

1. General Aspects

TC-PR had the annual meeting in Warsaw 3. and 4. February 2016 with a Workshop on EMPIR projects prior to the meeting the 2nd of February.

All activities on projects, comparisons and traceability are updated and can be found on the Euramet project website <http://www.euramet.org/technical-committees/search-tc-projects/>.

2. Projects

Consultancy project PR1101 “Future trends in Photometry and Radiometry” changed its title into a permanent project “Strategic planning in Photometry and Radiometry” lead by the TCC. The ongoing work in collaboration and coordination among NMIs is regarded as an important part of this project in the future. For the next meeting in Borås Peter Seitz, WG5 leader of Photonics21 is invited to participate. Photonics21 is one of Europe’s technology platform and WG5 covers security, metrology and sensors.

The research project PR1048 Cryogenic Solar Absolute Radiometer (CSAR) significant improvements have been made in 2015 with an uncertainty of 0.04 %. Comparison between CSAR and the World Standard Group (WSG) has revealed an offset of 0.26 % consistent with a number of other measurements.

3. Comparisons

The following comparisons are ongoing and details can be found on the Euramet project website.

PR 443	1997-09-01	Comparison of Ultraviolet Power Meters	LNE	agreed/started Comparison
PR 619	2001-03-21	Key-Comparison of Spectral Diffuse Reflectance (EUROMET.PR-K5)	MKEH	agreed/started Comparison
PR 1103	2010-06-25	Euramet.PR-K1.a Key Comparison of Spectral Irradiance	NPL	agreed/started Comparison
PR 811	2004-04-01	Traceability of luminous intensity and luminous flux using transfer standard lamps	BEV	agreed/started Comparison
PR 1073	2008-09-01	Bilateral comparison on Spectral regular transmittance	BIM	agreed/started Comparison
PR 1116	2009-09-15	Spectral responsivity in the range from 900 nm to 1600 nm (EURAMET.PR.K2a)	VSL	agreed/started Comparison
PR 1226	2012-09-01	Comparison of Reference Solar Cells	PTB	agreed/started Comparison
PR 1339	2015-09-28	Comparison on Total Solar Irradiance (EURAMET.PR-S6)	PMOD/WRC	agreed/started Comparison

PR 1307	2013-10-01	Bilateral comparisons on transmittance and luminous flux	IO-CSIC	proposed	Comparison
PR 1344	2014-01-15	Bilateral comparison of luminous flux using lamps as transfer standards	LNE	proposed	Comparison
PR 1359	2015-03-15	Bilateral comparison of spectral transmittance using a set of filters as transfer standards	LNE	proposed	Comparison

As a summary following issues is highlighted:

Project PR 811 is a traceability project and is registered as comparison by mistake.

Project PR 1103 is Completed and final report given.

Project PR 1307 is abandoned and registered as that in KCDB.

Projects PR 443, 619 1073 1226, 1339 is expected to be completed in 2016.

Projects PR 1116 and 1359 is in the Pre Draft A Stage and PR 1344 at Pre Draft A stage with issues about registration in KCDB.

As a concluding remark it can be noted that we expect to have very few ongoing comparisons at the beginning of 2017.

4. CMCs

A new batch of CMCs has been under review CMC EURAMET.PR.12.2015. A big batch of 10 laboratories has updated their CMCs. The review process has taken a long time and caused some concern and discussions at the annual meeting in Warsaw. More pressure on reviewers was made to keep the deadlines. The intra RMO review is now complete and the CMCs are in inter RMO review. However, the long indicated review time has caused additional concern on what is acceptable time schedule for reviews. The issue will be raised on the CCPR WG CMC meeting in September.

In the annual meeting there was a decision that Marek Smid is the Convenor of CMCs and supports TCC on harmonizing CMCs within Euramet and CC. Group of CMC reviewers were reviewed and updated in annual meeting.

There is raised an issue of guidelines on how to review CMCs for units and claims outside the KC range. With current practice, acceptance of CMC claims depends on the reviewer. A TCPR group of reviewers is looking into how to harmonize the application of existing CMC review rules.

TC-PR proposes a new service category for luminous intensity.

5. Activities of the Subcommittees

TC-PR has no Subcommittees.

6. Participation in EMRP/ EMPIR

In 2015, the project FuturePhotometry succeeded to be funded within the SI, whereas the continuation project "Precious" for "qu-candela" and "Newstar" did not succeed. Within the normative call also the BRDF failed to get funded.

The TC is involved in the following projects:

EMRP call 2012 SI: SIB57 NEWSTAR
EMRP call 2012 Industry: IND52 xDReflect
EMRP call 2012 Open excellence: SIQUTE
EMRP call 2013 Energy: ENG55 PhotoClass
EMRP call 2013 Energy: ENG62 MESaiL
EMRP call 2013 Environment: ENV53 MetEOC2
EMRP call 2013 Environment: ENV59 atmoz
EMPIR call 2014 Industry: 14IND05 MIQC2
EMPIR call 2014 Industry: 14IND13 PhotInd (partly)
EMPIR call 2015 SI: 15SIBXX FuturePhotometry (In progress)

7. Capacity Building: Activities of the last year and future needs

There has not been initiated any specific capacity building activities within the TC last year.

8. Meetings

The annual TC-PR meeting was held in Warsaw 3. – 4. February 2016. Next meeting in Borås 31st January to 2nd of February 2017.

9. Issues

CMC review process has been slow, but is now on inter RMO review.

10. Strategic Planning

There is established a consultancy project on strategic planning. The project is lead by TCC. In previous meeting TC-PR has identified convenors to support TCC on the strategic planning. The convenors are:

Peter Blattner (METAS) Pre-Normative research, Stefan Kueck (PTB) research for Energy, Nigel Fox (NPL) research for Environment, Gael Obein (LNE) research for Innovation, Giorgio Brida (INRiM) research for fundamental metrology and Jarle Gran (JV) research for SI. The Convenors has contributed to Euramet Strategic Research Agenda.

More focus on Strategic planning will be made in the forth-coming period as collaboration and coordinating efforts among NMIs will be discussed. The convenors will then play an important role to identify current and future needs. The TCC has also invited Peter Seitz, WG 5 leader of technology platform Photonics21, to participate in the next TC-PR meeting in Borås, Sweden. This is also regarded as a part of the Strategic planning to help us identify future need and share workload/ collaboration among NMIs.

It would be beneficial for the TCC to have resources available to cover travel expenses for interacting activities with other organisations (within and outside EURAMET) as a part of the Strategic Planning activities.

11. Outlook for 2016/2017

In the next period, more focus on strategic planning and collaboration among NMIs will be on the agenda. It is foreseen that this work will need to go over several years. The collaboration is expected to take different form depending on the type of collaboration under discussion. It is likely that present and future needs will continue to be the driver for the collaboration amongst NMIs.



EURAMET has agreed to collaborate with ESA. One identified area of collaboration is measurements for Solar Cells. The TP convenor for Energy, Stefan Kueck (PTB) is the contact point to ESA.

As many of the comparisons are ending 2016, new comparisons will be identified as follow ups from the CC-level. To share the workload and follow up previous decisions in TC-PR meeting every laboratory has to be ready to (co-) pilot comparisons. Preparations for that is expected in the forth-coming year.

