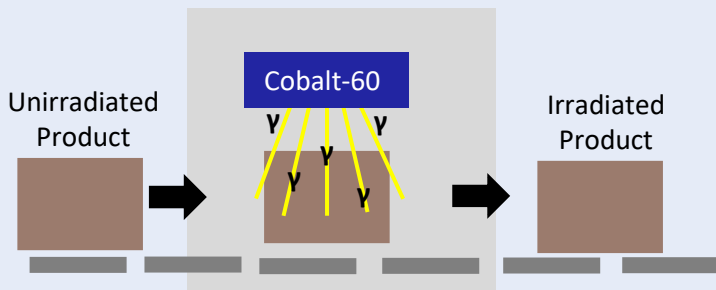


GAMMA IRRADIATION SERVICES

Philippine Nuclear Research Institute is the pioneer in offering irradiation services in the Philippines. The Multipurpose Gamma Irradiation Facility of PNRI has demonstrated radiation processing using gamma-rays in industry and research sectors for a wide range of applications.

What is Irradiation or Radiation Processing?

Irradiation is the process of utilizing high energy waves like gamma rays for physical, chemical and biological modification of a material.



Advantages of Radiation Processing

- ✓ No heat applied (Cold Process)
- ✓ No harmful toxic residues
- ✓ Products can be irradiated in its final packaging

Common Misconception

Materials DO NOT become radioactive when irradiated

SELF-SHIELDED GAMMA IRRADIATORS

The PNRI has two self-shielded gamma irradiators used for the irradiation of small volume of samples. Gammacell-220 is used for the irradiation of samples that require low doses. Ob-Servo Sanguis irradiator can be used for R&D samples that require higher doses. It can be used for decontamination, sterilization, polymer modification and sterile insect technique.



GAMMACELL-220



OB-SERVO SANGUIS



MULTIPURPOSE GAMMA IRRADIATION FACILITY

The first and only semi-commercial facility in the country that can accommodate bulk products. It is currently being upgraded to a commercial-scale, four-pass, fully automated batch/continuous tote box type irradiator.

APPLICATIONS:

- Sterilization of medical and pharmaceutical products, packaging materials, tissue grafts etc.
- Decontamination of spices, dried / dehydrated herbs, frozen products, cosmetic raw materials etc.
- Polymer modification
- Sprout inhibition of agricultural crops & quarantine treatment of fruit and vegetables
- Plant mutation breeding & sterile insect technique

For inquiries:

Irradiation Services Section

Nuclear Services Division - Philippine Nuclear Research Institute

Department of Science and Technology

Email: irradiation_services@pnri.dost.gov.ph Tel No.: 8929-6011 to 19 loc 248 / 243

Read more at:

www.pnri.dost.gov.ph

