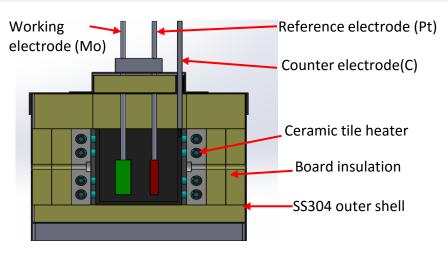
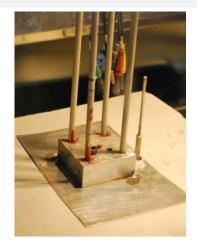
Molten fluoride salt purification facility



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

 $0^{2-} \rightarrow 0 + 2e^{-}$ At graphite crucible, reacts with graphite to escape as CO_2

 $\begin{array}{c} Cr^{2+} + 2e^- \rightarrow Cr \\ Ni^+ + e^- \rightarrow Ni \end{array}$ 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.