1. **Make sure you use the appropriate process tube:**
   1.1. Tube #1 is the top tube and is used for **SOG** cure only.
   1.2. Tubes #2 and #3 are for Wet and Dry Oxidation of clean Si.
   1.3. Tube #3 is the bottom tube and is used for general Annealing.
2. Load your sample on to the appropriate **Boat**.
3. If Oxidizing Si in Tube #2 or #3 use the BYU on-line “Thermal Oxide Rate Calculator” to determine the amount of time for the oxidation step.
4. **Load your Recipe**
   4.1. From the User Interface Panel that corresponds to the tube you intend on processing in press the “Menu” key in the upper left quadrant of the keypad.
   4.2. Type “DS” and press the “Enter” key. In the top center portion of the display you should see the word “step”. Directly next to “step” it should say “idle”. **If it doesn’t the system is likely already running a program. Do not proceed until you verify the tube status.**
   4.3. Press the “Menu” key.
   4.4. Type “RL” and press the “Enter” key.
   4.5. Use the arrows to navigate the cursor until it is on the recipe you want to run.
   4.6. Press the “Enter” key twice to select the recipe.
   4.7. If you are running a recipe with variable process times, temperatures or gas flows you will be prompted to enter a value for each variable in the recipe.
   4.8. Once you have satisfied the variables screen you will be prompted to press the “Menu” key.
5. Press the “Run” key in the lower left quadrant of the keypad.
6. The cantilever and door will now open. **The idle temperature is between 400C and 600C. Use caution as the door and all associated parts are very hot! Never leave the area while the door is open.**
7. When the door stops moving load the boat with your sample. **Again exercise extreme care. All of the exposed quartz is very hot and fragile.**
   7.1. Once you have loaded your sample press the “Event” key on lower left quadrant of the keypad.
   7.2. The door will now close and the process will begin.
8. Press the “Menu” key and type **“DS”** (Display Status) and press “Enter”. You will now be able to monitor the system during the run.
9. When the run is complete the system will wait at **“Step 0110”** with the door in the closed position. You will need to press the “Event” key to get the door to open. **Never leave the area while the door is open.**
   9.1. Once the door stops moving unload your boat with the appropriate boat holder and place it on the boat table. **Do not touch the boat. It is extremely hot!**
   9.2. **Do not use carbon tipped tweezers to remove your sample! The will melt!**
   9.3. Press the “Event” key on the keypad and the door will close. **Never leave the area while the door is open.**