SCIENCE ET SURFACE

V1

Application note n° 72

Study of photovoltaic multilayers

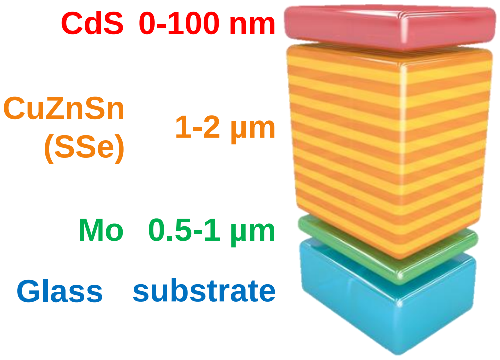
Subject: **Elemental depth pofiles of a multilayer used in photovoltaic application.**

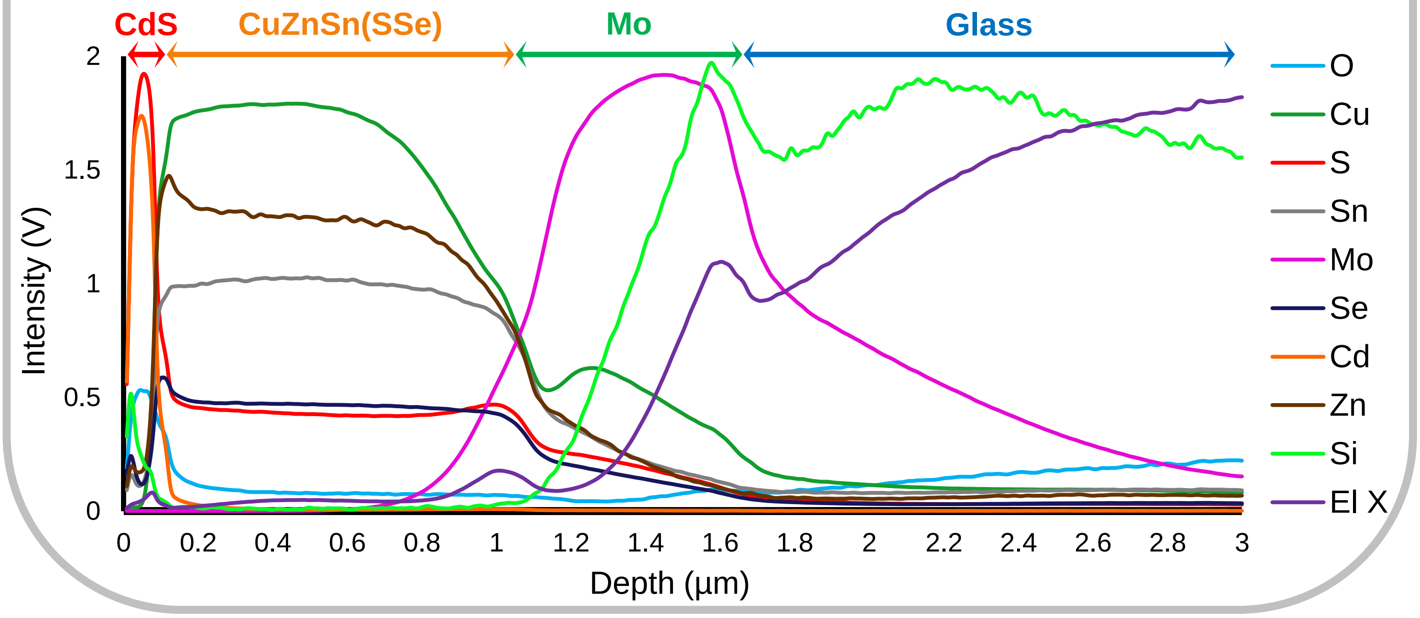
Technique: **GD-OES**

- ✓ **Qualitative depth profiles**
- ✓ **Until a depth of several tens of microns**
- ✓ **Shape and dimensions of the sample: flat surface, diameter > 11 mm**

Results:

- ➢ 3 layers (thicknesses measurements)
- ➢ Elemental composition verification
- ➢ Diffusion between the layers
- ➢ At the interfaces, diffusion of X element
- ➢ Traces detection (0 to 100ppm): C, N, Cl …





Conclusions:

- ➢ **Check of number, thickness and elemental composition of the layers**
- ➢ **Migration/diffusion phenomena between the layers**
- ➢ **Traces detection of potential polluants**