THE POSSIBILITY OF BORON NEUTRON CAPTURE THERAPY OF MALIGNANT TUMORS AT KIEV RESEARCH NUCLEAR REACTOR

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The possibility of neutron source design for boron neutron capture therapy (BNCT) at Kyiv research nuclear reactor is analyzed. It is necessary to rebuild the thermal column for construction of such a source. The basic features of proposed reconstruction are presented. In accordance with estimation, in respect to its parameters the source will meet the requirements of BNCT on a level of the best sources existing or planned abroad. Proposed reequipment of the thermal column has no influence upon safe functioning of the reactor. Appearance of the proposed neutron source will set up the conditions for developing the center of malignant tumor therapy on the base of Kyiv research reactor.