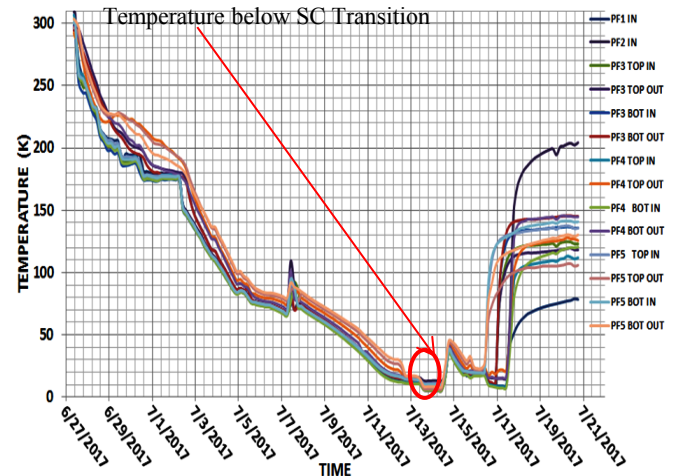
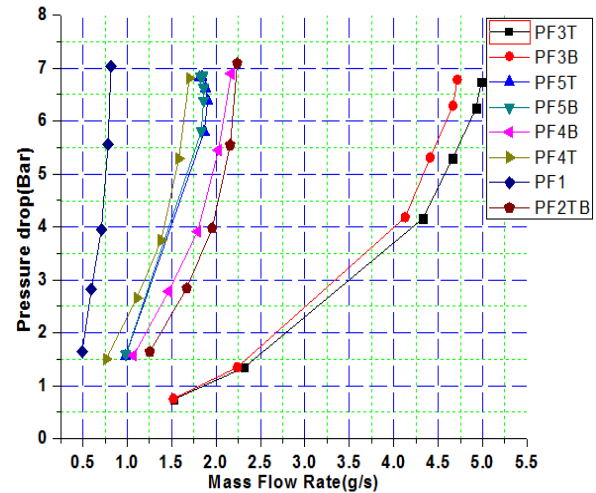
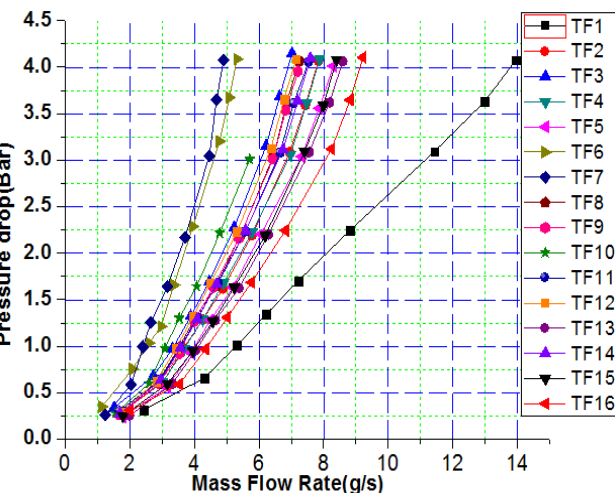
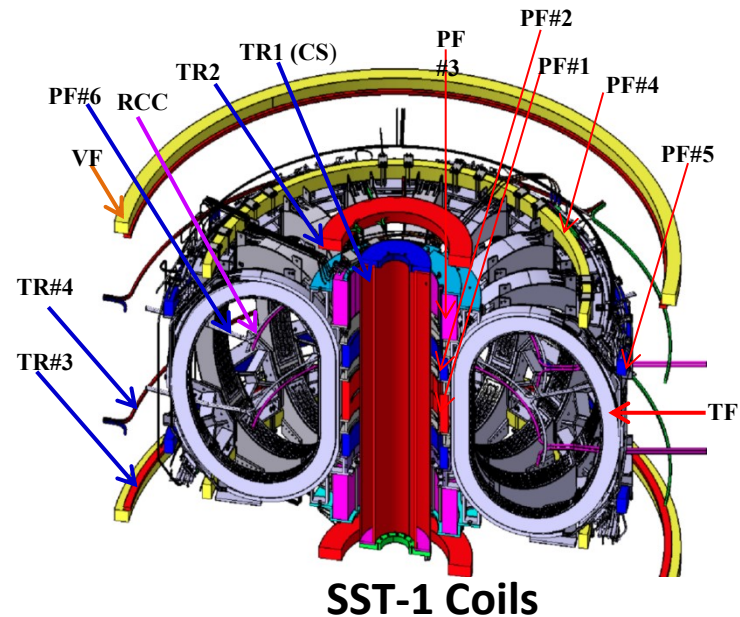


Thermal-hydraulic Characteristics Study of Superconducting Magnets of SST-1 ID: FIP/P7-9

U.Prasad et al.

- SST-1 consists of sixteen TF and nine PF superconducting(SC) coils
- Pressure drop of Toroidal Field(TF) coils measured at RT
- Pressure drop of Poloidal Field(PF) coils measured at RT
- Flow imbalances observed on PF coils due to different hydraulic path lengths
- PF coils sub-divided hydraulically in three groups
- PF coils cooled down below superconducting transition after regrouping
- Re-grouping and heat loads optimization led PF coils cooled down below SC transition temperature



Pressure drop and mass flow measurement results of TF and PF coils

Temperature profile of PF coils