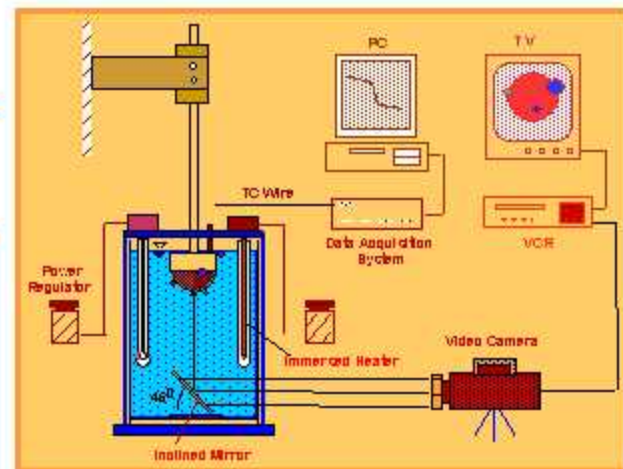
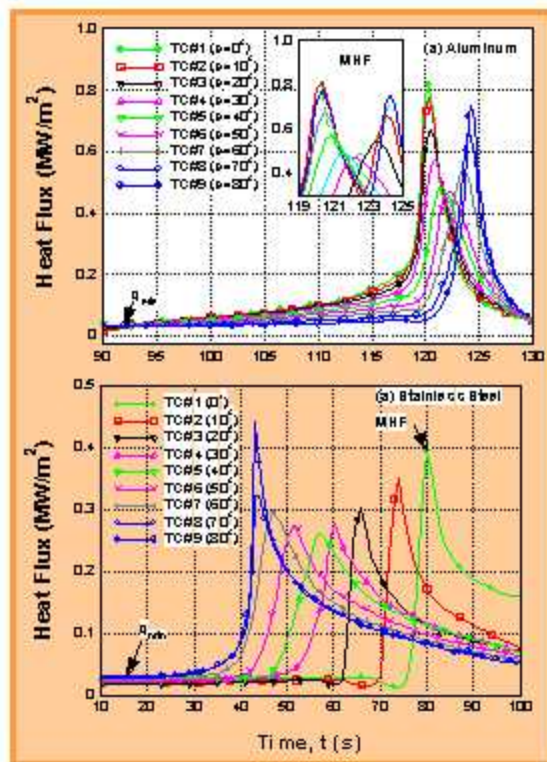
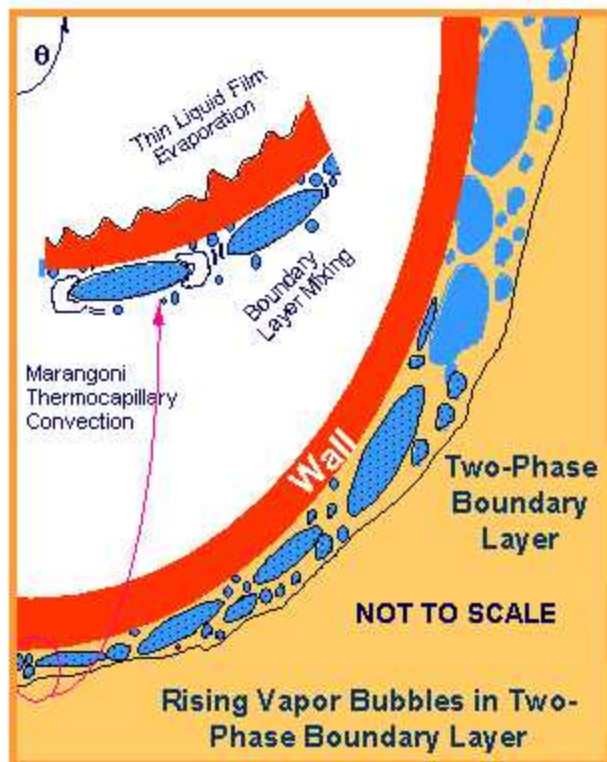


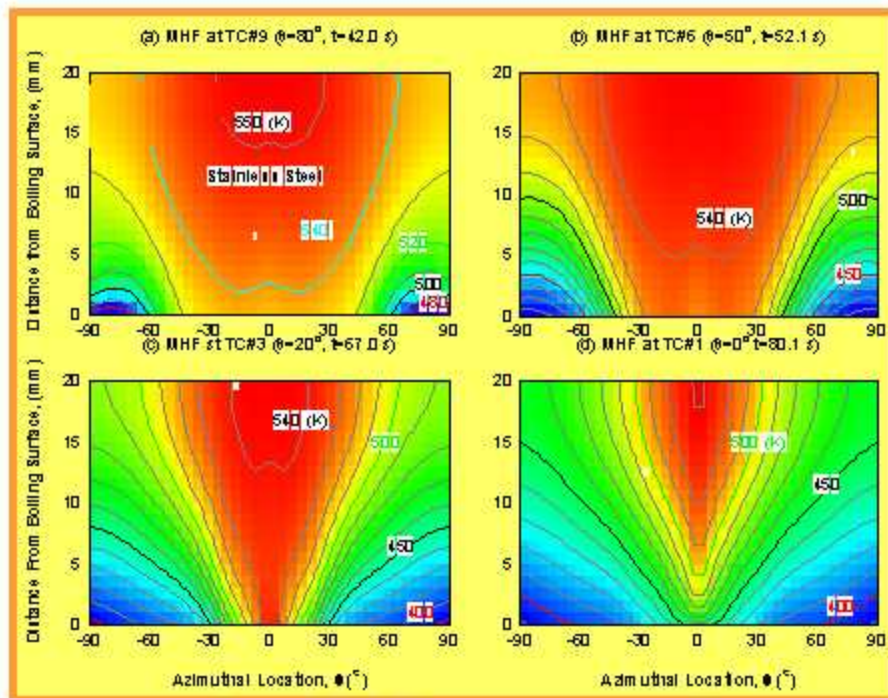
# POOL BOILING ON UNDERSIDE OF HEMISPHERES

- ◆ Cooling of PWR Vessel's lower head
- ◆ CHF < 40% upward surfaces, highest at  $\theta = 0^\circ$  and  $90^\circ$ , parabola min. at  $45^\circ$ .

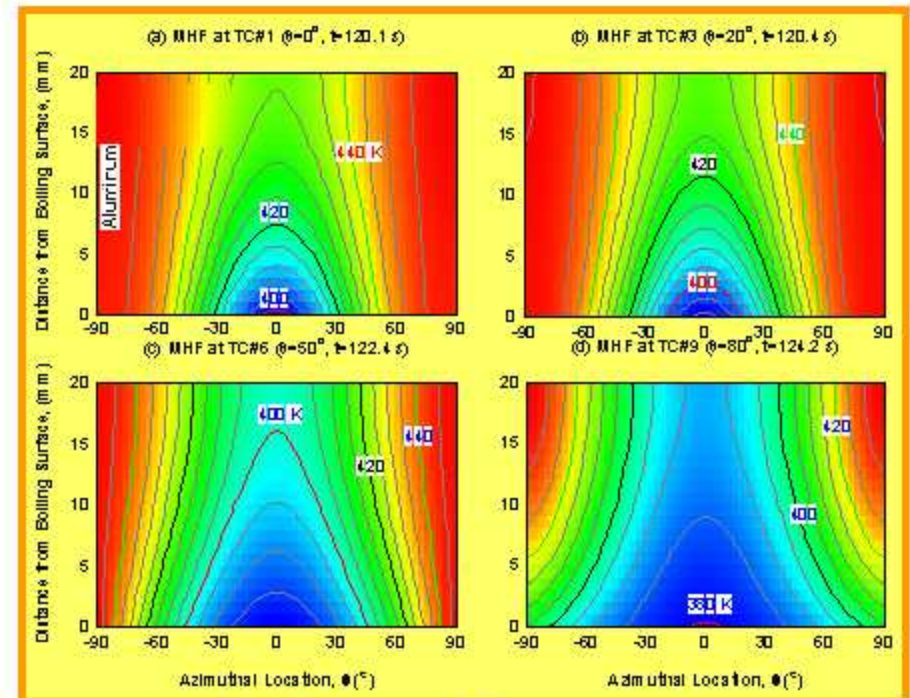


# POOL BOILING ON UNDERSIDE OF HEMISPHERES

- ◆ Visualization & 2-D simulation of CHF front propagation on Aluminum and Stainless-Steel hemispheres.
- ◆ Local boiling curves, NB heat flux increased as  $\theta$  decreased



**Stainless-steel**



**Aluminum**