

**ANNUAL REPORT
of Chairperson of COOMET TC 1.9 "Ionizing radiation and radioactivity"**

GENERAL INFORMATION ABOUT COOPERATION IN SUBJECT FIELD

Comparison activity is going on as the main TC direction.

THE CMC REVIEWING

Review of CMCs has been made in framework of the project 175/RU/99 "A status of a measurement standard base in the field of ionizing radiation and radioactivity for the countries – members of COOMET" (S. Korostin, VNIIFTRI).

In the framework of the inter-regional reviewing SIM and EUROMET CMCs were reviewed.

THE PROJECT FULFILLMENT

169/UA/98 – Rn-222 volume activity in air measurement means comparison COOMET.RI(II)-S1.Rn-222. (V.Sklyarov, NSC IM).

The following NMIs participated in the project: NNC IM (Ukraine), BelGIM (Belarus), VNIIFTRI (Russia), VNIIM (Russia), PTB (Germany), RMTC (Latvia).

At the moment Measurement completed and the report Draft A in progress for presentation to 6th TC 1.9 Meeting. The data evaluation technique is developed with help of TC 1.1 Chair Dr A. Chunovkina.

255/Ru/02 "Comparisons of the software (programs - measurement techniques) of scintillate spectrometers for activity measurements" (Yu.Permyakov, VNIIFTRI).

The project is suspended.

318/RU/04 Regional key comparison of national measurement standards of the Kerma in air for the energy of gamma radiation Co-60 COOMET.RI(I)-K1 (L. Buermann, PTB)

The following NMIs participated in the project: VNIIM (Russia), BelGIM (Belarus), PTB (Germany), RMTC (Latvia), SMU (Slovakia), CHPR(Cuba). Dr.Buermann presented Draft A at the 5 TC Meeting. The separation the data on to the two groups was revealed. It is caused by changing of the BIPM reference value. The Draft B will be made after completing proper CCRI comparison.

319/Ru/04 "Comparison measurements of radionuclide volume sources" COOMET.RI(II)-S2.Cs-137, COOMET.RI(II)-S2.Eu-152 и COOMET.RI(II)-S2.Sr/Y90 (S. Korostin, VNIIFTRI)

The following NMIs participated in the project: NNC IM (Ukraine), BelGIM (Belarus), VNIIFTRI (Russia), PTB (Germany), NCM (Bulgaria), CETIC-DMR (Cuba), MoE-ISR (Israel), SMU(Slovakia), RMTC (Latvia). At the present time the measurements is completing and report Draft A for presentation to 5th TC 1.9 Meeting in progress. The draft of "Guidelines for data evaluation of COOMET supplementary comparison" is being tested with the comparisons. Therefore the data of the simplest one COOMET.RI(II)-S2.CS-137 is evaluated at the firsts. The results will be presented to KCWG CCRI(II) and TC 1.9.

359/RU/06 Standardization of Am-241 radionuclide solution COOMET.RI(II)-K2.Am-241 (I. Kharitonov, VNIIM)

The following NMIs participated in the project: VNIIM (Russia), BELGIM (Belarus), CENTIS-DMR (Cuba). Comparison is completed. For traceability to the SIR key comparison reference value an ampoule with 3.6 g of the solution was sent to the SIR. Daft B submitted to CCRI(II) for approval.

NEW COMPARISONS

In accordance with TC the next projects were proposed:

- 386/RU/07 «Standardization of Cs-137 radionuclide solution (key comparison COOMET.RI(II)-K2.Cs-137)» (coordinator – I. Kharitonov, VNIIM)
- 389/RU/07 «Comparison of the well-type ionization chamber (IC) calibrations factors for the medical radionuclides ("Dosecalibrators").» (coordinator S. Korostin, VNIIFTRI)

COOPERATION WITH INTERNATIONAL ORGANIZATIONS

Representative TC 1.9 S. Korostin participated in CMC WG CCRI Meeting 15 November 2006. In particular, TC supplementary comparisons were discussed by the WG

TC 1.9 MEETING

5th TC 1.9 Meeting took place October 2006 in VNIIM (St. Petersburg, Russia).

Except comparisons the next new projects were discussed:

Key comparison of the key comparison of national measurement standards of the Kerma in air for the X-ray radiation;

Standardization of Eu-152 radionuclide solution (key comparison);

Key comparison of the National neutron fluence standards;

Consultations of Uzbekistan for system RI standards optimization.

New coordinators were approved by the Meeting:

- Dr L. Buermann as coordinator for “Dosimetry” sub-field
- Dr N. Moiseev (VNIIM) as coordinator for “Neutrons” sub-field.

6th TC 1.9 Meeting is scheduled in September 2007 in SMU (Bratislava, Slovakia).

Prof. Vladimir Yarina
TC 1.9 Chairman