

NTC – SHESTCO

Sheda Science and Technology Complex Abuja, FCT, Nigeria



Gamma Irradiation Facility



Central Workshop

The **Sheda Science and Technology Complex (SHESTCO)** was established by the Nigerian Government as a national centre of excellence to provide an attracting environment for high level research by laboratories and plants equipped with state- of- the- art facilities at various technologies and sciences. The complex is aimed to attract post- graduates and post- docs from Nigeria’s universities, but experts from other research institutes and the industry as well, to perform their research or to supplement their education using the facilities at Sheda. For the nuclear part of the complex (NTC- SHESTCO), a turn key supply contract had been awarded to Siemens’ subsidiary Interatom, now performed by the legal successor Framatome ANP.



Visit of the Nigerian President O. Obasanjo, May 2001



Visit of Peace Nobel Prize Winner Dr. M ElBaradei, IAEA, January 2005

The current scope of supply of the NTC- SHESTCO comprises the following plants:

- **Gamma Irradiation Facility** (commissioned and handed to the customer 2005)
 - Radiation source: Double SS-encapsulated Co 60 with 3.7×10^{16} Bq

- Conveyer capacity: 2×450 kg per carriage; 45 tons per day maximum
- Fields of application: Food preservation; sprout inhibition; sterilization of medical equipment and tools; cross linking of plastics; fighting of disease- spreading insects by male sterilization; etc.
- **Central Workshop** (under installation of the equipment)
 - Versatile workshop with dominant mechanical part
 - Supplementary departments for electrics, electronics, glass blowing, joiner's shop
- **Power Supply Station** (one third ready for operation)
 - Diesel generator output: 2×750 kVA (commissioned) + 2×1.5 MVA
- **Site Infrastructure** (mostly completed)
 - Water supply station, wells, streets, etc.

The future expansion of the NTC-SHESTCO shall comprise a 7 MW-Research Reactor, a Radioisotope Laboratory and a Waste Facility, which will safely store all radioactive materials inside Nigeria.