Realization of the spectral irradiance Scale in the UV range

Report

Regular Reporting on Subproject Progress
Reporting period: 2nd Semester 2016
Report No: 3

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Abbreviations

INTI: Instituto Nacional de Tecnología Industrial
LES: Laboratorio de Energía Solar
LATU: Laboratorio Tecnológico del Uruguay
CENAM: Centro Nacional de Metrología
IBMETRO: Instituto Boliviano de Metrología
INMETRO: Instituto Nacional de Metrología, Qualidade e Tecnologia
INACAL: Instituto Nacional de Calidad
PTB: Physikalisch-Technische Bundesanstalt

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1. INTRODUCTION

In Latin America the current situation in UV radiation measurements is dissimilar. Only Argentina, Brazil and Mexico have Calibration and Measurement Capabilities (CMCs) in Photometry and Radiometry in the appendix C of the BIPM. Countries such as Peru, Bolivia, Uruguay and Argentina need to develop measurements in photometry and radiometry for the development of new and innovative services in the field of biodiversity and climate protection.

The main objective of this project is acquiring knowledge and expertise, in order to achieve CMC’s in UV radiometry in the region. In Argentina, for example, it will facilitate the possibility to transfer the optical power scale from the cryogenic radiometer to spectral irradiance detectors, obtaining this way the traceability chain to national standards in radiometry.

The following institutions are involved in this projects:

INTI (Argentina)
LES (Uruguay)
LATU (Uruguay)
IBMETRO (Bolivia)
INMETRO (Brazil)
CENAM (Mexico)
INACAL (Peru)
PTB (Germany)

2. PERFORMED ACTIVITIES

1) It was decided by the participants to delay the Training in standard lamps calibration at PTB and join this activity with the Workshop on array spectrometers characterization at PTB in April-May, 2017.

2) The action plan was modified according to item 4.

3) Each participant sent a list of the devices they will dispose for the capacitation.

3. IMPLEMENTATION PROGRESS

INTI, INMETRO and CENAM members that will receive training in UV-VIS standard lamps calibration and array spectrometers characterization are working in their labs in the characterization of their equipment.

It was decided that LATU will participate of the second part the capacitation to be held at PTB (Workshop on array spectrometers characterization).

4. ADJUSTMENT REQUIRED
It was decided to change the date of the first capacitiation to be held at PTB (Training in standard lamps calibration). It will be carried out in April-May, 2017.

5. **NEXT STEPS**

Table 1:

<table>
<thead>
<tr>
<th>What?</th>
<th>Who?</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in standard lamps calibration at PTB. Workshop on array spectrometers characterization at PTB.</td>
<td>Members of INTI, INMETRO and CENAM and LATU. PTB experts.</td>
<td>April-May, 2017.</td>
</tr>
<tr>
<td>FEL standard lamps and solar spectrometers intercomparison at INTI.</td>
<td>Members of INTI, INMETRO and CENAM (and LATU?). PTB experts.</td>
<td>2018.</td>
</tr>
<tr>
<td>Training for INACAL, LATU, IBMETRO and Bolivian university members by INTI experts, at INTI.</td>
<td>Members of INTI, INACAL, LATU and IBMETRO. Two Bolivian university members</td>
<td>2018.</td>
</tr>
</tbody>
</table>

**ANNEX**

See attached files.