

**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 6<sup>th</sup> 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 5<sup>th</sup> 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**

5<sup>th</sup> 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.

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

Prof. Vladimir Yarina  
TC 1.9 Chairman