

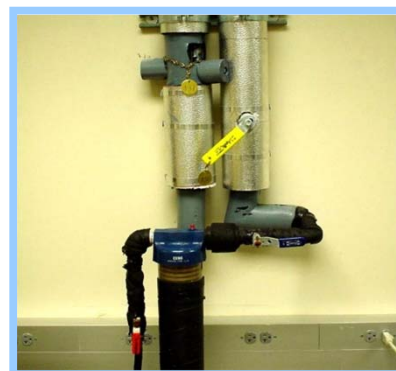
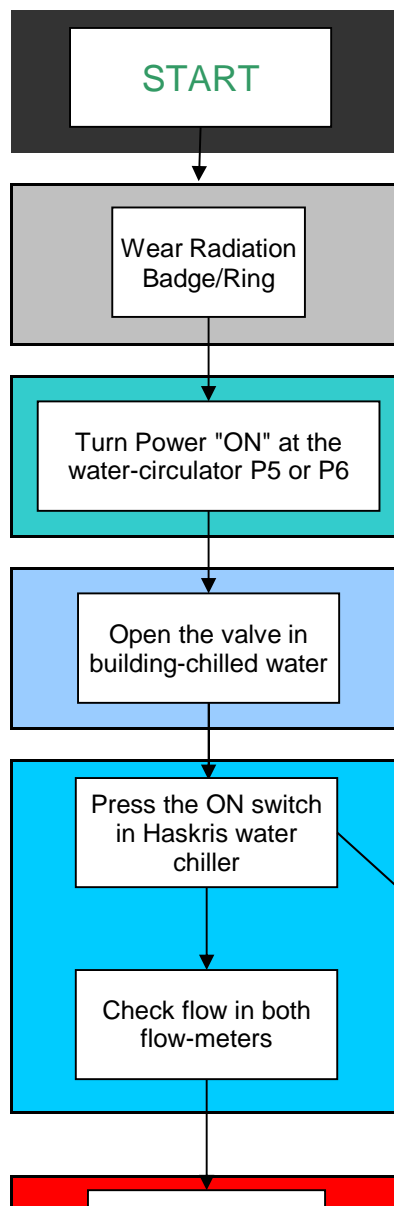
# X-Ray Generator Start-up & Shut-down Flowchart (R-Axis IV++ IP)

X-Ray Crystallography Facility  
410-413 Kasha Laboratory  
Institute of Molecular Biophysics  
Florida State University  
Tallahassee, FL 32306-4380  
Office: (850) 644-6448  
[tsomasundaram@fsu.edu](mailto:tsomasundaram@fsu.edu)

Last update: October 2014

Lab: (850) 645-1333  
[www.sb.fsu.edu/soma](http://www.sb.fsu.edu/soma)

© 2004-2014 Thayumanasamy Somasundaram



Open the valves in He gas cylinder; Ensure flow



Flip the handle to ON in circuit

Ensure flow  
Check the He flow in flow-meter at



Enter sample information in log

Wait 15 minutes

Press START button on VACUUM

Check vacuum-meter reading

Check Haskris water temperature



Press ON button below POWER on

Check vacuum-meter reading

Check the He flow in flow-meter

Press ON button below TARGET

Check vacuum-meter reading



Press ON button below X-RAY lamp

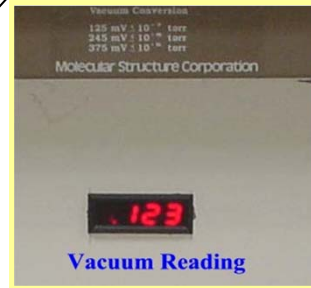
Check vacuum-meter reading

Check Haskris water temperature

Wait 10 minutes

Increase kV by 2;  
Increase mA by 4;  
**Never Exceed max limit**

Check vacuum-meter reading



Enter instrument information in log

Proceed with data collection

**DATA COLLECTION**

Finish data collection

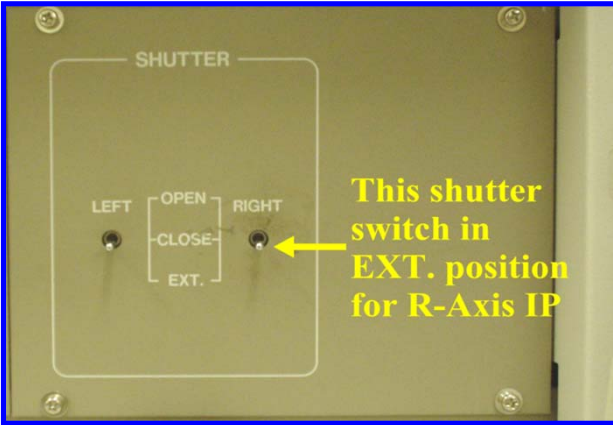
Decrease kV by 4;  
Decrease mA by 6;  
Stop at 20 kV and 10 mA

Press OFF button below POWER on

Press STOP button on VACUUM panel

Flip the handle to OFF in circuit

**For R-Axis IIc only**  
Ensure Right shutter switch is in EXT. position in SHUTTER panel



Close the valves in He gas cylinder; Ensure stoppage





Press the OFF switch  
in Haskris water  
chiller

Close the valve in  
chilled water

Turn knob back to 'OFF' on  
water-circulator P5 or P6

END

