

Opportunities for using the IEA-R1 reactor in nuclear applications

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The IEA-R1 nuclear research reactor is a pool-type reactor that has been in operation at the Institute for Energy and Nuclear Research, IPEN, at the University of São Paulo-USP main campus since the 1950s. The IEA-R1 reactor, which is Brazil's largest source of neutrons, can be used in a variety of nuclear applications when operating at the maximum power currently allowed, 5 MW. Irradiations in the reactor core aimed at producing radioactive sources and neutron beam studies can both be performed and generate competitive data. Upgrades to the reactor's equipments and a plan to extend the operational cycle to nine days in a row are ongoing. These actions should attract additional customers and create new opportunities for the IEA-R1 in nuclear applications.