ID: Type: **Poster**

to Reduce Emission of Radioactive Noble Gases via Hydrogen

The Fission Radioisotope Production Plant of Argentina, located at the Ezeiza Atomic Center, produces Mo 99 since 1985, irradiating targets with High Enrichment Uranium. In 2002 the targets have been changed by Low Enrichment Uranium. Facilities that produce radioisotopes by fission are considered one of the largest emitters of radioactive noble gases into the environment. The increase of the background of radioactive noble gases and particularly the Xe-133 does not favor the rapid detection of an undeclared nuclear explosion, a task carried out by the monitoring stations of the CTBTO in different parts of the planet. The poster describes the process of production of radioisotopes by fission, the dissolution of the targets with uranium in an alkaline medium and the generation of hydrogen. The emission of noble gases via hydrogen will be analyzed, the different devices to retain it and / or reduce it and a comparative study of them, its characteristics, advantages and disadvantages.

Primary author: CARRANZA, Eduardo Carlos (Comision Nacional de Energía Atómica)

Presenter: CARRANZA, Eduardo Carlos (Comision Nacional de Energía Atómica)

Track Classification: Theme 2. Events and Nuclear Test Sites