

भारत सरकार/Government of India
परमाणु ऊर्जा विभाग/Department of Atomic Energy
विकिरण एवं आइसोटोप प्रौद्योगिकी बोर्ड/Board of Radiation & Isotope Technology

विआप्रौबोबीएआरसी वाशी कॉम्प्लेक्स/
BRIT/BARC Vashi Complex,
सेक्टर-20/Sector-20, वाशी/Vashi,
नवी मुंबई/NAVI MUMBAI - 400 703.

सं/Ref: विआप्रौबो/BRIT/सत/Vig/सं/Parl/2021/ 209

August 05, 2021

Sub: Forwarding of Lok Sabha provisionally admitted Unstarred Question Dy. No. 10328 for answer on 11.08.2021.

उपरोक्त विषय पर पऊवि के दिनांक 03.08.2021 के पत्र की संदर्भ लें। Reference is invited to DAE letter dated 03.08.2021 on the captioned subject.

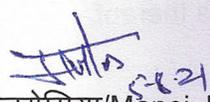
विआप्रौबोर्ड से संबंधित अपेक्षित जानकारी इस प्रकार है। The requisite information in respect of BRIT is as follows:

Sl. No.	Question	Reply
(a)	Whether cases of scientists/employees working in various nuclear plants as well as the local people coming into contact with atomic radiation have come to light	Not applicable
(b)	If so, the details thereof during the last two years	Not applicable
(c)	The remedial measures taken by the Government in this regard	Not applicable
(d)	Whether wide use of nuclear energy is proving to be a boon in the fields of medical treatment and agriculture	Yes
(e)	If so, the details thereof,	(1) Radioisotopes are widely used in the form of sealed radioactive sources and radiolabeled pharmaceuticals (radiopharmaceuticals) towards treatment of diseases. BRIT is the major producer and supplier of sealed radioactive sources and radiopharmaceutical products for cancer treatment to hospitals in the entire country. Iodine-131 radiopharmaceuticals which comprise majority of the radiopharmaceuticals used for treatment are employed for treatment of thyroid cancers and thyroid related disorders. BRIT supplies ~600-700 Curie (Ci) of I-131 radiopharmaceuticals annually to Nuclear Medicine (NM) Centres. BRIT is also the major supplier of Lutetium-177 (177Lu) based radiopharmaceuticals (177Lu-DOTA-TATE and 177Lu-PSMA*-617) for cancer treatment. During 2020-21, 350 consignments (~60 Ci) of 177Lu-DOTA-TATE and 125 consignments (~24 Ci) of 177Lu-PSMA were supplied for neuroendocrine tumor therapy and prostate cancer therapy respectively to NM centres. BRIT also launched supply of Ruthenium-106 eye plaques for treatment of ocular cancers.

		<p>There are close to 350 NM centres operational in the country utilizing these radiopharmaceutical products supplied by BRIT for patient treatment, mainly for cancer. BRIT is in the forefront of production of a variety of radioisotopes/ radiopharmaceuticals for medical treatment and has ensured the availability of the radiopharmaceuticals for medical treatment at affordable costs, serving thousands of patients annually.</p> <p>(2) Nuclear energy from Cobalt-60 (Co-60) source is being used in Gamma Radiation Processing Plants for preservation of agricultural products such as dry spices, cereals and pulses and onions. It is also used for quarantine treatment of mangoes for export purpose. (for medical treatment matter, inputs may be obtained from Radio-pharmaceutical production group)</p> <p>(3) Nuclear energy is proving to be boon in the fields of medical treatment and agriculture. BRIT is associated with assemble, test, commission and supply of two radiation technology equipments viz.</p> <p>(i) Blood Irradiator which is used for irradiating blood before administering it into immune deficient patients like cancer, thalassemia and AIDS patients. Nowadays, blood irradiation is mandatory before administering into patients. BRIT fabricates and supplies high dose rate source assembly which is used for brachytherapy treatment for cancer.</p> <p>(ii) Research irradiator, which is used to irradiate agriculture product, seeds for R&D purpose and for producing high yield seeds.</p> <p>BRIT is using Co-60 and Cesium-137 (Cs-137) radioactive isotopes for blood irradiator, Co-60 source for research irradiator and Iridium-192 source for brachytherapy treatment. In all the utilities gamma radiation is used as the source nuclear energy.</p>
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(* PSMA – Prostate-Specific Membrane Antigen)

यह मुख्य कार्यकारी, विआप्रौबोर्ड के अनुमोदन से जारी किया जाता है। This is issued with the approval of Chief Executive, BRIT.


(मनोज जगसिया/Manoj Jagasia)

प्रशासनिक अधिकारी - III/Administrative Officer - III

Tel. No. 022-2788 7014

अवर सचिव/Under Secretary,
संसद अनुभाग/Parliament Section,
पऊवि/DAE, अणुशक्ति भवन/Anushakti Bhavan,
छ.शि.म. मार्ग/C.S.M. Marg, मुंबई - 1/Mumbai - 1.