

## Integral Test Facility for Safety Studies, Jadavpur University, Kolkata

**The Objective:** Study of thermal-hydraulic phenomena related to LOCA specific to PHWR, for model development, model validation and resolving issues. An Integral Test Facility for Safety Studies (ITFSS) has been fabricated where three different separate effect test are planned namely

- (a) PHWR 220 MWe specific channel blowdown and in-core LOCA,
- (b) Clad heatup behaviour during initial phase of LOCA and
- (c) large scale Molten Fuel Coolant Interaction can be studied.

The first two experimentation is to generate data for safety analysis code validation and the third experiment is to find out the loading that the neighbouring channel may experience from a single channel melt down condition. Nevertheless the generated data from the third experiment was planned to validate CFD code developed for molten fuel coolant interaction specially developed for PHWR.

