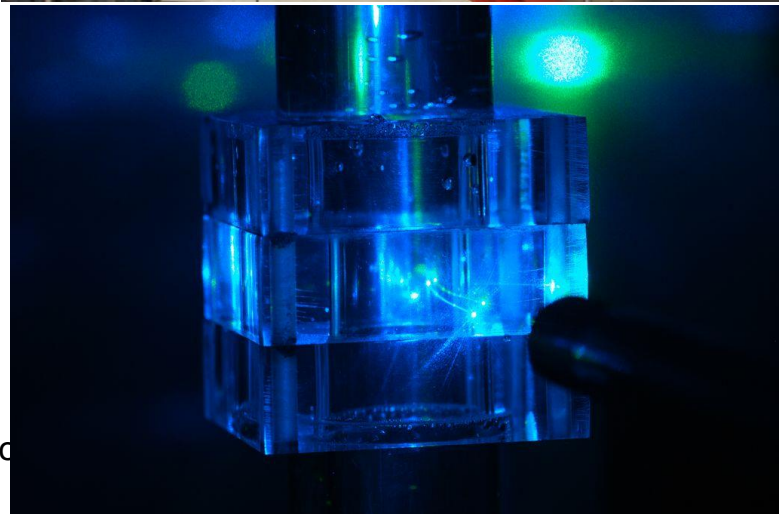
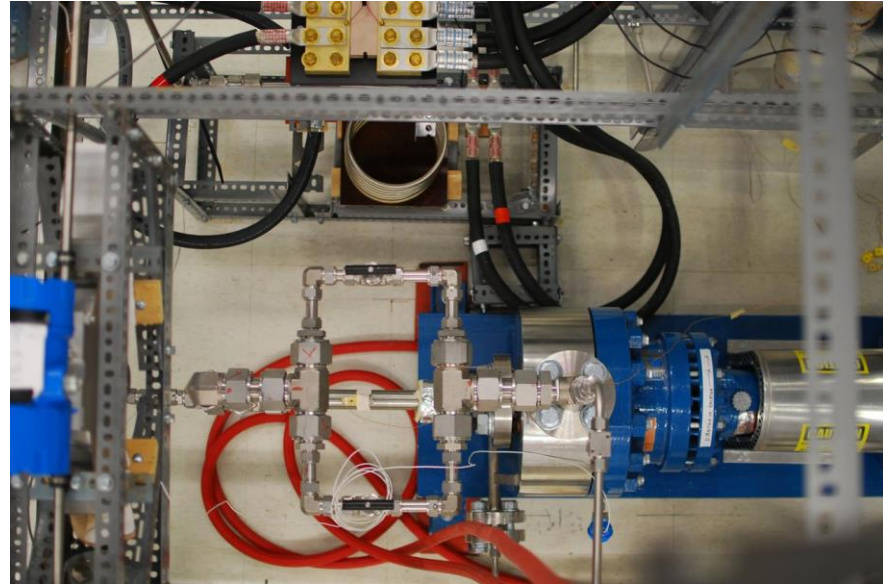
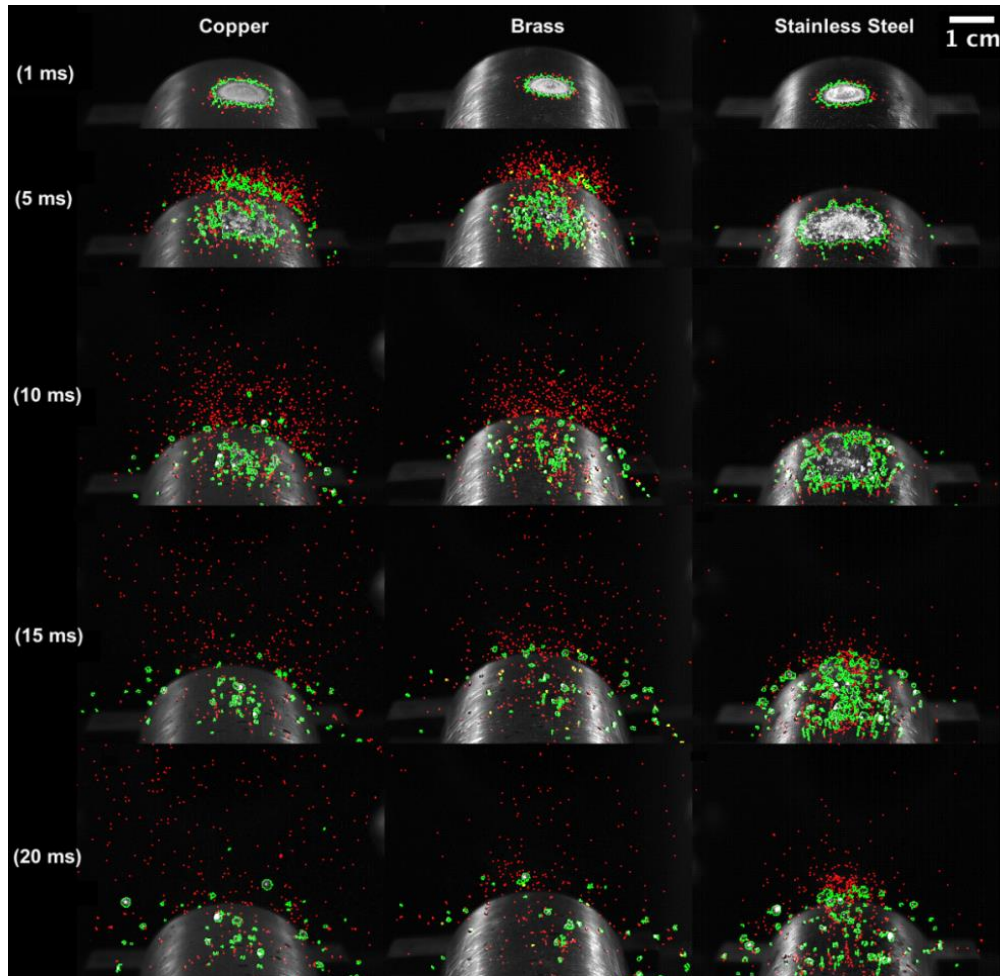


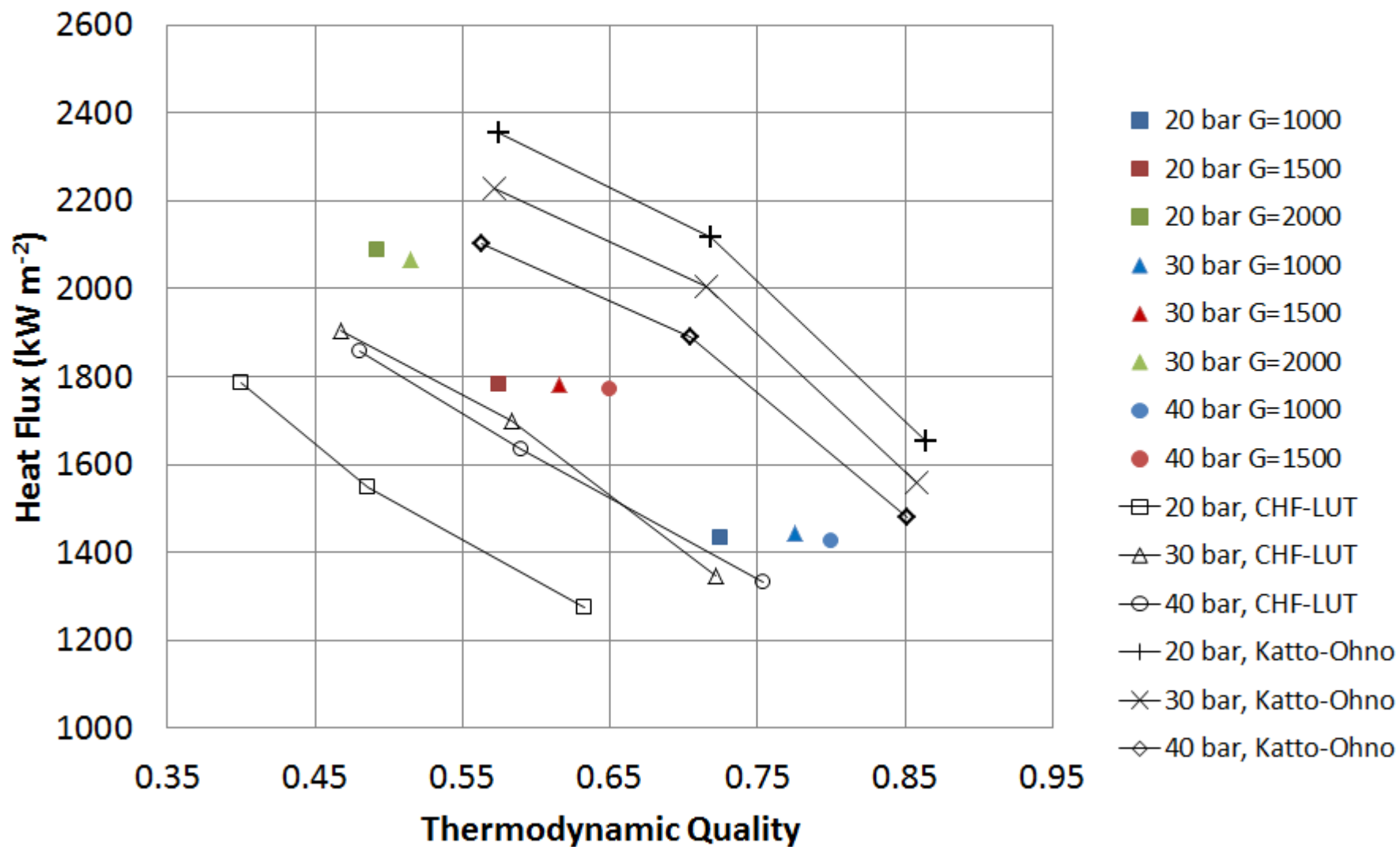
CHF Test Facilities



High Temperature Surface – Water Interactions



Onset of Intermittent Dryout Data Compared to CHF-LUT of Groeneveld *et al* using the 'heat balance method' and the correlation of Katto and Ohno



Severe Accidents: In-Vessel Retention Limits

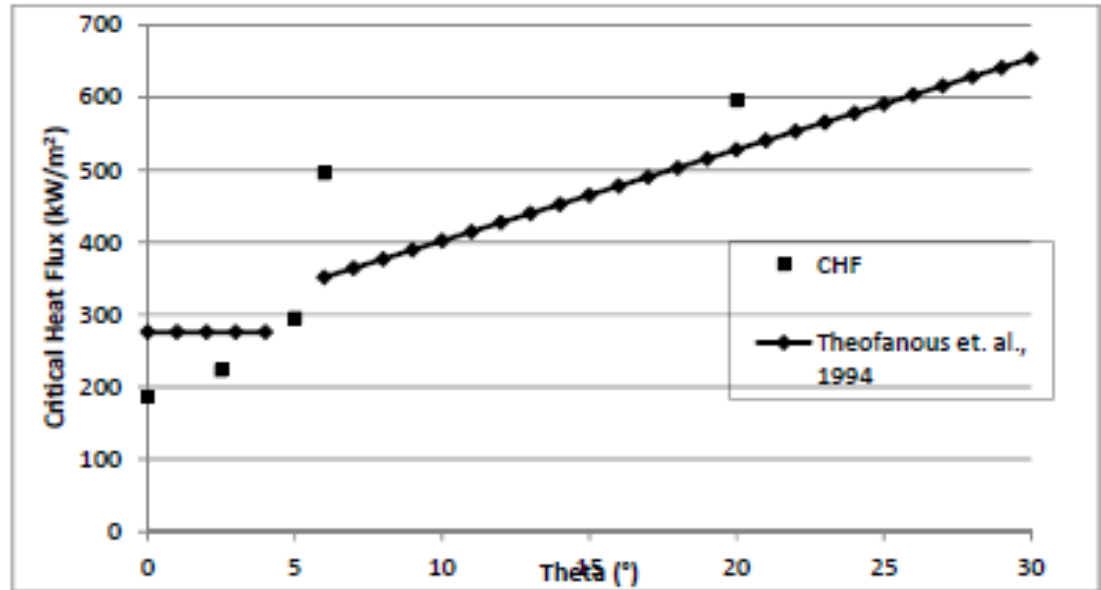
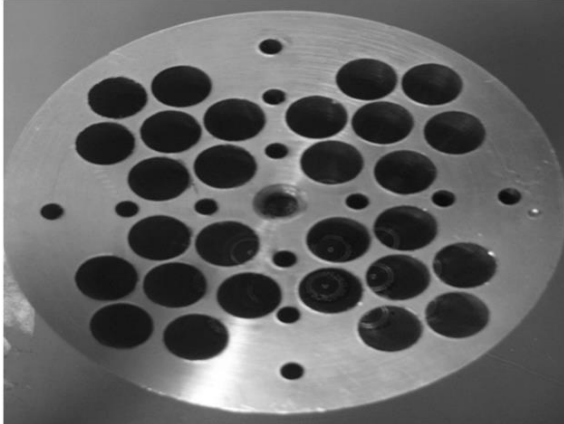
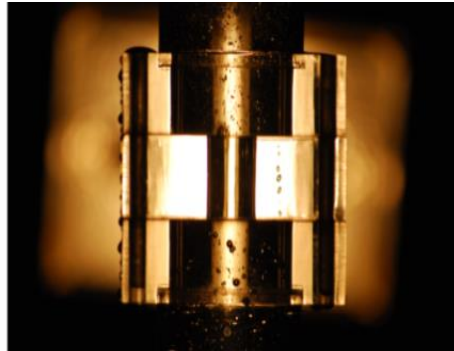
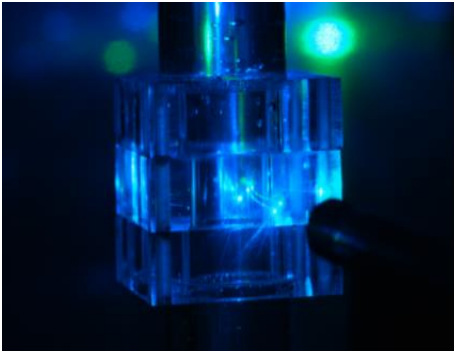


Figure 13: CHF as a function of θ – Comparison with Theofanous data

Advanced Thermalhydraulics

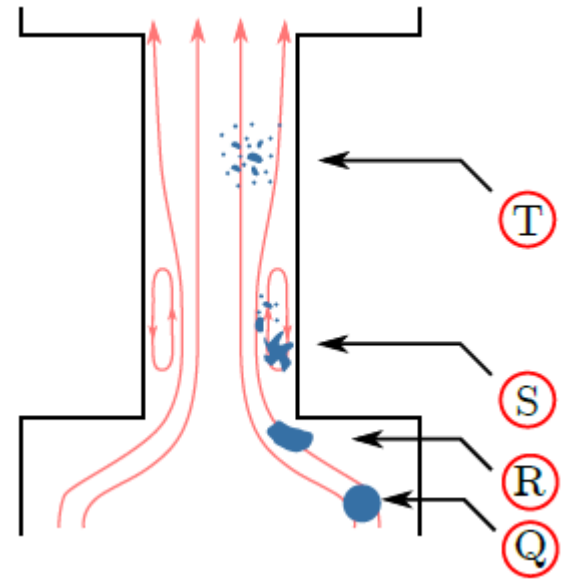
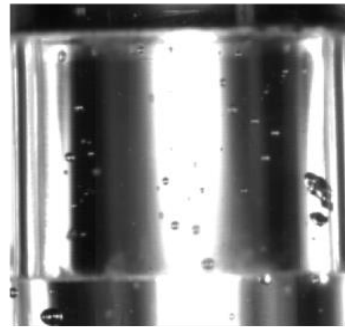
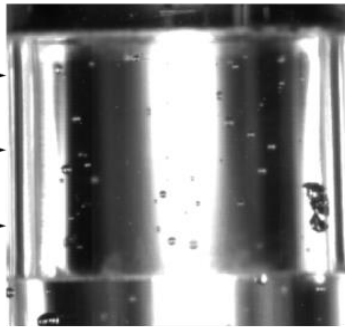


LDV Measurement Plane Elevation

F

E

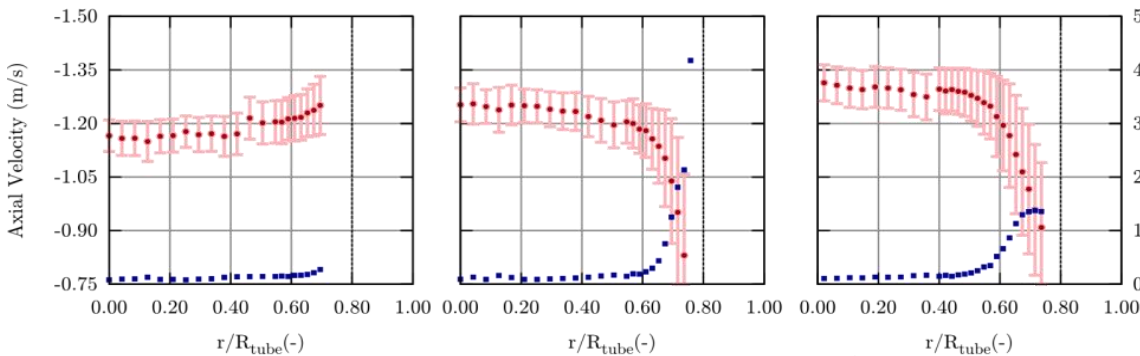
D



Measurement Point D

Measurement Point E

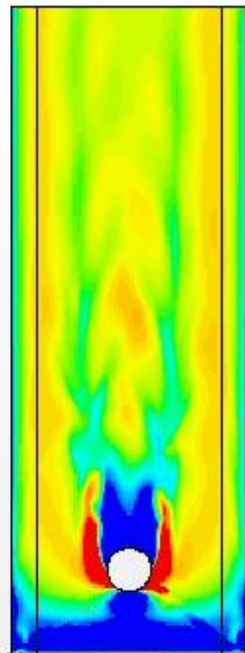
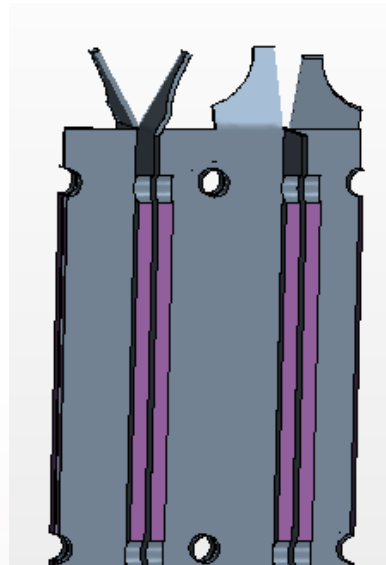
Measurement Point F



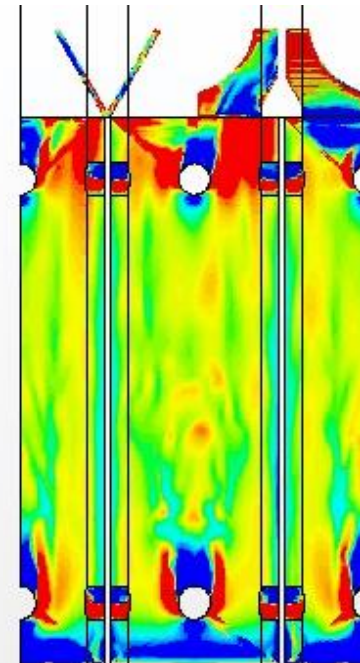
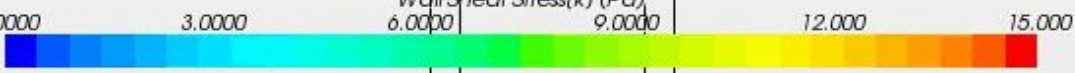
● Axial Velocity (Left Axis)
 ■ Turbulent Weber Number (3mm, Right Axis)

$\dot{m} = 0.550 \text{ kg/s}$
 $R_{orifice} = 25.40 \text{ mm}$ (Wall at $0.8R_{tube}$)
 $R_{tube} = 31.75 \text{ mm}$

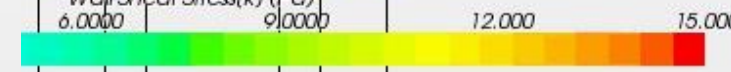
Role of Spacers in a BWR Assembly (OECD Benchmark Case)



Wall Shear Stress(k) (Pa)



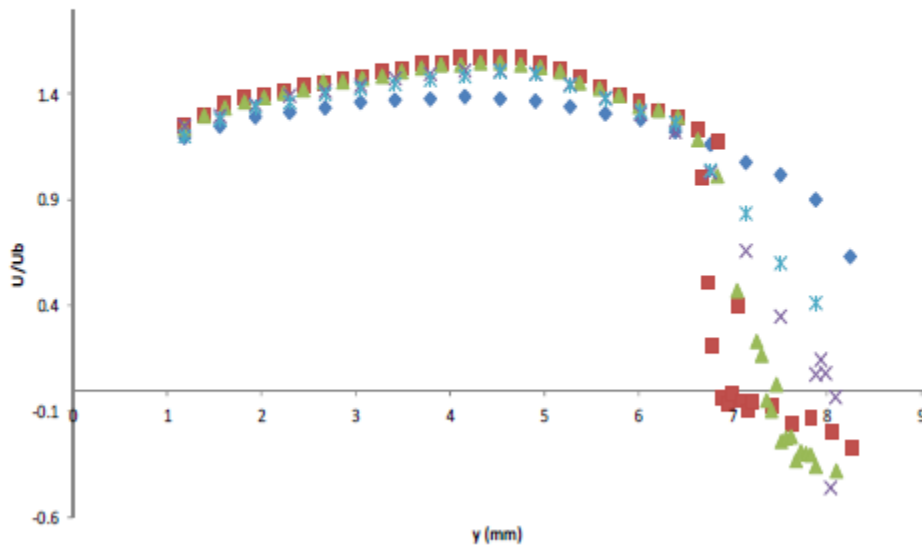
Wall Shear Stress(k) (Pa)



New Data on CANDU Spacer Influence

Re=30700

- ◆ streamwise norm vel no obs
- ▲ streamwise norm vel @ D/2
- × streamwise norm vel @ 1.5D
- streamwise norm vel with obs
- × streamwise norm vel @ D



Re=99000

- ◆ azimuthal norm vel no obs
- ▲ azimuthal norm vel @ 3.5D
- × azimuthal norm vel @ 5.5D
- azimuthal norm vel @ 2.5D
- × azimuthal norm vel @ 10.5D

