangladesh, Brunei Darussalam, Cambodia, China, Chinese Taipei, DPR Korea, Fiji, Hong Kong (, China), India, Indonesia, Japan, Korea (Republic of), Macao (, China), Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Russia, Singapore, Sri Lanka, Thailand, and Vietnam.

APMP now has 12 Associate Member economies. APMP's Associate Members are:

Egypt, Iran, Iraq, Jordan, Kazakhstan, Kenya, South Africa, Syria, United Arab Emirates, United Kingdom, United States of America, and Uzbekistan

**2. Highlights of 2018 APMP General Assembly and Related Activities:**

The National Metrology Centre (NMC), A\*STAR and Health Science Authority (HSA) jointly hosted the 34<sup>th</sup> APMP General Assembly (GA) and Related Activities from 20 to 30 November 2018 in Singapore. Highlights include:

- Mr Xiang Fang (China) was elected to the new APMP Chairperson for a three-year term from GA2019 to GA2022
- Ms Ajchara Charoensook (Thailand) was elected as an EC member.
- Seven new Technical Committee (TC) Chairs commenced their terms for three years (TC for Quality System Chair was assigned for a single year as an exception) – TC for Acoustics, Ultrasound & Vibration, TC for Electricity & Magnetism, TC for Mass & Related Quantities, TC for Quality System, TC for Photometry & Radiometry, TC for Amount of Substance, and TC for Thermometry.
- Endorsement of the election of two new TC Chairs (TC for Ionizing Radiation and TC for Material Measurement) whose terms of office will commence from GA2019.
- Endorsement of the 2019 APMP Work Plan and Budget Plan

Annex 2 provides updated contact details for APMP.

### **3. Strategic developments:**

#### **TC Initiatives Projects 2019:**

The APMP TC Initiatives (TCI) budget is aimed at fostering R&D projects of significance in addressing current needs of industry. Four TCI proposals submitted for 2019 have been approved by the EC and will be commenced in 2019. The four TCI proposals are:

- Research on the micro liquid flow standard system and inter-comparison
- Improving measurement techniques at the silver freezing point (961.78 °C) and validation of the equivalence of the APMP linkage to the CCT-K4
- BeiDou time transfer and its system time traceability to UTC in Asia
- Research on the calibration of environmental radiation survey meters

The a few more TCI proposals will be approved.

#### **Evolution of APMP's Focus Group strategy**

APMP has established five Focus Groups to increase the impact of measurement to solve issues at the sectoral level. The Focus Groups aim to address regional challenges in support of government, industry, innovation, and research. The five Focus Groups are:

- Energy Efficiency – Chair: Ms. Ajchara Charoensook, Thailand
- Food Safety – Chair: Prof Hongmei Li, China
- Medical Metrology – Chair: Dr Sheng-Jui Chen, Chinese Taipei
- Climate Change and Clean Air – Chair: Dr Sangil Lee, Korea
- Clean Water – Chair: Dr. Ghufroon Zaid, Indonesia

APMP's Food Safety Focus Group Chair participated in the 3rd Expert Meeting on "Trade Facilitation through an APEC Framework on Food Safety Modernization" under APEC SCSC. Focus Group for Clean Water had a planning workshop in conjunction with APMP GA 2018. Attendees selected four topics and planned future activities Focus Group for Energy Efficiency and Medical Metrology Focus Group had their meetings and reported their activities. Focus Group for Climate Change and Clean Air developed their long-term strategy and approaches.

#### **Review of Global Framework for Mutual Recognition in Scientific Measurement - CIPM MRA**

In 2015, the peak international expert body in scientific measurement, the International Committee for Weights and Measures (CIPM), initiated a review into the effectiveness of the CIPM Mutual Recognition Arrangement (CIPM MRA). Following in-depth consultations over 2016, implementation of agreed recommendations is currently underway

*The CIPM MRA was established in 1999 under the Metre Treaty as the international framework for mutual recognition between signatories of national measurement standards and calibration certificates. It provides the essential technical basis to help reduce technical barriers to trade in support of wider agreements negotiated for international trade, commerce and regulatory affairs, e.g. government-to-government free trade agreements. CIPM MRA signatory institutes cover most industrialised nations, including nearly all APEC economies.*

APMP is one of the five Regional Metrology Organisations working with the CIPM in addressing the recommendations from this review.

## **Revision of the SI**

In November 2018, the General Conference on Weights and Measures (CGPM) was held and obtained resolutions related to the revision of the SI. The most remarkable thing was the implementation date of the SI revision was agreed to be 20 May 2019. The summary of impact in the different fields by the revision of the SI can be found on the BIPM webpage, and highlighting in the area of mass, uncertainty is not affected for ordinary uses.

## **4. Stakeholder Interactions**

### Asia Pacific Economic Cooperation

**SCSC 1 and SRB Forum, February 2018:** APMP represented by Dr Jan Herrmann (Australia).

**APEC Food Safety Cooperation Forum, Nov. 2018:** Prof Li Hongmei (China) participated in *"Trade Facilitation through an APEC Framework on Food Safety Modernization."*

**SCSC 2, August 2018:** APMP represented by Dr Toshiyuki Takatsuji and Dr Takehiro Morioka (Japan).

### Asia Pacific Laboratory Accreditation Cooperation (APLAC) – Cooperation Under APMP-APLAC MoU:

Dr Toshiyuki Takatsuji, APMP Chairperson and Mr Wang-wah Wong, APLAC Chair had the annual meeting according to MoU in Hong Kong. They discussed future cooperation in the field of proficiency tests and transition of ISO/IEC 17025. Dr Kazumi Inagaki (Japan) participated in proficiency testing working group meeting held in Kyoto, Japan in June 2018 and discussed future activities after APLAC is merged with PAC. Dr Takehiro Morioka (Japan), APMP Secretary represented APMP at the APLAC-PAC Joint Annual Meetings.

### Asia Pacific Legal Metrology Forum (APLMF) – Cooperation Under APLMF-APMP MoU:

APMP is continuing working with PTB (Physikalisch-Technische Bundesanstalt, the German NMI) and APLMF under the joint regional capacity building project, MEDEA (Metrology: Enabling Developing Economies within Asia). The project has moved on the second phase (MEDEA 2.0) and started from May 2018 for three years. It focuses on sustainability, regional cooperation and technical trainings.

## **5. APMP Meetings in 2019**

### **APMP Mid-Year Meetings, date to be decided soon.**

APMP's 2019 Mid-Year Meetings will be held in June 2018 in Cebu, Philippines, hosted by the Industrial Technology Development Institute (ITDI). As well as meetings of its governance committees, APMP seeks to hold Mid-Year meetings in a developing member economy in order to use the opportunity of the presence of key regional measurement experts to support the local metrology institute in highlighting the importance of measurement to government decision-makers and industry as well as to conduct capacity building technical workshops in fields relevant to the host economy.

### **2019 APMP General Assembly and Related Activities**



The National Measurement Institute, Australia (NMIA), Australia to host the 35<sup>th</sup> APMP General Assembly and Related Activities in Sydney in November 2019.

## Annex 1

### APMP Full and Associate Members, April 2019

ECONOMY	MEMBER	METRE CONVENTION MEMBERSHIP STATUS	SIGNATORY TO THE CIPM MRA
Australia	NMIA ARPANSA ANSTO	Member	1999
Bangladesh	BSTI DRiCM	Associate of the CGPM	2011
Brunei Darussalam	MSL-BD		
Cambodia	NMC		
China	NIM	Member	1999
Chinese Taipei	CMS/ITRI INER CHT	Associate of the CGPM	2002
Egypt	NIS	Member	2000
Fiji	FNML		
Hong Kong, China	SCL GL	Associate of the CGPM	2000
India	NPLI BARC	Member	1999
Indonesia	RCM-LIPI (Formerly KIM-LIPI) PTKMR-BATAN	Member	2004
Iran (Islamic Republic of)	NMCI	Member	2016
Iraq	COSQC	Member	2014
Japan	NMIJ/AIST NICT CERI JEMIC	Member	1999
Jordan	JNMI		
Kazakhstan	KazInMetr	Member	2006
Kenya	KEBS	Member	2002
Korea (Republic of)	KRISS	Member	1999
DPR of Korea	CIM		
Macao, China	PHL		
Malaysia	NMIM (Formerly SIRIM) Malaysian Nuclear Agency KIMIA	Member	2001
Mongolia	MASM CGL	Associate of the CGPM	2013
Nepal	NBSM		
New Zealand	MSL	Member	1999
Pakistan	NPSL	Member	2011
Papua New Guinea	NISIT		
Philippines	ITDI	Associate of the CGPM	2002
Russia	VNIIM	Member	1999
Singapore	A*STAR HAS	Member	1999
South Africa	NMISA	Member	1999
Sri Lanka	MUSSD	Associate of the CGPM	2007 (excepting the period 1 January 2015 to 16 August 2016)
Syria	NSCL	Associate of the CGPM	2012
Thailand	NIMT DSS TISTR OAP	Member	1999
United Arab Emirates	DCLD EMI	Member	2016



United Kingdom	NPL	Member	1999
United States of America	NIST	Member	1999
Uzbekistan	UzNIM	Associate of the CGPM	2018



Vietnam	VMI	Associate of the CGPM	2004
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Associate Members of APMP



## **Annex 2**

### **APMP Personnel and Contact information**

**Website:** [www.apmpweb.org](http://www.apmpweb.org)

#### **APMP Secretariat**

<b>NAME</b>	<b>ADDRESS</b>	<b>EMAIL</b>
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#### **APMP Executive Committee**

<b>NAME</b>	<b>ORGANISATION</b>	<b>EMAIL</b>
Dr Toshiyuki Takatsuji (Chair)	National Metrology Institute of Japan	<a href="mailto:toshiyuki.takatsuji@aist.go.jp">toshiyuki.takatsuji@aist.go.jp</a>
Dr Osman Zakaria	National Metrology Institute of Malaysia	<a href="mailto:osman@sirim.my">osman@sirim.my</a>
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Ms Wei Gao (Treasurer)	National Institute of Metrology, China	<a href="mailto:gaowei@nim.ac.cn">gaowei@nim.ac.cn</a>
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Ms Ajchara Charoensook	National Institute of Metrology (Thailand)	<a href="mailto:ajchara@nimt.or.th">ajchara@nimt.or.th</a>





**APMP Technical Committee (TC) Chairs**

TC	CHAIR	EMAIL
Lead TC Chair	Dr Chu-Shik Kang, KRISS, South Korea	cskang@kriss.re.kr
Acoustics, Ultrasound and Vibration	Dr Ryuzo Horiuchi, NMIJ, Japan	ryuzo.horiuchi@aist.go.jp
Electricity and Magnetism	Dr Hyung-Kew Lee, KRISS, Korea	hyungkew.lee@kriss.re.kr
Fluid Flow	Dr Takashi Shimada, NMIJ, Japan	t-shimada@aist.go.jp
Length	Dr Jariya Buajarern, NIMT, Thailand	jariya@nimt.or.th
Mass and Related Quantities	Dr Sheng-Jui Chen, CMS/ITRI, Chinese Taipei	sj.chen@itri.org.tw
Materials Metrology	Dr Victoria Coleman, NMIA, Australia	<a href="mailto:victoria.coleman@measurement.gov.au">victoria.coleman@measurement.gov.au</a>
Photometry and Radiation	Dr Haiyong Gan, NIM, China	ganhaiyong@nim.ac.cn
Amount of Substance	Dr Kazumi Inagaki, NMIJ, Japan	k-inagaki@aist.go.jp
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Thermometry	Dr Inseok Yang, KRISS, Korea	iyang@kriss.re.kr
Time and Frequency	Prof Aimin Zhang, NIM, China	zhangam@nim.ac.cn

**Developing Economies' Committee (DEC) Chair**

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