CONSULTATIVE COMMITTEE FOR PHOTOMETRY AND RADIOMETRY (CCPR)

The CCPR mission is to advance global compatibility of **photometric** and **radiometric measurements** through promoting traceability to the SI photometric unit, the **candela**, and associated derived units and related radiometric quantities, enabling Member States and Associates to **make measurements with confidence.**

IMPACT

Behind the third revolution in lighting, and behind SI-traceable data used to study earth resources, the environment and the optical properties of materials, lies the work of the CCPR – with clear benefits for the energy and photovoltaics sectors.

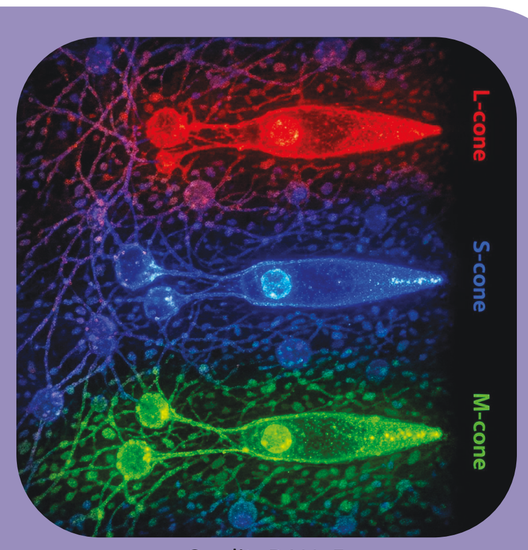


Credit: DALL-E

KEY ACHIEVEMENTS SINCE 2022

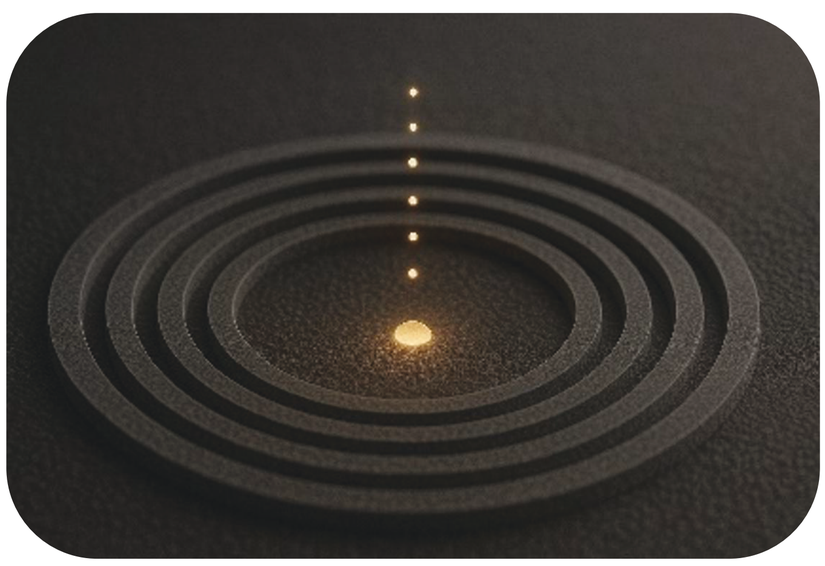
CCPR and CIE joint workshop 100 years of $V(\lambda)$ And the future of photometry

The workshop covered advanced understanding of **cone responses** to visible light and their impact on perception, enabling **future photometric standards and lighting metrology.**



Credit: DALL-E

Towards quantum standards: pilot study of Si-SPADs



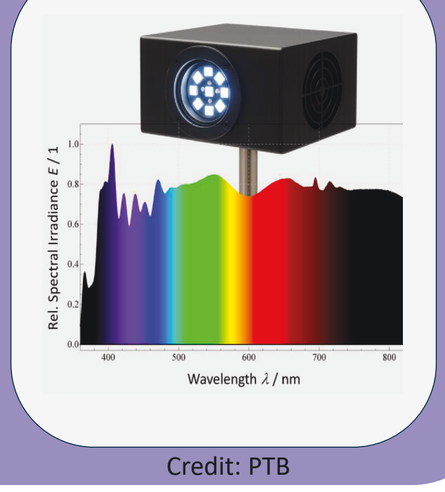
Credit: ChatGPT

Single-Photon Avalanche Diodes are ultrasensitive quantum photodetectors counting individual photons, crucial for quantum computing, communication and storage.

A 2025 **comparison with 11 NMIs** showed good agreement, supporting consistent, comparable international SPAD-based measurements.

Next generation of standard sources

Significant progress in **replacing incandescent lamps as transfer standards,** with multiple CCPR task groups advancing LED-based standard sources across spectral ranges and promoting a shift toward radiometer and spectroradiometer-based realizations.



Credit: PTB