

**Field Trip to
Nuclear Fuel Complex, Hyderabad
6th August 2019
Department of Physics & Electronics**



Staff and Students at KBN college campus in the morning





Our Staff with Resource person at NFC



REPORT

6th August is most significant day in the history of world as well as in the history of Science positively or negatively. Because it is the day which revealed the concept of nuclear fission in the form of atom bomb to the public through the disaster of Hiroshima and Nagasaki.

A bad always follows good. From that moment the creamy layer started to think about the utilisation of nuclear fission phenomena for the benefit of mankind. The result is the invention of nuclear reactor which is alternative source for electricity generation.

For any nuclear reactor fuel is the basic need. To provide the unique facility for manufacturing of enriched uranium fuel and core components of nuclear reactor, the Govt. of India established Nuclear Fuel Complex in 1971 in Hyderabad.

Hence the Department of Physics and Electronics organised a field trip to NFC on 6th August 2019, which is the significant day in the history of nuclear physics.

First we were given a brief explanation by the concerned authorities about the working and functions of NFC through a video. Later we went to fuel extraction section. In this section we observed how uranium is extracted from ore and how it is prepared as pellets. They also explained how the pellets are filled in Zr tubes and the process of bundling the Zr tubes. The process of loading Zr tubes into a reactor is also explained by the concerned authorities.

If there is no proper maintenance environment will be definitely be polluted due to nuclear products. NFC is maintaining the waste management, health and safety measures in an extraordinary way with the co-ordination of Health Physics unit, Safety Engineering Division and Environment & Pollution Control Group.

NFC is the greatest asset of our country in not only supporting the nuclear power programme but also in developing a large number of allied and ancillary industries.

We feel proud to visit a prestigious place. We are thankful to our management to permit us and the authorities of NFC for permitting us to visit NFC.