

Synchrotron light for various applications in material sciences

Synchrotrons and other accelerators produce beams of bright X-ray light covering a broad range in energy, from infrared to X-rays. These beams are guided in a beamline to interact with the sample of material to be studied, allowing to investigate structural and dynamical properties of matter as well as analytical techniques in many different fields of science like chemistry, physics, materials, biology, medicine, environment, astrophysics, archeology... The lecture will describe the general functioning of modern synchrotron light sources and will give an overview of the various techniques provided by such facilities.

Classification de thématique: Interactions between light and matter