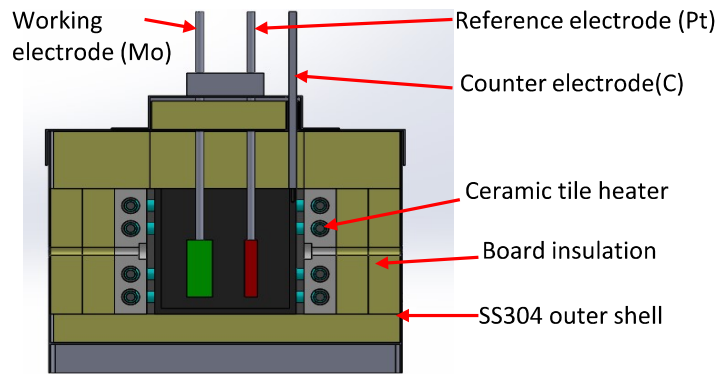


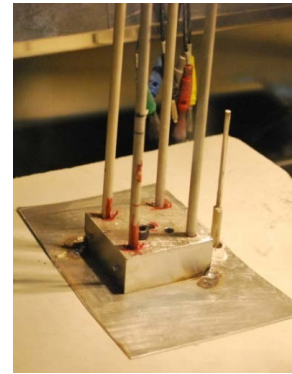
Molten fluoride salt purification facility



Schematic of fluoride salt purification facility



Graphite crucible containing molten fluoride salts



Electrode assembly

- ❖ Electrochemical purification facility based on a three electrode system has been developed
- ❖ Cyclic voltammetry test of salt were conducted before & after purification
 - $O^{2-} \rightarrow O + 2e^-$ At graphite crucible, reacts with graphite to escape as CO_2
 - $Cr^{2+} + 2e^- \rightarrow Cr$
 - $Ni^+ + e^- \rightarrow Ni$ } Deposited at cathode, removed by surface cleaning
- ❖ Facility has been installed and commissioned inside an inert gas glovebox, with oxygen and moisture content below 1 ppm each.
- ❖ Purification of IMSBR coolant salt (FLiNaK) was carried out.