RIE – Operating instruction

FAB STAFF ONLY:

- 1. Turn on the roughing pump- check nitrogen pressure before.
- 2. Turn on the chiller
- 3. Open the following valves: air pressure, nitrogen and water supply.
- 4. Turn on load lock pump.
- 5. Turn on main switch.
- 6. Press: Machine power, primary mech pump, lock pump.
- 7. Turn on the computer

ALL USERS:

- 8. Choose working cell- Utilities->select active chamber.
- 9. If you are working on the right chamber, turn on TMP (Utilities -> TMP On)
- 10. Press stand-by mode
- 11. Press service-> maintenance-> pump-> system.
- 12. Press service-> maintenance-> vent-> loadlock.
- 13. Load sample.
- 14. Press service-> maintenance-> pump-> system.
- 15. Press process->batch->file->load->...(batch name)
- 16. Press ready.
- 17. Only if both chambers are pumped proceed
- 18. Press run.
 - *insure the process is running without any warning, before loading your sample.
 - * While pumping the load lock press down the chamber door (For 1 sec).
- 19. After a process ends, unload your sample, and pump lock.

Loading sample procedure

- 1. Using capton tape, secure your sample to the Si wafer.
- 2. Gently put the Si wafer on top of the Graphite.
- 3. Do not touch anything in the working station.

RIE work protocol

- ❖ If you failed to hold down the lock door the system will not pump correctly and it might beep-> press silence -> repeat the action (and hold down the door)
- After the process will finish the system will beep for 10 sec, you can stop the beep by pressing Enter.
- ❖ If a wafer fall down in a cell or there is any alert, silence the alarm->press hold-> call for assistance. (Don't try fix the problem).
- ❖ Do not press abort!!!