# Compact linac based neutron generator

T.V. Kulevoy

ITEP – NRC Kurchatov institute

Moscow Russia

Email: kulevoy@itep.ru

The 13 MeV 162.5 MHz linac for acceleration of 100 mA pulsed proton beamis under development at ITEP. The beam pulses with length of 100μs will be accelerated with repetition rate 100 pulses-per-second (1% duty factor). The linac is designed for the DARIA project (neutron source Dedicated to Applied Research and Industrial Applications) – directed to the development of compact neutron generators for Universities, Scientific Centres and Industry [1]. The facility detailed description including linac, neutron generation target and neutron channels are presented.

Work financially supported by Ministry of Science and Higher Education of the Russian Federationin framework of Agreement No.075-15-2021-1358 from 12 October 2021.

References

1. GRIGORIEV, S., IASHINA, E., PAVLOV, K., Spin-echo Small Angle Neutron Scattering for a Compact Neutron Source Daria, J. Synch. Investig. 13(2019), 1132–1134. https://doi.org/10.1134/S1027451019060314