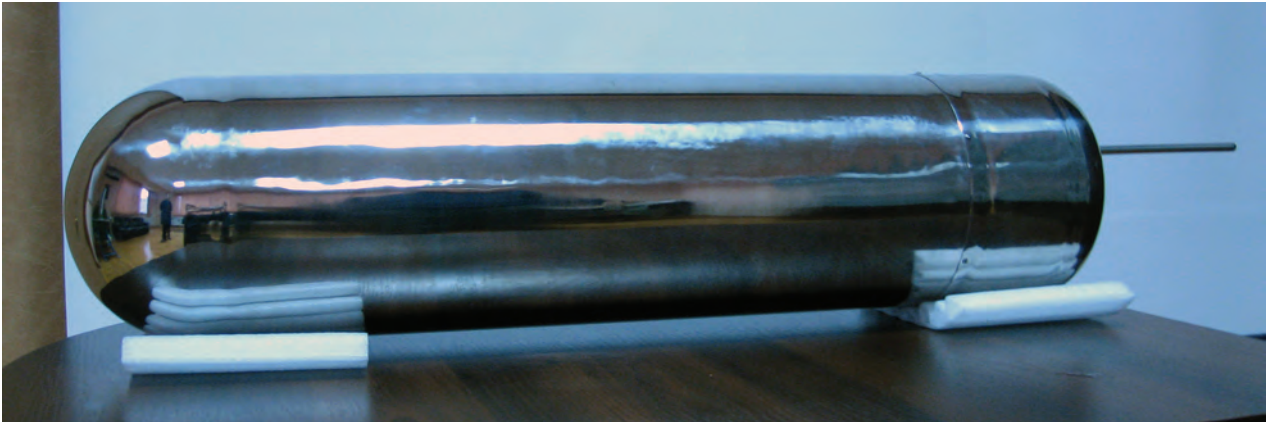


PORTABLE FAST NEUTRON GENERATOR



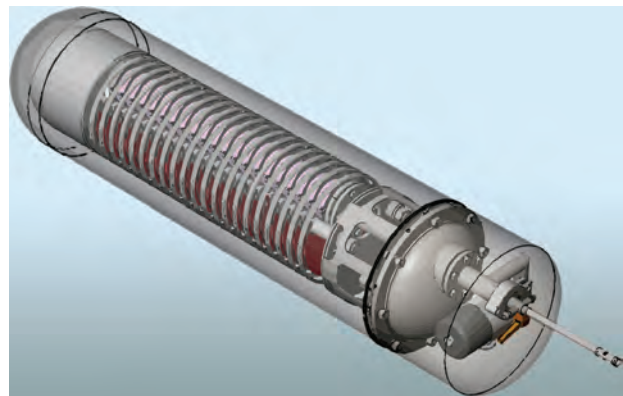
Portable fast neutron generator (prototype in operation)

Areas of Application

The device is to be used in medicine for brachytherapy of rectum cancer, uterine cancer etc., and for neutron therapy

Specification

Power consumption, W	120 (220 V or 48 V)
Neutron flow, n/s	$3 \cdot 10^9$
Deuteron acceleration voltage (max), V	$6 \cdot 10^5$
Deuteron current, mA	30–35



Portable fast neutron generator

Advantages

The portable fast neutron generator is an alternative to research nuclear reactors used for neutron therapy. Due to its mobility and significant reduction in infrastructure and equipment cost both at the construction and at the commissioning stages, the neutron generator opens new opportunities for creating neutron therapy clinical departments

Stage of Development.

Suggestion for Commercialization

IRL3, TRL4

Preparation of prototype for preclinical/clinical trials; seeking partners for licensing and certification of the neutron generator as medical device, serial production and introduction to Ukrainian and foreign markets

IPR Protection

IPR1

Contact Information

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