

## **Small and Wide Angle X-ray Scattering as scanning microscopies to study ecosystem, human or animal health problems or to inspect novel smart materials**

*Cinzia GIANNINI - Institute of Crystallography - CNR, Bari, Italy*

Small (SAXS) and Wide Angle X-ray Scattering (WAXS) are techniques long adopted in the last decades. More recently, they have been used as scanning microscopies with quite profitable results in several research fields, e.g. to solve ecosystem health problems (related to nutrition or food safety), human or animal health problems (pandemic or rare diseases, drug design, tumors), or to inspect novel smart materials to be used for energy, electronics, circular economy or cultural heritage protection.

In this lecture, an introduction to these promising microscopies will be given, together with applications to specific fields of interest.