



Experts in Radiation Assurance for Harsh Environments

OUR MATERIALS LABORATORY

We offer a large range of material testing, including:

Environmental tests: Irradiation, Thermal cycling, UV ageing

Sample characterizations: Electrical tests, Optical measurements, Physical analysis, etc.

Particle Irradiation



- Protons from 5 keV to 10 MeV
- Electrons from 80 keV to 4 MeV
- Gammas (Cobalt 60)

UV Irradiation



- In accordance with ECSS-Q-ST-70-06C
- AM0 UV spectrum, acceleration factor up to 6 suns
- In-situ monitoring of UV flux, vacuum pressure and sample temperature

Vacuum & Atmospheric Thermal Cycling



- In accordance with ECSS-Q-ST-70-04C
- Sample size up to 30 cm
- Vacuum facility
 - Pressure down to 1e-5 mbar
 - Temperature from -180°C to +200°C
- Atmospheric pressure facility
 - Inert atmosphere (N or Ar)
 - Temperature from -180°C to +400°C

Characterization Means & Functional Testing



- Visual inspection
 - Optical microscope
 - SEM & X-ray analysis
- Optical measurements
 - Transmission
 - Reflectivity / absorptivity
- Electrical measurements
 - High voltage tests
 - Insulation resistance, conductivity, continuity...

Solar Cell Simulator

Solar cell electrical characterization under AM0 spectrum AAA class sun simulator
I (V) characteristic, Voc, Isc, Vm, Im, Pmax, FF, thermal coef. in +20°C / +70°C temperature range