



MINUTES

of the 27th COOMET TC 1.12 «Reference Materials» meeting

September 12, 2022

Combined format

(in person at UNIIM - Affiliated Branch of D.I. Mendeleev Institute for Metrology (VNIIM-UNIIM), Yekaterinburg, Russia, and online via videoconference on the Zoom platform)



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Sergey Medvedevskikh

Chair of COOMET TC 1.12 «RMs»

THE OUTCOME OF THE MEETING AND ADOPTED RESOLUTIONS

Opening of the meeting. Roll call of the participants. Verification of the quorum requirements. Adoption of the Agenda

Dr. Sergey Medvedevskikh, Chair of TC 1.12, opened the meeting. He greeted the Members of TC 1.12 and the experts on RMs from COOMET member countries participating in the meeting, expressed his hope for fruitful cooperation and constructive results of the meeting, verified the presence of a quorum at the meeting in accordance with the requirements of the COOMET Document D5/2021.

The heads of delegations introduced their members. Following the discussion, the Agenda was agreed and adopted ([Annex 1](#)).

Agenda item 1: Information provided by the COOMET President

Dr. Valery Hurevich, COOMET President, greeted the meeting participants and noted the key role of the development and production of reference materials for composition and properties of substances and materials (RMs) in ensuring the uniformity of measurements.

The decision was taken as follows:

To take the information into consideration.

Agenda item 2: Information provided by the Head of the COOMET Secretariat

Mrs. Nadezhda Liakhova, Head of the COOMET Secretariat, informed the meeting participants on the decisions of the extraordinary 32nd meeting of the COOMET Committee (October 26, 2021, online) and the 28th meeting of the COOMET Presidential Council (November 24-25, 2021, online). The presentation is attached.

The decision was taken as follows:

To take the information into consideration ([Annex 2](#)).

Agenda item 3: Information on the current state of metrological activities on RMs in COOMET countries

The meeting participants shared information on the state, problems, most important events and activities on RMs in Azerbaijan, Belarus, Kazakhstan, Slovakia, Russia, Tajikistan and Turkey.

Information in writing is provided by the members of TC 1.12 of Kazakhstan, Russia and Turkey ([Annexes 3.1; 3.2; 3.3 - respectively](#)).

The decision was taken as follows:

To take the information into consideration.

Agenda item 4: Information on RM activities within international organizations ISO/TC 334, OIML TC 3/SC 3, NTCMetr WG RM of CIS EASC

Under this item, the presentations were made as follows:

- The activities of ISO/TC 334 - Mrs. Olga Kremleva, Russia;
- The activities of OIML TC 3/SC 3 - Mrs. Olga Kremleva, Russia;
- The activities of NTCMetr WG RM of CIS EASC - Mrs. Olga Kremleva, Russia.

The decision was taken as follows:

To take the information into consideration ([Annex 4](#)).

Agenda item 5: Report on the activities of TC 1.12 in 2021-2022

Speaker: Mrs. Oksana Anfilatova, Secretariat of TC 1.12

Mrs. Oksana Anfilatova presented the annual report on the activities of TC 1.12 from September 2021 to September 2022 (*Annex 5*).

The decision was taken as follows:

To take the information into consideration

Agenda item 6: Discussion of the progress of COOMET projects on the development of COOMET CRMs

6.1 Project 700/RU/16 Pilot comparisons of CRM for composition of ferric ion solution

6.2 Project 701/RU/16 Pilot comparisons of CRM for composition of copper ion solution

Speaker: Mrs. Olga Kremleva, Project Coordinator

Comparisons have been carried out. Reports and documents have been prepared for circulation among the members of TC 1.12 by correspondence to consider the possibility of recognizing CRMs as COOMET CRMs. Scheduled stages of work: the submission of CRMs to the next COOMET Committee meeting for approval according to the established COOMET procedure.

The decision was taken as follows:

1. To take into consideration the information on the progress of the projects.
2. To request the Secretariat of TC 1.12 to submit reports on comparisons and documents on CRMs to the members of TC 1.12.
3. To request the members of TC 1.12 after receiving the documents (see clause 2 above) to submit their opinions within a month on the possibility of approval of the documents on the CRM for composition of ferric ion solution and the CRM for composition of copper ion solution as COOMET CRMs for submission to the next meetings of the JCS and the COOMET Committee.
4. To request the Secretariat of TC 1.12 to include the CRM for composition of ferric ion solution and the CRM for composition of copper ion solution in **the List of CRMs agreed for recognition as COOMET CRMs** at the COOMET Committee meeting with a positive result of the work performed under clauses 2 and 3 (see above) and taking into account information on a sufficient number of countries that have joined the recognition.
5. To request the Project Coordinator to complete the forms of final reports after the approval of CRMs as COOMET CRMs and send them to the Secretariat of TC 1.12 for further submission to the COOMET Secretariat.

6.3 Project 815/RU-a/20 Conducting comparison tests of certified characteristics of the CRM for composition and properties of coal, OS rank (SO-42) – GSO 10894-2017

6.4 Project 816/RU-a/20 Conducting comparison tests of certified characteristics of the CRM for composition of polymetallic ore of the Quartz Hill deposit (SO-45) – GSO 11039-2018

6.5 Project 817/RU-a/20 Conducting comparison tests of certified characteristics of the CRM for composition and properties of coal, G rank (SO-43) – GSO 10895-2017

Speaker: Mrs. Svetlana Shushunova, Project Coordinator

Projects have been completed:

CRM for composition and properties of coal, OS rank (SO-42)

The indicators of the composition and properties of coal (ash content, mass fraction of total sulfur, actual density, volatile matter yield) have been certified. The values of indicators - higher heating value, mass fraction of phosphorus, mass fraction of total carbon, mass fraction of total hydrogen, mass fraction of nitrogen are included in additional information.

The CRM material was studied in 51 analytical and testing centers in Russia and neighboring countries (Latvia, Ukraine). The data of the interlaboratory metrological certification were used in the calculation of the certified value and its error.

CRM for composition of polymetallic ore of the Quartz Hill deposit (SO-45)

The composition indicators of polymetallic ore (mass fractions of lead, zinc, copper, barium oxide, arsenic, cadmium, cobalt, nickel, titanium oxide, aluminum oxide, silicon dioxide, total iron oxide, total sulfur, manganese oxide, calcium oxide, magnesium oxide, sodium oxide, potassium oxide, gold, silver) have been certified. The value of the mass fraction of phosphorus pentoxide is included in the supplementary information.

The CRM material was studied in 18 analytical and testing centers in Russia and one laboratory in Kazakhstan. The data of the interlaboratory metrological certification were used in the calculation of the certified value and its error.

CRM for composition and properties of coal, G rank (SO-43)

The indicators of the composition and properties of coal (ash content, mass fraction of total sulfur, actual density, mass fraction of phosphorus) have been certified. The values of indicators - higher heating value, volatile matter yield, mass fraction of total carbon, mass fraction of total hydrogen, mass fraction of nitrogen were included in additional information at the time of CRM certification.

The CRM material was studied in 31 analytical and testing centers in Russia and neighboring countries (Latvia, Ukraine). The data of the interlaboratory metrological certification were used in the calculation of the certified value and its error.

Progress reports and documents for the CRM for composition and properties of coal, OS rank (SO-42), CRM for composition of polymetallic ore of the Quartz Hill deposit (SO-45) and CRM for composition and properties of coal, G rank (SO-43) will be submitted for consideration by the members of TC 1.12 to consider the possibility of their recognition as COOMET CRMs.

The decision was taken as follows:

1. To take into consideration the information on the progress of the project.
2. To request the Secretariat of TC 1.12 to submit to the members of TC 1.12 reports on the study of the metrological characteristics of **the CRM for composition and properties of coal, OS rank (SO-42), CRM for composition of polymetallic ore of the Quartz Hill deposit (SO-45) and CRM for composition and properties of coal, G rank (SO-43)**, with the approved documents for CRMs to consider the possibility of their recognition as COOMET CRMs by correspondence **until 30.12.2022**.
3. To request the members of TC 1.12 after receiving the documents (see clause 2 above) to submit their opinions on the possibility of approving the documents for CRMs as COOMET CRMs for their submission to the next meetings of the JCMS and the COOMET Committee.
4. To request the Secretariat of TC 1.12 to include the CRM for composition and properties of coal, OS rank (SO-42), CRM for composition of polymetallic ore of the Quartz Hill deposit (SO-45) and CRM for composition and properties of coal, G rank (SO-43), in **the List of CRMs agreed for recognition as COOMET CRMs** at the next COOMET Committee meeting with a positive result of the work performed under clauses 2 and 3 (see above) and taking into account information on a sufficient number of countries that have joined the recognition.
5. To request the Secretariat of TC 1.12 and the Project Coordinator to carry out a complex of works on the recognition and registration of GSO 10894-2017, GSO 11039-2018 and GSO 10895-2017 as COOMET CRMs in accordance with the requirements of COOMET Recommendations R/RM/4:2008 and R/RM/5:2010.
6. To request the Secretariat of TC 1.12 to provide methodological assistance to the CRM manufacturer in issuing COOMET Certificates for CRMs in accordance with the requirements of the COOMET Recommendation R/RM/22:2020.
7. To request the Project Coordinator to complete the forms of final reports after the approval of CRMs as COOMET CRMs and submit them to the Secretariat of TC 1.12 for further submission to the COOMET Secretariat.
8. To request the Project Coordinator to prepare information for the journal «Measurement Standards. Reference Materials» based on the results of the work performed.

6.6 Project 856/RU-a/22 Development of the CRM for composition of Siberian pine needles (HSS-1) (*Pinus sylvestris*)

Speaker: Mrs. Oksana Anfilatova, Secretariat of TC 1.12

Mrs. Oksana Anfilatova provided information on the progress of work on the project based on data provided by Mrs. Irina Vasilieva, the Project Coordinator. The work on the project has been completed; the report is being prepared, which, together with the documents for the CRM, will be submitted to the Secretariat of TC 1.12 for approval and further submission to the members of TC 1.12 to consider the possibility of recognizing the CRM for composition of Siberian pine needles (HSS-1) as a COOMET CRM. 18 scientific and manufacturing laboratories of organizations from Belarus, Kazakhstan and Russia participated in the experimental studies. The results were obtained by analysts under conditions that ensure metrological traceability. In Russia, the CRM was approved by the order of the Federal Agency for Technical Regulation and Metrology No. 2227 dated 07.09.2022 as a CRM with registration number GSO 11961–2022.

The CRM is intended for calibration, certification, and validation of analytical methods, assessment of the uncertainty of existing and new methods of analysis, regular quality control of the results of studying elemental ratios in environmental media, food and medicinal products, certification studies of new CRMs and qualification tests. The new matrix CRM has no analogues in the world in terms of the number of certified elements and ranges of their content.

The decision was taken as follows:

1. To take into consideration the information on the progress of the project.
2. To request the Project Coordinator to prepare and submit a report on the development of the COOMET CRM together with the approved documents for the CRM to the Secretariat of TC 1.12 for approval and further circulation among the members of TC 1.12 to consider the possibility of recognizing the CRM as a COOMET CRM by correspondence.
3. To request the Secretariat of TC 1.12 to send to the members of TC 1.12 a report on the development of the CRM for composition of Siberian pine needles (HSS-1) (*Pinus sylvestris*) with the approved documents for the CRM to consider the possibility of recognition as a COOMET CRM.
4. To request the members of TC 1.12 after receiving the documents (see clause 3 above) to submit within a month their opinions on the possibility of approving the report and the CRM for composition of Siberian pine needles (HSS-1) (*Pinus sylvestris*) as a COOMET CRM.
5. To request the Secretariat of TC 1.12 to include the CRM for composition of Siberian pine needles (HSS-1) (*Pinus sylvestris*) in **the List of CRMs agreed for recognition as COOMET CRMs** at the next meetings of the JCS and the COOMET Committee based on the results of the work performed under clauses 2-4 (see above) and taking into account the information on the countries that have joined the recognition.
6. To request the Secretariat of TC 1.12 and the Project Coordinator to carry out a complex of works on the recognition and registration of GSO 11961–2022 as a COOMET CRM in accordance with the requirements of the COOMET Recommendations R/RM/4:2008 and R/RM/5:2010.
7. To request the Secretariat of TC 1.12 to provide methodological assistance to the CRM manufacturer in issuing COOMET Certificates for the CRM in accordance with the requirements of the COOMET Recommendation R/RM/22:2020.
8. To request the Project Coordinator to complete the forms of the final report after the approval of the CRM as a COOMET CRM and send them to the Secretariat of TC 1.12 for further submission to the COOMET Secretariat.
9. To request the Project Coordinator to prepare information for the journal «Measurement Standards. Reference Materials» based on the results of the work performed.

6.7 Project 858/RU-a/22 Recognition (registration) of CRMs included in the BIPM KCDB as COOMET CRMs (decision on recognition and registration of 15 types of CRMs in the Register of COOMET CRMs)

Speaker: Mrs. Oksana Anfilatova, Secretariat of TC 1.12

The Secretariat of TC 1.12 and Mrs. Olga Savinkova, a member of TC 1.12 from Kazakhstan, prepared and submit to the members of TC 1.12 a set of documents for 9 types of CRMs for the composition of calibration gas mixtures produced by the Karaganda branch of the RSE «KazStandard», included in the BIPM KCDB, to consider the possibility of recognition (registration) as COOMET CRMs (the set of documents also includes Certificates for COOMET CRMs prepared in accordance with the COOMET Recommendation R/RM/22:2020). As of September 12, 2022, **Armenia, Belarus (4 types), Russia and Slovakia** gave positive responses on the possibility of recognizing 9 types of CRMs of Kazakhstan, included in the BIPM KCDB, as COOMET CRMs.

As of September 12, 2022, **Azerbaijan, Armenia, Belarus, Kazakhstan and Slovakia** gave positive responses on the possibility of recognizing 6 types of CRMs of Russia, included in the BIPM KCDB, as COOMET CRMs (previously presented at the 26th meeting of TC 1.12).

In accordance with the requirements of the COOMET Recommendation R/RM/4:2008 «Procedure for joint development, recognition and registration of certified reference materials within COOMET», **the List of 15 types of CRMs included in the BIPM KCDB and proposed for recognition as COOMET CRMs (Annex 6.7)** was prepared and submitted to the meeting of TC 1.12.

The decision was taken as follows:

1. To take into consideration the information on the work performed on the recognition of CRMs included in the Appendix C of the CIPM MRA as COOMET CRMs

2. To request the members of TC 1.12, who have not sent their opinions yet, to consider **the List of 15 types of CRMs included in the BIPM KCDB and proposed for recognition as COOMET CRMs (Annex 6.7)**, and provide the Secretariat of TC 1.12 with information about the possibility of recognizing 15 types of CRMs of Kazakhstan and Russia, included in BIPM KCDB, as COOMET CRMs.

3. To request the Secretariat of TC 1.12 to carry out a complex of on the recognition and registration in the Register of COOMET CRMs of 15 types of CRMs of Kazakhstan and Russia, included in the BIPM KCDB, as COOMET CRMs in accordance with the requirements of the COOMET Recommendation R/RM/4:2008.

4. To request the Secretariat of TC 1.12 to include CRMs in the List of CRMs agreed for recognition as COOMET CRMs at the 33rd COOMET Committee meeting (October, 2022) based on the results of the work performed under clauses 2 and 3 (see above), and if there is a sufficient number of countries that have joined the recognition.

Agenda item 7:

Project 186/RU-a/99 Programme of joint CRM production within COOMET

Information on the progress of work on updating the Programme of joint CRM production within COOMET (on-going COOMET Project 186/RU/99) was presented by Mrs. Oksana Anfilatova within the report of the Secretariat of TC 1.12 on the implementation status of the CRM projects for the current period (clause 6 of the presented Minutes). She informed on the work performed in 2021-2022 and briefed on the content of the Programme submitted for consideration as of 12.09.2022 (**Annex 7**).

Mrs. Alena Shleyning, Project Coordinator (Krasnoyarsk V.N. Gulidov Non-ferrous Metal Plant, Russia), provided additional information on the Programme projects (Part 2) (**Annex 7.1**).

Mrs. Svetlana Shushunova (JSC «West-Siberian Testing Centre», Russia) presented a new project on comparative tests of certified characteristics for composition and properties of coal, T rank, proposed for joint work within the Programme ([Annex 7.2](#)).

The decision was taken as follows:

1. To take into consideration the information on the progress of work on updating the Programme of joint CRM production within COOMET (COOMET Programme P5).

2. To approve the submitted Draft COOMET Programme P5 «Programme of CRM joint production within COOMET for 2022-2024» as of 12.09.2022 ([Annex 7](#)).

3. To request the Secretariat of TC 1.12 to update the Draft Programme taking into account its consideration at the meeting and submit the updated COOMET Programme P5/2022 «Programme of CRM joint production within COOMET for 2022-2024» for approval at the 33rd COOMET Committee meeting (October, 2022).

4. To request the members of TC 1.12 to promote the work in their countries to identify participants in experimental work on new, proposed projects and prepare additional proposals for the development of CRMs for inclusion in the COOMET Programme P5 and send proposals to the Secretariat of TC 1.12 **by 31.01.2023**.

5. To request the Coordinator of the Project 186/RU-a/99 (Secretariat of TC 1.12) to update the Draft Programme taking into account the proposals received under the clause 4 (see above), and submit an updated version of the Programme to the next meeting of TC 1.12 in 2023.

Agenda item 8: Consideration of COOMET Publications

8.1 Project 857/RU-a/22 Revision of the COOMET Recommendation R/RM/4:2008 «Procedure for joint development, recognition and registration of certified reference materials within COOMET»

Speaker: Mrs. Olga Kremleva, Deputy Chair of TC 1.12

As part of the implementation of the Plan for the revision of COOMET publications on CRMs for harmonization with new ISO documents and implementation of the Schedule of updates of COOMET publications for 2021–2024 (COOMET-31-PS/18), the COOMET Recommendation R/RM/4:2008 «Procedure for joint development, recognition and registration of certified reference materials within COOMET» is being revised. The term of execution is 2021-2023.

The draft of the **new version** of the COOMET Recommendation R/RM/4:___- and the **developed block diagrams** for acquiring the COOMET CRM status were previously submitted to the members of TC 1.12 and to the COOMET Secretariat and presented to the meeting ([Annexes 8.1.1; 8.1.2; 8.1.3](#)) for discussion of the new concept.

The decision was taken as follows:

1. To take into consideration the information on the revision of the COOMET Document R/RM/4:2008.

2. To request the Project Coordinator to update the draft of the new version of the Recommendation taking into account the proposals received at the meeting **by 29.12.2022**.

3. To request the Secretariat of TC 1.12 to circulate the updated draft of the new version of the Recommendation to the members of TC 1.12 for approval **by 30.12.2022**.

4. To request the members of TC 1.12 to consider the updated draft of the new version of the Recommendation and the developed block diagram for acquiring CRMs the COOMET CRM status and send their position **in writing** to the Secretariat of TC 1.12 **by 15.01.2023**.

In case of no response from a member of TC 1.12, the Draft Recommendation will be considered approved by that member.

5. To request the Secretariat of TC 1.12 to submit the updated draft of the COOMET Recommendation R/RM/4: ___ agreed by the members of TC 1.12 for approval by the JCMS for agreement with its members by correspondence **until 16.01.2023**.

6. To request the Secretariat of TC 1.12 to submit the Draft Recommendation and the block diagram agreed by the members of TC 1.12 and approved by the JCMS to the COOMET Secretariat **by 01.02.2023**.

7. To request the Chair of TC 1.12 to present at the COOMET Presidential Council (February, 2023) a new concept for acquiring the COOMET CRM status and the updated draft of the COOMET Recommendation R/RM/4: ___.

8. To request the COOMET Secretariat in case of approval by the COOMET Presidential Council of the updated draft of the COOMET Recommendation R/RM/4: ___ to submit it for approval at the meeting of the COOMET Committee in 2023.

9. To request the Project Coordinator to fill in the final report form after the approval of the updated Recommendation at the meeting of the COOMET Committee and submit it to the COOMET Secretariat.

8.2 Approval and implementation of the Plan for revision of COOMET documents on CRMs for harmonization with the newly issued ISO documents

Speaker: Mrs. Oksana Anfilatova, Secretariat of TC 1.12

The issue of revision of COOMET publications regarding TC 1.12 is stipulated by the COOMET Strategy and Development Program, as well as the Schedule of updates of COOMET publications for 2021–2024 (approved by the decision of the 31st meeting of the COOMET Committee (June 15-17, 2021): COOMET-31-PS/18).

The work on a number of publications on CRMs has been postponed to 2023 until the adoption of the final version of COOMET R/RM/4:___ (**a new concept for acquiring the COOMET CRM status**). The updated Plan for revision was submitted at the meeting ([Annex 8.2](#)).

The decision was taken as follows:

1. To take the information into consideration.
2. To request the members of TC 1.12 to continue the work on updating COOMET publications on CRMs in accordance with the dates established by the Plan for revision.
3. To recommend to the appointed work coordinators to open COOMET projects on the revision of a certain COOMET publication.
4. To request the Coordinator of the work on the revision of the COOMET Document D3/2008 «Memorandum of understanding on the development and use of certified reference materials of composition and properties of substances and materials within COOMET» (BelGIM, Belarus) to submit the first version of the updated document to the Secretariat of TC 1.12 for discussion and further consideration by the COOMET Presidential Council in February 2023 (together with the updated COOMET Recommendation R/RM/4: ___) **until 20.01.2023**.

Agenda item 9: Project 543/RU-a/11 Development and maintenance of the database of COOMET CRMs

Speaker: Mrs. Olga Kremleva, Deputy Chair of TC 1.12

Mrs. Olga Kremleva informed the meeting participants that in May, 2022, the transfer of the COOMET website (www.coomet.org) to the information technology platform of the All-Russian Research Institute of Metrological Service (Russia) was completed with the transfer of its administration to the specialists of this institute. Mr. Ilya Krasavin, Head of the Center for Monitoring and Forecasting of the All-Russian Research Institute of Metrological Service, was appointed as the new administrator of the COOMET website, and he will also be **the new coordinator of the Project 543/RU-a/11** «Development and maintenance of the database of COOMET CRMs» (**together with Mrs. Olga Kremleva**).

In August 2022, an online meeting was held between the Secretariat of TC 1.12, the COOMET Secretariat and coordinators of the projects to discuss the algorithm of actions for maintaining the database of COOMET CRMs, taking into account the change of location and administration of the COOMET website.

The decision was taken as follows:

1. To take the information into consideration.
2. To request the Secretariat of TC 1.12 to reissue the form of the agreed Project 543/RU-a/11 in connection with the change of the information technology platform and the appointment of a new co-coordinator from the All-Russian Research Institute of Metrological Service, and submit it to the COOMET Secretariat.

Agenda item 10:

Information on the progress of the Register of COOMET CRMs

Speaker: Mrs. Oksana Anfilatova, Secretariat of TC 1.12

Mrs. Oksana Anfilatova presented the updated COOMET Information Material I/RM/2:2021 «Register of COOMET CRMs» ([Annex 10.1](#)). 117 types of CRMs are registered in the Register and the database of COOMET CRMs; 20 of them are considered excluded.

In 2022, the state of the Register of COOMET CRMs was analysed in relation to the validity periods of national CRM Certificates. The relevant extension amendments have been made to the Register.

The work has been carried out with the organizations-developers of COOMET CRMs of Russia to exclude from the Register of reference materials, the validity period and expiration date of which have expired, and their extension is not planned.

The List of CRMs proposed for exclusion from the Register of COOMET CRMs was prepared and presented at the meeting ([Annex 10.2](#)).

The decision was taken as follows:

1. To approve the updated COOMET Information Material I/RM/2:2021 «Register of COOMET CRMs (as of 12.09.2022)» taking into account the work performed on the exclusion of CRMs.
2. To request the COOMET Secretariat and the Secretariat of TC 1.12 to submit the updated COOMET Information Material I/RM/2:2021 (as of 12.09.2022) to the materials of the 33rd meeting of the COOMET Committee (October, 2022) and then publish it on the COOMET web resources (website www.coomet.org and portal www.coomet.net).
3. To request the members of TC 1.12 in concert with organizations-developers of RMs to prepare proposals for updating the Register of COOMET CRMs for items related to their countries and submit them to the Secretariat of TC 1.12 **by 01.02.2023**.
4. To request the Secretariat of TC 1.12 to prepare an updated version of the COOMET Information Material I/RM/2 (taking into account additional proposals from the organizations-developers of RMs for the exclusion of CRMs and decisions of the 33rd COOMET Committee on the recognition of new COOMET CRMs) no later than **04.02.2023** for subsequent approval by the COOMET Presidential Council (February, 2023)

Agenda item 11: Any other business

11.1 COOMET training courses in the field of TC 1.12 activity on the BIPM e-learning platform

Speaker: Mrs. Olga Kremleva, Deputy Chair of TC 1.12

Mrs. Olga Kremleva informed the meeting participants that since June, 2022, the COOMET page has been launched on the BIPM e-learning platform (<https://e-learning.bipm.org/>), which hosts COOMET courses in accordance with the Practical Agreement between BIPM and COOMET

signed at the beginning of 2022. The platform is designed to facilitate the e-learning process, and enhance cooperation in capacity building and transfer of knowledge in the field of metrology.

The decision was taken as follows:

1. To take the information into consideration.
2. To request the members of TC 1.12 to submit to the Secretariat of TC 1.12 proposals on training courses in the field of TC 1.12 activity that could be placed on the platform and information on the possibility of providing original presentations for use as material for COOMET courses (indicating the authors and observing all copyrights) **until 25.01.2023**.
3. To request the COOMET Secretariat and the Secretariat of TC 1.12 to organize an online meeting to discuss the received proposals in January-February 2023.

11.2 Date and venue of the next meeting

Speaker: Dr. Sergey Medvedevskikh, Chair of TC 1.12

The decision was taken as follows:

1. To request the members of TC 1.12 to consider the possibility of holding the next 28th meeting of TC 1.12 in the second half of 2023 (approximately in September-October 2022).
2. To request the Secretariat of TC 1.12 to agree on the date and venue of the next 28th meeting of TC 1.12 by correspondence.

In closing the meeting, Dr. Sergey Medvedevskikh, Chair of TC 1.12, expressed his hope that cooperation on CRMs within COOMET will have a good continuation and thanked the participants for their active work, and the COOMET Secretariat for organizing and providing the ZOOM platform for holding the meeting.

Chair of TC 1.12



Dr. Sergey Medvedevskikh