

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
DEPARTMENT OF CHEMICAL ENGINEERING
PG Research lab
STANDARD OPERATING PROCEDURE
Autosorb iQ

1. Outgassing Procedure

- 1.1 Ensure Start Up procedure is completed
- 1.2 Select Sample Cell as per sample. Ensure the cell is clean and dried properly
- 1.3 Weigh
 - a) Empty Sample cell and record
 - b) Appropriate sample quantity (20 -50 mg)
- 1.4 Pour the sample using funnel ensuring minimum sample loss
- 1.5 Start external Vacuum Pump
- 1.6 Take Liq Nitrogen in Small Dewar and fix it at cold trap for outgassing.
- 1.7 Fix the sample cell with heating mantle using clip. Ensure heating mantle number against OG Station to be used is proper.
- 1.8 Fix the sample cell and attached heating mantle at appropriate OG Station with proper O ring, Sleeve and holder.
- 1.9 On computer go Menu Bar > iQ Default > Outgasser > St1 (or 2)> Edit Program.
- 1.10 Edit program dialogue opens. Enter Outgas Temp, Ramp Rate, Soaking Time and Evacuation Cross over Pressure and press OK.
- 1.11 Go to Menu Bar > iQ Default > Outgasser > St1 (or 2)>Load
- 1.12 A new dialogue opens. Check 'Do not save OG Data' and click OK
- 1.13 Outgass Starts.