

PHOTONUCLEAR TECHNOLOGIES FOR MEDICAL ISOTOPE PRODUCTION



Radiochemical laboratory

Areas of Application

^{99m}Tc , ^{67}Cu , ^{95m}Pt are medical isotopes for diagnostics and therapy of diseases, including cancer

Specification

Daily yield of medical isotopes:

^{99m}Tc : 1 – 4 Ci

^{67}Cu : 0.3 Ci

^{195m}Pt : 50 – 100 mCi

Stage of Development. Suggestion for Commercialization

IRL5, TRL5

Seeking investors for preclinical, clinical trials and production

Advantages

The photonuclear production technology is an environment friendly technology. It doesn't require using nuclear reactors for isotope production and will compensate for a production decline that can be a result of shutdown of research nuclear reactors. Ukraine does not have its own production of medical isotopes. ^{99m}Tc is one of the most common isotopes for diagnostics of cancer, cardiac diseases, etc. ^{67}Cu , ^{195m}Pt are promising isotopes for the creation of new radio pharmaceuticals

IPR Protection

IPR3

Contact Information

Serhii G. Pugach, National Science Center "Kharkov Institute of Physics and Technology";
+38 057 335 68 43, +38 057 349 10 49, e-mail: pugach@kipt.kharkov.ua