

Minutes of Meeting
APMP Focus Group for Clean Water Meeting
20 June 2019

Venue: JPark, Cebu, Philippines

List of Attendees

No	Name	Organization	Economy
1.	Abdul Rashid bin Abidin	MEDEA Project	Malaysia
2.	Charun yafa	National Institute of Metrology (Thailand)	Thailand
3.	Corinna Weigelt	Physikalisch-Technische Bundesanstalt	Germany
4.	Dyah Styarini	National Measurement Standards, National Standardization Agency of Indonesia (SNSU-BSN)	Indonesia
5.	Ghufron Zaid	National Measurement Standards, National Standardization Agency of Indonesia (SNSU-BSN)	Indonesia
6.	Haslina Abdul Kadir	National Metrology Institute of Malaysia (NMIM)	Malaysia
7.	Joe Magur Panga	National Institute of Standards and Industrial Metrology,	Papua New Guinea
8.	Kazumi Inagaki	NMIJ/AIST	Japan
9.	Liandi Ma	National Institute of Metrology, China	China
10.	Mala Khan	Designated Refrence Institute for Chemical Measurement (DRiCM)	Bangladesh
11.	Osman Bin Zakaria	National Metrology Institute of Malaysia (NMIM)	Malaysia
12.	Salgaduge Dinesh Indika Dias	Measurement Units, Standards & Services Department	Sri Lanka
13.	Victoria Coleman	National Measurement Institute, Australia	Australia
14.	Vorleaks Peou	National Metrology Center (NMC)	Cambodia
15.	Em Sophors	National Metrology Center (NMC)	Cambodia
16.	Marlon Aguinaldo	ITDI-NML	Phillipinnes
17.	Kirti Soni	CSIR-NPL India	India
18.	Benilda S. Ebarvia	NML-ITDI	Philippines
19.	Theressa Aviles	ITDI-DOST	Philippines
20.	Elyson Encarnacion	ITDI-DOST	Philippines
21.	Christy Daniel	ITDI-DOST	Philippines
22.	Nina Mae Delacruz	ITDI-DOST	Philippines
23.	Agnes De Asis	ITDI-DOST	Philippines
24.	Christian Laurio	ITDI-DOST	Philippines

Welcome Address and Opening Remarks by APMP Focus Group on Metrology for Clean Water Chair, Dr. Ghufron Zaid

Dr. Ghufron Zaid welcomed the delegates to the 3rd APMP Focus Group on Metrology for Clean Water (APMP FGCW) Meeting in Cebu, Philippines, and he informed the delegates that FGCW was initiated in 2016 APMP Mid-Year Meeting and had its 1st meeting in Bogor, Indonesia (2017) and 2nd meeting in Singapore (2018). Afterwards he explained about the aims of the meeting were to share NMI activities and their local problem in clean water; to have updated information related to the activity planning agreed upon in Singapore Meeting and to plan the FGCW activities. He was then read the proposed agenda, floored it to the delegates and finalized the agenda of the meeting.

Discussion on The Update of FGCW planned activities

Dr. Ghufron said that in 2018, we have planned some activities that also have been agreed during the planning workshop conducted in Singapore. He was then invited Dr. Kazumi Inagaki as the TCQM Chair for giving the update on the proposed Interlaboratory Comparison (ILC).

Dr. Kazumi Inagaki gave an update in regard to planning of ILCs. He said that we have two planned ILCs which were E.Coli in drinking water that will be provided by National Institute of Metrology, China (NIM) and Metals/trace elements in River water that will be provided by National Metrology Institute, Japan (NMIJ). He also explained that unfortunately for ILC of River Water will be delayed due to budget issue, and ILC for E.Coli also will be delayed due to international travel issue for the sample containing E.Coli that is forbidden. Another proposal for ILC is anion in seawater that will be organized by NIM that has been proposed in the last TCQM Meeting (2018). This proposal has been discussed in Inorganic Analysis Working Group (IAWG) Meeting in BIPM. He encouraged to propose the ILC of anion in sea water as CCQM comparison. This proposal is still need to be discussed in detail and will be discussed further in the IAWG fall meeting.

Prof. Ma Liandi gave an update regarding two projects in NIM that are for providing ILC of E.Coli in drinking water and organochlorine pesticides in water.

1. E.Coli

The proposal for providing ILC of E.Coli in water has been submitted to CCQM, as a pilot study and has been approved. NIM also can offer two weeks training for measurement of E.Coli, and asking the probability for getting financial support from DEC and MEDEA. The training also can be combined with the Pilot Study, which the mechanism proposed by Prof. Ma was Comparison—Training—Comparison. Tentative of time proposed was October 2019 for the training, and then continued to the exercise with deadline for submission of the result is December 2019. Since we will ask for the funding support from DEC or MEDEA, therefore the time frame for the training need to be confirmed by DEC or MEDEA. If there is no funding support from DEC or MEDEA, then NIM still can host the training, but for flight and accommodation of trainees cannot be covered by NIM.

Dr. Charun Yafa commented on the training of the E.Coli that is offered by NIM, that this topic was not raised yet in the need of APMP FGCW. According to the survey to the APMP members, 11 courses have been identified based on the survey. And after getting inputs from the needs of training from APMP FGCW, therefore come up with 5 training activities

1. Heavy metals in water for advance level (July 2020)
2. Analysis of elements in water for beginner level (Need to be fixed the time, offered to SNSU-BSN).
3. Intermediate training for pH (NIMT, 2019)
4. Intermediate training for Electrolytic Conductivity (NIMT, October 2019)
5. pH and Electrolytic Conductivity for beginner level (Need to be fixed the time, offered to SNSU-BSN).

All activities are already proposed to MEDEA and waiting for a decision or approval from MEDEA. If we agree that training on E.Coli is needed, then we can put it into the package. Dr. Charun Yafa also said that if we plan to conduct the training on E.Coli on October, so we have to submit the proposal immediately.

Dr. Ghufron said that the need for E.Coli is for ILCs and can be extended with the training if agreed by the delegates. Dr. Mala Khan agree to Prof Ma because it is quite hard to get ILC scheme and CRM for E.Coli, so DRiCM will need this training. DRiCM already has experience on E.Coli analysis, and will provide services on this regularly. She also suggested to conduct the attachment training for one month. Ms. Haslina said that Malaysia has no capability in doing measurement of E.Coli. pH measurement is more suitable for Malaysia. Dr. Benilda said that Philippines needs training for E.Coli. Dr. Charun said that if we need E.Coli, we may consider to carry out this training. All training's participants must improve the capability and participate in the ILCs. Since there were several NMIs arise the need of training on E.Coli, then the forum agreed that training on E.Coli is needed and then become the 6th training program that will be proposed to MEDEA and need to be prioritized. The hosts of trainings need to consultancy with TCQM Chair and APMP FGCW Chair will choose the appropriate participants. Training for beginner level will take 1 month while for advance training (IDMS technique) will need 2-3 months. If there is any ILC related to the training topic, the trainees can participate the ILC scheme, but if there is no ILC Scheme, the host have to provide the samples for the trainees. Corinna has taken note that there were 6 trainings proposed and further will ask for nomination and contribution. Dr. Charun suggested that if an NMI already has the capability, NMI can follow the ILC and then see the result. If the result is not OK, then can follow the training. So, no need to follow the training at the beginning before knowing the ILC result. Dr. Mala Khan informed that DRiCM has provided services but has problem with the traceability. DRiCM can contribute to provide transportation for the trainee from DRiCM. Dr. Charun Yafa need an information about living cost from Prof. Ma and he will contact Prof. Ma later.

2. Pesticide residues in water

The sample would be difficult to prepare because usually the level of pesticide residues is very low. NIM has plan for this in the future. Another information, CCQM just organized a Key Comparison for measurement of PFOS and PFOE in water at ppt level. Maybe in the future, APMP

region will also focus on organic analysis in water. There are several challenges in the analysis of organic parameter in water that are not stable and quite hard to be homogenized, therefore it would be hard to prepare the samples. And for Proficiency Testing in organic compounds, the sample will not be stable. Dr Inagaki asked Prof Ma to share the information about PT in organic analysis for the next APMP FGCW meeting.

NMI Update

1. NPLI, India

Dr. Sushree Swarupa Tripathy unfortunately cannot join the meeting, but she already sent the updated information related the planning activities to Dr. Ghufron by e-mail. Dr. Ghufron and her colleague (Dr. Kirti Soni) who attended the meeting delivered the updated information, as follow:

- NPL, India has participated and qualified in the CCQM-K143 program (Cu standard solution).
- NPL, India has started providing support to the Reference Material Producers of India in various matrices, among them disseminated traceability for the CRMs / BNDs on water based elemental solutions.
- NPL, India has agreed to work with PTB, Germany for the project on "National Mission for Clean Ganga" to Strengthening quality infrastructure for water monitoring of the Ganges river.
- NPL, India had committed to conduct two activities such as:
 - Awareness and Stake holder engagement Workshop in 2020
 - Training on Anion and Cation by Ion Chromatography with measurement uncertainty – July 2019 (newly proposed for November 2019 – as weather will be pleasant). The proposal has been submitted to DEC for the training.NPL, India is ready to conduct the aforesaid program, however, financial assistance is needed to conduct the program.
- NPL, India is interested to involve actively in forthcoming Clean water Focus Group activity

2. Measurement Units, Standards & Services Department, Sri Lanka (By Dr. Salgaduge Dinesh Indika Dias)

MUSSD has capability on pH measurement and will prepare secondary pH buffer solution. MUSSD also has plan to develop the technical capability on conductivity measurement, therefore need a training on this.

Dr. Mala expressed the interest for training on secondary buffer solution.

Dr. Charun gave a comment that MEDEA cannot focus only for one country.

3. Designated Reference Institute for Chemical Measurement (DRiCM), Bangladesh (By Dr. Mala Khan)

DRiCM provides regular services to industry and academia for 74 parameters and has several main equipment such as NMR, HPLC, LC-MS and TOC analyzer. DRiCM also organized ILCs but the number participants are low due to capability of testing labs that still low. The Clients of DRiCM are come from government institutions (15), industries (20) and universities (14).

DRiCM also provides several training including ISO 17025. Several seminar and stakeholder meeting have been carried out and got funding support from the government.

Prof Ma asked whether DRiCM already participated in the ILC Scheme? And Dr. Mala explained that DRiCM has participated in the 3 or 4 ILC schemes. She also said that still facing the problem for traceability. It would be good if the host can also provide the CRM as one package with the ILC's sample.

Next Chair and continuity of APMP FGCW

Dr. Ghufron explained that the continuity of APMP FGCW will be reviewed by Executive Committee (EC) and we need to submit the report to EC. The continuity of APMP FGCW will be decided during GA meeting, and hopefully APMP FGCW will be continued. As we have turn into the 3rd year of this first period, we need to agree the candidate for the next APMP FGCW Chair and Co-Chairs. The forum was then agreed that Prof. Ma would be the next chair while Mrs. Haslina and Dr. Richard Shin would be the candidate for the next co-chairs.

Next Meeting, in Sydney

Dr. Ghufron gave an information that the APMP Meetings 2019 would be carried out in Sydney between 28 November to 9 December. APMP FGCW planned to conduct meeting and workshop in conjunction with APMP Meetings. For the workshop, the topic will be discussed by e-mail. According to Dr. Victoria Coleman, NMIA can arrange the visit tour to one of the NMIA's stakeholder that is Sydney Water Company, but this plan need to be discuss further and decided.

Other Issues

- The training on Anion and Cation planned to be conducted in India, in December 2019 with NPL India as the host.
- Dr. Abdul Rashid bin Abidin said that we need to prepare Guide Documents for Stakeholder Engagement.

LISTS OF ACTION NEED TO BE FOLLOWED UP

No.	Actions	PIC
1.	Dr. Charun Yafa to propose funding support for six topics of trainings to MEDEA: <ol style="list-style-type: none"> 1. Heavy metals in water for advance level. 2. Analysis of elements in water for beginner level. 3. Intermediate training for pH. 4. Intermediate training for Electrolytic Conductivity. 5. pH and Electrolytic Conductivity for beginner level. 6. Measurement of E.Coli. 	Dr. Charun Yafa
2.	<ul style="list-style-type: none"> ▪ Prepare the Report of APMP FGCW Activities to be reviewed by Executive Committee. (Deadline September 2019) ▪ Prepare the poster of APMP FGCW Activities 	APMP FGCW Chair and Secretariat Team
3.	Next APMP FGCW Meeting in Sydney <ul style="list-style-type: none"> ▪ For workshop, the topic need to be decided ▪ For visit to stakeholder, still need to be discussed. 	APMP FGCW Chair In coordination with Prof. Ma, Dr. Inagaki and Dr. Richard for topic of workshop. APMP FGCW Chair In coordination with Dr. Victoria Coleman and Dr. Angela Samuel for visit to stakeholder
4.	Planning of training on Anion and Cation planned to be conducted in India, December 2019. APMP FGCW Chair to ask DEC Chair about the funding.	APMP FGCW Chair
5.	Prepare Guide Documents for Stakeholder Engagement. APMP FGCW Chair to propose the idea to other APMP FG Chairs.	APMP FGCW Chair