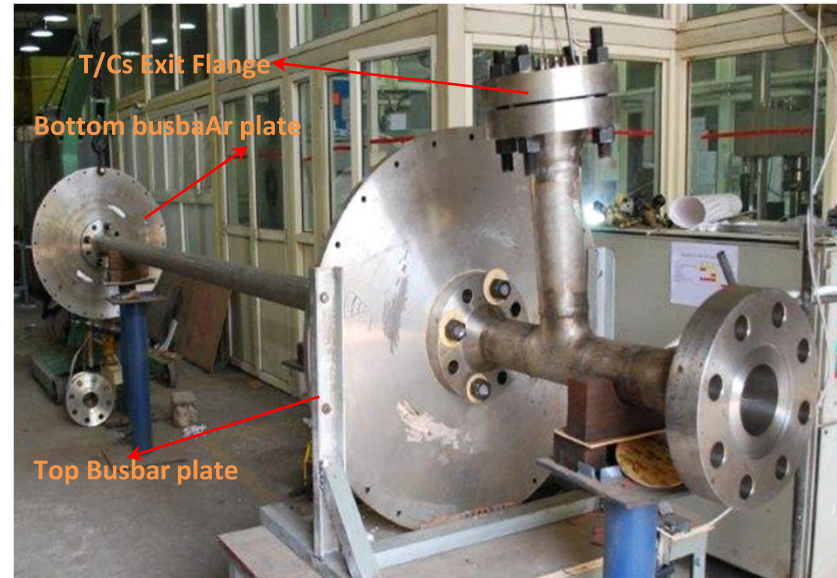
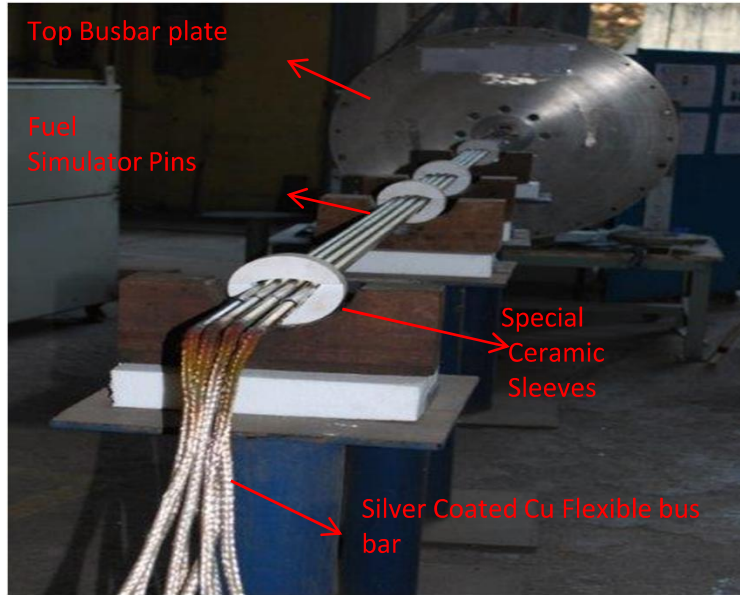
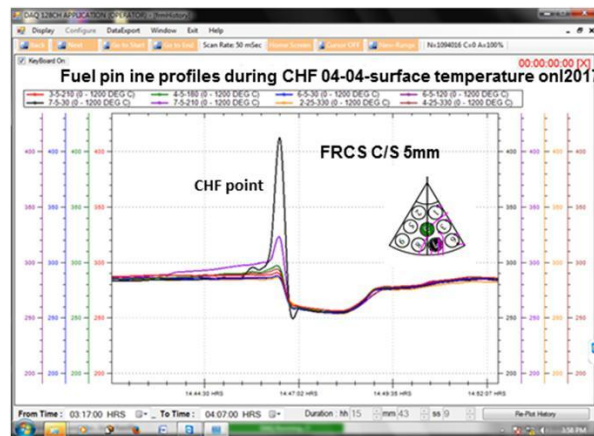
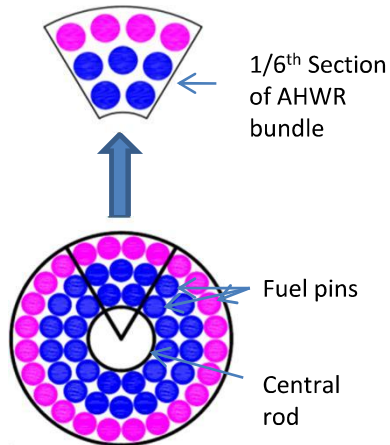


Development of Instrumentation for Rod Bundle Critical Heat Flux (CHF) Detection in AHWR fuel cluster



Fuel Rod Cluster Simulator



Achievements

- CHF data was successfully generated in one-sixth sector of AHWR bundle at AHWR operating conditions using surface mounted thermocouples technique. The T/Cs need to be closely spaced near the high quality zone. CHF was found to occur at the exit of the T/S.
- Around 40 CHF data has been generated in 1/6th FRCS.
- AHWR Critical power is 4190 kW with standard deviation of 5.32 % for mass flux range of 750 to 850 kg/m²s.