

SUMMARY SLIDE

TITLE:

STUDIES ON HIGH TEMPERATURE VACUUM BRAZING OF TUNGSTEN TO TUNGSTEN ALLOY MATERIALS FOR DEMO DIVERTOR APPLICATION

- Joining of W to W, Joining of W to W alloy (WL10) have been performed in high temperature vacuum brazing technique by suitable filler materials.
- The brazed joints have been characterized by the suitable characterization techniques which includes:
 - (i) Non-destructive testing - Ultrasonic NDT,
 - (ii) Metallography study – SEM, EDAX,
 - (iii) Mechanical testing of the joints - shear measurement, micro-hardness measurement,
 - (iv) Thermal fatigue test for 500 nos. of cycle at operational temperature (950°C) in Gleeble system
- The experimental methodology and results of the characterization will be presented in the paper.