Metrology for wearable light loggers and optical radiation dosimeters

Stakeholder Meeting

Introduction to the project

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EURAMET. Neither the European Union nor the granting authority can be held responsible for them.

Co-funded by the European Union

The project (22NRM05 MeLiDos) has received funding from the European Partnership on Metrology, co-financed from the European Union's Horizon Europe Research and Innovation Programme and by the Participating States.

METROLOGY PARTNERSHIP

EURAMET

Introduction to the project

Participants

Roundtable

- Project partners
- Stakeholders

What is a stakeholders?

- Get informed of early results
- Get access to some meetings and materials for feedback
- Get invitations to trainings and other events
- Get the newsletter
- Give feedback and support in communicating the results
- Do what you want, none of these are mandatory

Co-funded by the European Union

The project (22NRM05 MeLiDos) has received funding from the European Partnership on Metrology, co-financed from the European Union's Horizon Europe Research and Innovation Programme and by the Participating States.

METROLOGY PARTNERSHIP
EURAMET

Introduction to the project

Objectives and goals

1. To **develop and validate new characterisation methods**, and define a validated **set of quality indices for wearable optical radiation dosimeters**, with a focus on spectral ranges relevant to daily life (i.e. UV and visible). Their **validation will be performed against lab-based instrumentation** for parameters (e.g. wavelength sensitivity, linearity and angular response) in an intercomparison exercise. The quality indices will be based on those defined by ISO and CIE for illuminance meters and luminance meters. (WP1).
2. To **develop data analysis methods** to verify and **increase the quality of data**, as well as to establish the correlation between different datasets to **improve reproducibility** and make comparisons from different devices more reliable.
3. To **analyse use cases for wearable light loggers based on end user needs**, and to then **produce recommendations** based on those needs on i) **(meta-)data model and data formats**, as well as **summary metric**s and on ii) the **practical use of light loggers**, including device placement, compliance and quality control (WP2).
4. To evaluate the performance of new portable devices able to **measure spatially resolved photobiological quantities** and to **compare them with spatially averaging devices**, to determine relevancy depending on use case. Additionally, to **investigate the shortcomings of current devices** regarding their use and to investigate the benefits and drawbacks of spatially-resolved devices (WP3).
5. To **collaborate with CIE Division 2 and Division 6**, **and the users of the standards they develop** to ensure that the outputs of the project are aligned with their needs, including the provision of recommendations in a form that can be incorporated into future standards at the earliest opportunity. Additionally, to promote the results to other relevant parties such as **lighting experts, chronobiologists and sleep specialist**s through various communication channels available to the participants (WP4).

Objective 5 is right now!

Co-funded by the European Union

The project (22NRM05 MeLiDos) has received funding from the European Partnership on Metrology, co-financed from the European Union's Horizon Europe Research and Innovation Programme and by the Participating States.

METROLOGY PARTNERSHIP EURAMET

MeLi Dos
Metrology for wearable light loggers and optical radiation dosimeters

Contact information

- **WP1: Characterisation methods and quality indices adapted to light/UV logging devices**

WP Leader: Maria Nilsson Tengelin (maria.nilssontengelin@ri.se)

- **WP2: Recommendations for wearable light loggers use based on use case studies: data collection, verification, analysis and summary metrics**

WP Leader: Manuel Spitschan (manuel.spitschan@tuebingen.mpg.de)

- **WP3: Recommendations for future wearable light logging devices: towards spatially-resolved measurements**

WP Leader: Costis Bourroussis (Constantinos.Bourroussis@metas.ch)

- **WP4: Dissemination and Communication**

Coordinator: Fabien Eloi (Fabien.Eloi@lne.fr)

Co-funded by the European Union

The project (22NRM05 MeLiDos) has received funding from the European Partnership on Metrology, co-financed from the European Union's Horizon Europe Research and Innovation Programme and by the Participating States.

METROLOGY PARTNERSHIP

EURAMET