Cytek Start up 101

1. Turn on the computer (PW: Welcome#1)
2. Open Spectraflo software and login to your user account
3. Ensure there is a tube of water in probe, sheath fluid filled up and waste bottle emptied before turning on the instrument
4. Click on acquisition and go to default experiment
5. Click on Start and run water to inspect condition of the instrument
   - If dirty, run 10% bleach on High for 15 mins, follow by water on High for 15 mins
   - If clean, run water on low on 20mins
6. After 30 mins of laser plate warming up, proceed to QC.
7. Click on QC tab and perform daily QC according to bead lot number 1002.
   - Preparation of QC beads: Put one drop of QC beads into 350uL filtered sheath fluid
8. Run daily QC.
9. Proceed to experiment only if QC passes.
10. In the case of QC fail, perform 2 x "clean flow cell" with 10% bleach and water.
11. Repeat step 5.
12. Run daily QC.

Why did QC fail?

1. Machine is dirty from previous user?
2. Too few QC beads? Minimum 100 events/s
3. Wrong diluent? Dirty Diluent?
4. Bead quality? Degraded beads left out for too long?
5. Bubble in sample line? No events detected
6. Laser not warmed up?
7. Laser alignment off. Open LJ graph from QC to track %rCV over time.

Cytek shutdown 101

1. If you are the final user, perform :
   - 10% bleach for 10 mins on high
   - Run water for 10 mins on high
2. Perform fluidic shutdown under acquisition tab
3. Turn off instrument
4. Shutdown computer

General reminder:

1. Please filter your samples
2. In between users, please perform 2X Clean Flow Cell
   - One tube of 10% bleach
   - One tube of water
3. **Do not** use more than **3 mL** of solution in tube and ensure that liquid does not touch metal probe of the instrument