

Readings for Gamma-ray Crystal Spectrometer Experiment

Understand:

1. Beta decay, gamma emission, annihilation radiation.
2. Photomultiplier Tube
3. Sodium Iodide (NaI) Scintillator
4. Compton Scattering
5. For GCS Pulse height analyzer (PHA)

On reserve in library are several copies of:

W.R. Leo, Techniques for Nuclear and Particle Physics Experiments, Springer, 1994.

Chapter 1- Beta decay, gamma emission, annihilation radiation

Ch 7 Scintillation Detectors, especially 7.1 General Characteristics, 7.3 Inorganic Crystals

Ch 8 Photomultipliers

Ch 9 Scintillation Detector Mounting and Operation

Ch 15 P303-310 Pulse Height Selection and Coincidence Technique –Multichannel analyzer

P 52 Compton Scattering

Most of these topics are also covered in Knoll, G. F., Radiation Detection and Measurement, which is also on reserve.