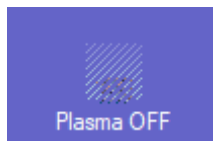
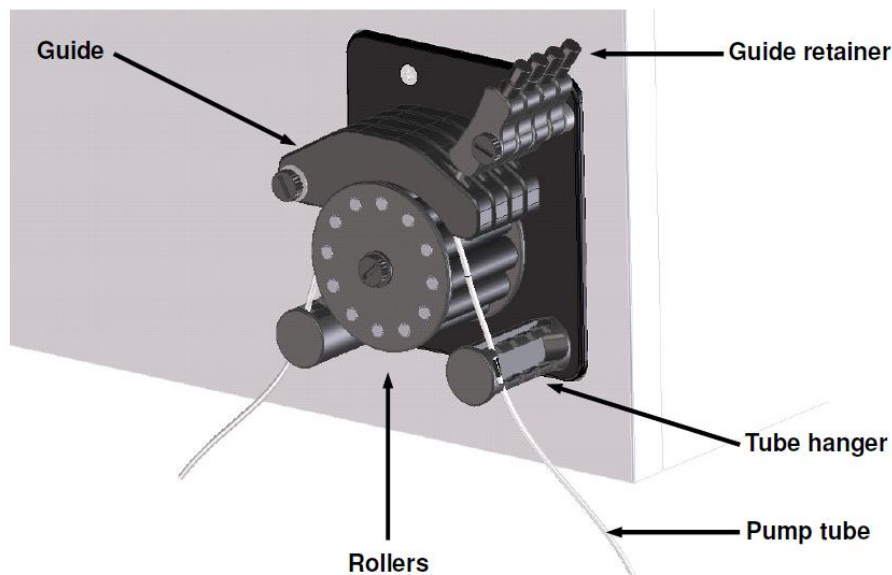


ICP – Preparing your instrument for shutdown

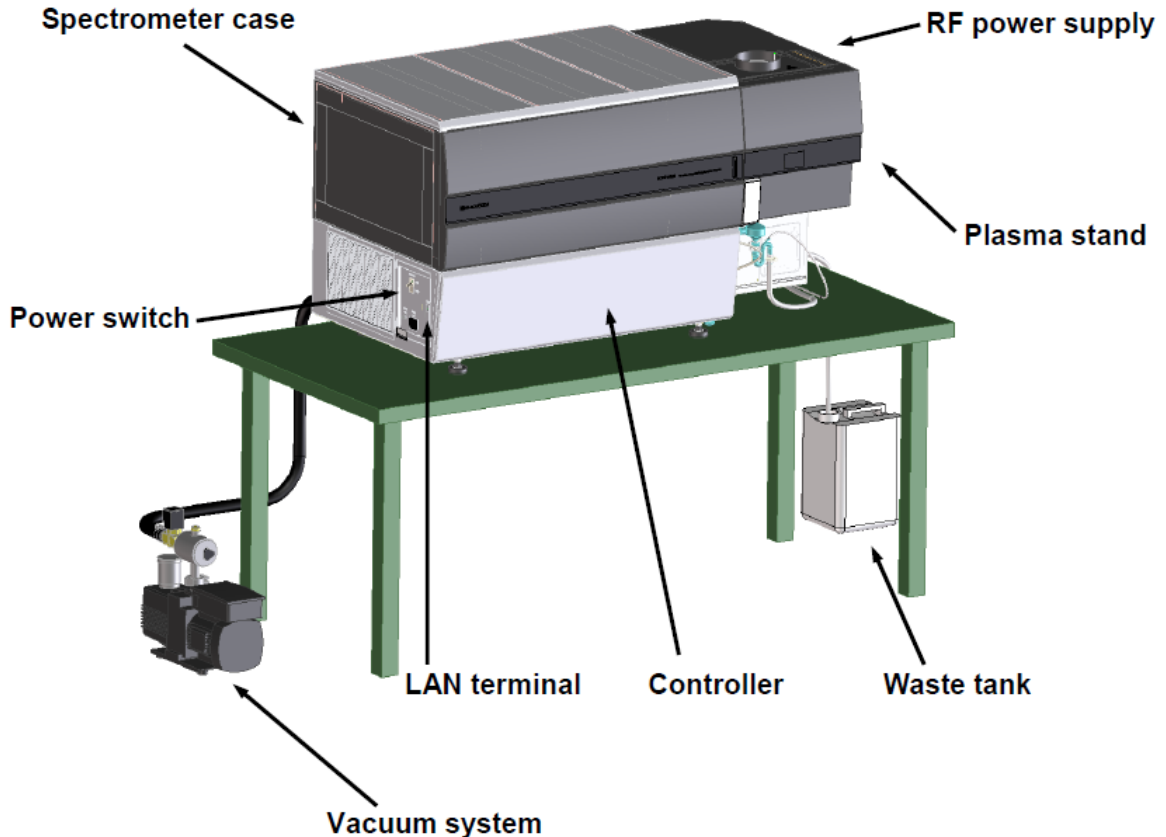
1. To flush out the system, for aqueous applications aspirate with rinse solution for five minutes, then DI water for an additional three minutes. For oils applications, aspirate with rinse solution for five minutes.
2. Shut down the plasma by clicking the Plasma Off button in ICPEsolution software at the bottom-left of the screen. Wait for the shutdown sequence to complete.



3. Release tension on the peristaltic pump tubing by releasing the guide arms and detaching tubing from the tube hangers.



4. Shut off the exhaust ventilation system and shut off argon gas at the source.
5. Ensure that the chiller water has antimicrobial additives as recommended in the user manual. Three tablets of baby aspirin dissolved and circulated can act as a substitute for commercially available products. Shut off Chiller.
6. Shut off vacuum system if planning more than one week of downtime.



7. Shut down the ICPEsolution software and the control computer.
8. Shut off power to the ICPE, autosampler, and other external accessories
9. Dispose of the rinse solution in the J-tube and drain line and close the waste collection container.



ICPE – Startup procedure

1. Refer to the instruction manual, (PN 305-34208, “ICPE-9800 Series Instruction Manual”) for specific startup and other procedures.
2. Start up the duct exhaust system.
3. Supply cooling water after checking levels and the absence of contamination in the external chiller water.
4. Check the external pump vacuum, maintenance if necessary, and power on.
5. Turn on argon at the source—ensure proper pressure is not exceeded during this process: argon at 450 kPa \pm 10kPa.
6. Turn on the power switch on the left side of the main ICPE instrument.
7. Turn on the PC and other peripherals. Open software to establish communications. Allow vacuum to pump down overnight before turning on plasma.
8. Fill the J-tube with water to create a pressure seal to the torch.
9. Check the torch and spray chamber glassware, as well as peristaltic pump, nebulizer and other sample introduction accessories before turning on the plasma.