Realization of the spectral irradiance scale in the UV range

Report

Regular Reporting on Subproject Progress

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Abbreviations

INTI: Instituto Nacional de Tecnología Industrial
LES: Laboratorio de Energía Solar
CENAM: Centro Nacional de Metrología
IBMETRO: Instituto Boliviano de Metrología
INMETRO: Instituto Nacional de Metrologia, Qualidade e Tecnologia
PTB: Physikalisch-Technische Bundesanstalt
Content

1. Introduction ........................................................................................................................................... 1
2. Performed Activities ............................................................................................................................... 1
3. Implementation progress ....................................................................................................................... 1
4. Adjustment required .............................................................................................................................. 2
5. Next Steps ............................................................................................................................................... 2
Annex ......................................................................................................................................................... 2
1. **INTRODUCTION**

In Latin America the current situation in UV radiation measurements is dissimilar. Only Argentina, Brasil and Mexico have Calibration and Measurement Capabilities (CMCs) in Photometry and Radiometry in the appendix C of the BIPM. Countries such as 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 CMCs 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.

In this project the following institutions are involved:

- INTI (Argentina)
- LES (Uruguay)
- IBMETRO (Bolivia)
- INMETRO (Brasil)
- CENAM (Mexico)
- PTB (Germany)

2. **PERFORMED ACTIVITIES**

1) Three Central meetings were carried out between the participants and the coordinators of the subproject. In those meetings the realization of a workshop at INTI was established (in March 2016), with the participation of PTB experts (with the participation of all members).

2) A survey was disseminated between the participants in order to gather information related to the current situation in the region. The answers were collected and sent to the PTB experts (with the participation of all members).

3) A draft concept of the future workshop was written in collaboration with the participants and the PTB experts.

3. **IMPLEMENTATION PROGRESS**

Currently the project is in its initial steps, and the performed activities described above were oriented to determine the situation of the traceability in UV measurements and identify key candidate methods for the traceability of UV measurements. These should act as reference methods for testing and selecting candidate sectors or applications.
4. **ADJUSTMENT REQUIRED**

None so far.

5. **NEXT STEPS**

| Table 1: |
|----------------|-----------------|---------------|
| **What?** | **Who?** | **When?** |
| Realization of workshop at INTI with all participants and PTB experts. | All members of the project | March 2016 |
| Adjust the operational plan as needed. | All members | After the workshop |

**ANNEX**

See attached files.