**Objectives**

1. To evaluate electrical properties of concentrating receivers (solar cell and Secondary Optical Element (SOE)) by the system so called CIRCE
2. To present main characteristics of the developed equipment
3. Case-study: evaluation of the gluing process of SOE and cell

**What are the differences between the measuring conditions needed for cells and receivers?**

**CIRCE**

- High irradiance (concentrated light)
- AM1.5D spectrum
- Lamertian illumination

**Receiver (Multi-Junction solar cell and SOE)**

To reproduce the illumination of the Primary Optical Element (POE):
- Modified AM1.5D spectrum (at the entrance of the receiver)
- Non-uniform profiles and angular distribution (at the entrance of the receiver)

**CIRCE: An appropriate system to characterize electrical properties of receivers**

CIRCE system has been developed at the IES-UPM and transferred to the company Solar Added Value (SAV) for commercialization.

**Case-study: Evaluation of gluing process of SOE and cell**

Receivers manufactured by AUREL to be installed into BECAR modules have been characterized by the CIRCE system

The lower the glue height the better the receiver performance (lower losses due to spilling light beyond the cell perimeter)

**Conclusions**

CIRCE system is appropriate to perform a quality control of receivers in production line before being installed in a CPV module