OXFORD ICP PlasmaLab 80+

These instructions are intended for reference only, and will not replace the thorough training required for proper system operation. Contact a clean room staff member with questions or to report a system problem.
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<th>Enable the tool in <strong>BADGER</strong></th>
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| 1. | **VERIFY SYSTEM STATUS**  
Select “pumping” from the SYSTEM pull down menu to display the vacuum system schematic.  
The system should be at high vacuum \(<4e^{-5}\) with the roughing pump and turbo running. Click on **Accept** to clear any alerts that may be displayed; contact a lab staff member or super-user if accepting an alert does not allow you to continue with your experiment. |
3. **PRE CLEAN**  
Under the “Process” tab, click on *recipes*, select *load*, and highlight the clean process recipe *CR-O2-CLEAN.*

The cleaning process should run for a minimum of 10 minutes to establish a consistent set of background conditions for the process that will follow.

Accept the yellow alert when it appears, marking the end of the process.

4. **VENT THE SYSTEM**  
On the pumping page click ‘stop’ and then ‘vent’.

The vent process takes several minutes, because it initiates system pump down and a nitrogen purge cycle before the chamber brought to atmospheric pressure, to assure that potentially hazardous gasses have been cleared from the chamber.
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<th>5. INSTALL SAMPLE</th>
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<td>When the chamber is fully vented, open the chamber using the pneumatic controls. Place your sample at the center of the chamber’s base plate (Please don’t use tape to stick your sample it’s contaminating the system). Close the chamber lid using the pneumatic controls.</td>
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6. **DEFINE PROCESS**  
Select your recipe and load. Edit operating parameters as necessary by right-clicking on the recipe step and changing parameter values as required, selecting ok to finish editing a step. Save the recipe if you wish the changes to be permanent.

7. **RUN PROCESS**  
Select ‘Run’ to initiate the process. The tool will automatically pump down and run the process. Accept the yellow alert that appears when the process is complete.
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| **8.** | **VENT THE SYSTEM**  
On the pumping page click ‘stop’ and then ‘vent’. |
| **9.** | **RETRIEVE SAMPLE**  
When the chamber is fully vented, open the chamber using the pneumatic controls and take out your sample. |
| **10.** | **RETURN TO NORMAL**  
Leave the tool as you found it by closing the lid using the pneumatic controls. Initiate the vacuum cycle. Make sure the chamber crossed over to turbo pumping before disabling on Badger. |
| **11.** | **BADGER LOGOUT:** Don’t forget to disable the tool in badger after you’re done. |