

Abstract

Radiation is commonly used in many branches of every day life. Applications of ionization radiation sources in wide range of energy as well as precise detectors cover a number of areas, from basic research, medical treatment, industrial processing, environmental protection, non-destructive testing to safety and security. Accelerator and X-ray tube based techniques are increasingly used in luggage and cargo inspection, smuggling detection of explosives and of nuclear materials. The development of new technologies and new features of “classical” machines can be observed recently with the same, well known physics inside.

This report is intended to provide the readers with newly developed at NCBJ experimental stand for cargo screening tests, equipped with linear interlaced-energy accelerator.