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

## 1. Startup Procedure (from STANDBY condition)

- 1.1 Open Nitrogen Cylinder valve at Cabinet 2, ensure the regulator output pressure is >6.5 kg/cm<sup>2</sup>
- 1.2 Open Helium Cylinder valve at Cabinet 4, ensure the regulator output pressure is >40 psi
- 1.3 Ensure TGA-BET isolation valve is open at Lab. Ensure regulator output pressure is 2 kg/cm<sup>2</sup> at this point.
- 1.4 Open Toggle valves of Nitrogen and Helium at point of use at Lab.
- 1.5 Switch on the UPS for Autosorb iQ.
- 1.6 Switch on instrument mains and wait for 1 min.
- 1.7 Switch on instrument electronics and wait for 5 mins
- 1.8 Start the interface computer. Start ASiQwin software.
- 1.9 Once the instrument has completed its initialization, click on the 'Connect' button and begin using the instrument.

## 2. Shut down procedure

- 2.1 Disconnect the software and exit
- 2.2 Shut down the computer
- 2.3 Switch off instrument electronics
- 2.4 Switch off instrument mains
- 2.5 Close all gas toggle valves from point of use panels (do not operate regulators)
- 2.6 Isolate Mains, Switch off and reset the UPS for Autosorb iQ.