

REPORT

of Chairperson of TC 4 “Information and Training”

1 General characteristic of cooperation

In 2017–2018 the work within TC was conducted on the base of TC 4 Work Program for 2015–2017. There are three subcommittees in TC:

- SC 4.1 “Support in Developing the Basic Metrological Infrastructure of COOMET Member Countries”;
- SC 4.2 “COOMET Informational Resources”;
- SC 4.3 “Raising Proficiency Level and Work with Young Metrologists”;

2 Results of works:

Organised and held are:

- VII International Competition of COOMET “The Best Young Metrologist”, 17–18 May 2017 in Astana, Kazakhstan;
- seminar for the Directors of NMIs of COOMET Member Countries and the Chairpersons of COOMET TCs on the procedure and conditions of participation in the European Metrology Program for Innovation and Research (EMPIR), 4 December 2017, Braunschweig, Germany;
- meetings of Working Group under COOMET President’s Council on questions of maintaining COOMET Informational Resources, 23–24 January 2018, Minsk, Belarus, and 12–13 March 2018, Braunschweig, Germany;
- workshop on calibration of small volumes, 6–8 March 2018, Wolfen, Germany, jointly with TC 1.6 “Mass and related quantities”.

The work was done on posting information to COOMET web-portal about projects from the COOMET databases.

The work on containing the COOMET web-portal is continued.

3 Survey of implemented projects and their results

In 2017–2018 the work was conducted on the following registered projects:

518/UZ-a/11 Training of specialists of measuring, calibration and testing laboratories

The aim of the project is application of modular approach in training on the base of step-by-step implementation of uncertainty conception into the practice of laboratory work. Within the project it were developed out four major modules of training for the experts of testing and calibration laboratories on the basis of step-by-step implementation of uncertainty conception in practical work of laboratories.

553/UZ-a/12 The development of competencies and qualifications within COOMET for specialists and metrologists of measurement, calibration and testing laboratories for training on the basis of the modular approach

Work was carried out on the development of the document, which establishes the basic principles of qualification requirements for specialists and metrologists of measurement, calibration and testing laboratories. The basic training programs are programs based on modular approach for training. The competence of a specialist is assessed by means of qualification tests.

656/UA-a/15 Training on the basis of modular approach for specialists-metrologists of medical clinical laboratories

There are developed 7 training modules with application of system approach in distribution of functional module load (from basic to specialized). Such approach allows to train laboratory

specialists of different qualification and to include into the training programs practical aspects of medical laboratory work in accordance with the requirements of ISO 15189 standard.

At the 14th TC 4 meeting on Projects **518/UZ-a/11**, **553/UZ-a/12**, **656/UA-a/15** there was taken a decision to prepare the Drafts of informational materials.

543/AM-a/11 Development and administration a database of RM of COOMET

Ongoing joint project of TC 1.12 “Reference Materials” and TC 4 “Information and training”. The aims of the project are to develop a structure of the document, acquisition and examination of data of reference materials of COOMET, their publication on the website as a database, administration the database of reference materials.

725/UA/17 The organisation and holding the Workshop in 2018 within the BIPM Capacity Building & Knowledge Transfer Programme (CB&KT) for the countries with developing metrological infrastructure

The workshop is planned to be held on 10 April 2018 in Sarajevo, Bosnia and Herzegovina, with the PTB financial support and participation of representatives and lecturers from BIPM and COOMET member-countries.

731/BY/17 Review of national education & training systems for the NMIs and metrologists of the COOMET member countries

Through the completion of this COOMET Project, the system of basic education, the system for training, advanced training and retraining as well as the system for training of top-qualification scientific personnel of the NMIs and of metrology professionals of the COOMET member countries shall be reviewed on the basis of up to date education & training information submitted by the COOMET member countries and of the relevant revised national legislations, while taking into account the implementation of the Recognition Arrangement for national measurement standards and for calibration and measurement certificates issued by the NMIs.

739/CN/17 The organisation and holding of a training activity in 2018 in field of food safety measurement

This training aims at transferring technologies and knowledge regarding food safety measurement capabilities to technicians of COOMET member institutions who are in need of this training, assist them to improve their measurement capabilities in food safety, develop the prioritized measurement technologies and research capabilities on relevant reference materials.

4 Results of the TC meeting

14th meeting of TC 4 “Information and Training” was held on 31 October – 1 November 2017 in Chisinau, Moldova. Members of TC 4 and their representatives from 10 COOMET member-countries (Belarus, Bosnia and Herzegovina, China, Georgia, Germany, Kazakhstan, Moldova, Russia, Tajikistan and Ukraine) participated in the meeting.

Participants of the meeting exchanged of experiences on the practice of training and raising proficiency level of the specialist-metrologists in COOMET member-countries and discussed the state of implementation of COOMET Projects.

During the meeting the participants had been informed about the results of the realization of the TC 4 Work Program for 2015–2017 and also the Draft TC 4 Work Program for 2018–2020. TC 4 Members approved the activity of TC 4 during the reporting period and expressed their proposals and notes for Draft TC 4 Work Program for a three-year period. TC 4 Secretariat was charge to prepare the final version of the TC 4 Work Program for further approval at the 22nd meeting of COOMET President’s Council and 28th COOMET Committee meeting.

COOMET Coordinator in CB&KT Yu. Bunyayeva informed the participants of the meeting about BIPM Capacity Building & Knowledge Transfer Programme (CB&KT) and COOMET participation in this Programme.

COOMET Vice-President, TC 4 Chairperson P. Neyezhnikov made the participants the presentation about the works on forming informational infrastructure of measurements.

The question about candidate of SC 4.2 “COOMET Informational Resources” and SC 4.3 “Raising Proficiency Level and Work with Young Metrologists” was also discussed at the meeting. As a result of discussion of the candidates at the TC 4 meeting and also approval at the 22nd meeting of COOMET President’s Council a Member of SC 4.2 from Russia, Administrator of COOMET web-site A. Ivanov and a Member of TC 4 from Russia E. Kozmina were recommended as Chairpersons of SC 4.2 and SC 4.3 accordingly for further approval at the 28th COOMET Committee meeting.

5 Results of VII International Competition of COOMET “The Best Young Metrologist 2017”

VII International Competition of COOMET “The Best Young Metrologist” was held 17–18 May 2017 in Astana, Kazakhstan.

The second time the Competition was held with the participation of young metrologists from other RMOs and only in English.

36 works of young metrologists from 10 countries (Belarus, Columbia, Germany, Kazakhstan, Moldova, Peru, Russia, Slovakia, Spain and Ukraine) of 3 regional metrological organisations (COOMET, EURAMET and SIM) were submitted to the Competition.

The Scientific Committee of the Competition includes leading metrologists from international (BIPM, BIML) and regional (AFRIMETS, COOMET, EURAMET, SIM) metrology organizations.

Based on the assessment results of the works of competitors, the following winner and awardees of the Competition were determined: 1st place – Edyta Beyer (PTB, Germany) – graduate student of PTB from Poland; 2nd place – Mikhail Aleynikov (VNIIFTRI, Russia); 3rd place – Anna Villevalde (VNIIM, Russia).

For the first time it was prepared and published in electronic and paper variants the Proceedings of VII International Competition of COOMET “The Best Young Metrologist – 2017”. All papers were assigned the DOI index – digital object identifier. This was done by the specialists of the NSC “Institute of Metrology” (Kharkov, Ukraine).

6 Results of the seminar for the Directors of NMIs of COOMET Member Countries and the Chairpersons of COOMET TCs on the procedure and conditions of participation in the European Metrology Program for Innovation and Research (EMPIR)

The seminar for the Directors of NMIs of COOMET Member Countries and the Chairpersons of COOMET Technical Committees on the procedure and conditions of participation in the European Metrology Program for Innovation and Research (EMPIR) was held on 4 December 2017 in Braunschweig, Germany.

The Seminar was attended by Heads of National Metrology Institutes and Chairpersons of COOMET TCs from 7 COOMET member-countries (Belarus, Georgia, Germany, Russia, Tajikistan, Ukraine and Uzbekistan) and also representatives of EURAMET and EMPIR Secretariats.

The agenda included a number of issues: introduction course for participants; introduction to EMPIR; concept of EMPIR; rules for participants; contribution and impact of EMPIR Projects; participation in EMPIR topics; structure of Projects; examples of external partnership; projects of potential research topics.

7 Results of the meetings of Working Group under COOMET President’s Council on questions of maintaining COOMET Informational Resources

The meetings of Working Group under COOMET President's Council on questions of maintaining COOMET Informational Resources were held on 23–24 January 2018, Minsk, Belarus, and 12–13 March 2018, Braunschweig, Germany.

The members of Working Group from 5 COOMET member-countries (Belarus, Germany, Russia, Tajikistan and Ukraine) were participated in the meetings.

The participants of the meeting exchanged their opinions on the functioning of two COOMET informational resources (web portal www.coomet.net and website www.coomet.org) and unanimously noted the need to create and maintain the SINGLE electronic informational resource of COOMET, combining the portal and the site's capabilities to fully present up-to-date information on activities of COOMET and ensuring the exchange of information between the participants of COOMET cooperation.

The following decisions were taken during the meeting:

- to note the feasibility of creating and maintaining a single electronic informational resource of COOMET under the domain name www.coomet.org;
- to note the need to ensure the functioning of the portal (www.coomet.net) and the site (www.coomet.org) until the new single informational resource of COOMET is ready for operation;
- to develop the new structure of the website that should contain general information about COOMET (structure, activities, events, etc.), have restricted access for registered users, maintain the COOMET databases and have a direct link with KCDB 2.0 of BIPM;
- to consider that it is expedient to complete the development of the project of the single informational resource of COOMET by the end of 2019;
- COOMET President's Council to form the membership of the Working Group on the creation of the new single informational resource of COOMET (WG-Web);
- it is necessary to consider the development of Terms of Reference for the creation of the single informational resource of COOMET;
- to take into account that the Terms of Reference should obligatory reflect the issues of data exchange from KCDB 2.0, hosting, Web content availability (taking into account the requirements of the WCAG 2.0 Web Content Availability Guide), support for mobile devices, information security (taking into account international standards) and technical administration of the resource, as well as the distribution of authorities;
- to ask the Chairperson of TC 4 “Information and Training” P. Neyezhmakov to organize the development of COOMET Draft Document on maintaining the single informational resource of COOMET (in the future instead of COOMET D6/2013 “Procedure for maintaining the COOMET website. Main provisions” and COOMET D10/2013 “COOMET Web-portal. Main statements and order of maintaining”) taking into account the requirements of Terms of Reference for the creation of the single informational resource of COOMET.

8 Results of the workshop on calibration of small volumes

The workshop on calibration of small volumes was held on 6–8 March 2018, Wolfen, Germany. 13 representatives of TC 1.6 from 12 COOMET member-countries (Azerbaijan, Bosnia and Herzegovina, Cuba, Georgia, Germany, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Ukraine and Uzbekistan) were participated in the workshop.

The following questions were discussed during the workshop:

- application and usage of piston pipettes and multidispensers;
- introduction into the theoretical part for the calibration of piston pipettes based on the guideline DKD-R 8-1 and multidispensers based on the guideline DKD-R 8-2;
- practical training for the calibration of piston pipettes and multidispensers.

9 Work on information support of the CIPM MRA



COOMET-28/09.1

Information about the CIPM MRA realization in COOMET member-countries is posted on the pages of www.coomet.net and www.coomet.org. Posting the information at online resources is conducted by COOMET Secretariat and by on-line editors of countries and COOMET Technical Committees.

Pavel Neyezhmakov
Chairperson of TC 4