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Boron Neutron Capture Therapy Implementation At Research Reactor: Physical And Biological Aspects.

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ABSTRACT

Boron Neutron Capture Therapy (BNCT) is a promising cancer treatment modality that utilizes thermal neutrons to induce tumor cell death in less toxic environment. Research reactor is one of the reliable neutron sources for BNCT implementation. The use of research reactors has allowed researchers to optimize treatment parameters and develop more effective neutron capture agents. This review will focus on the physical and biological aspects of BNCT implementation at research reactor. The aim is to propose TRIGA PUSPATI Reactor as a neutron source for BNCT procedure