National Institute of Technology Rourkela

Departmental Seminar

Seminar Title : Impact of Small Angle X-ray Scattering (SAXS) in characterizing Nanomaterials.

Speaker : Prof D K Bisoyi Supervisor : Prof Bharat Kumar

Venue : MC126

Date and Time : 23 Apr 2024 (4:00 PM)

Abstract : Understanding the behavior

: Understanding the behavior of nanomaterials is an important aspect of both Nanoscience & Nanotechnology. Any material, may it be natural or artificial and again living or non-living are being utilized by people across the Globe for at least one of its properties or behavior. Nanomaterial means any material having at least length order of nm to 100nm have many important behavior for application point of view, which are much superior then Bulk & Thin films. So, it is no doubt to find out the reason of such properties in correlation with their structure at nano order scale length. Among many characterizing tools available to us few such as Electron Microscopy, Scanning Tunneling Microscopy etc. Small Angle X-ray Scattering (SAXS) is an superior tool because of its versatile nature to accommodate the materials in any state like solid, liquid & gas. Moreover at a stretch one can able to extract the information on size, shape & surface of Nanoparticles involved in Nanomaterials. Present talk will cover all above aspects of SAXS including its history in the Institute/Department of Physics & Astronomy.