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.