Cleaning and Reconditioning

Pedestal Cleaning

1. Apply 3-5 ul of dH_20 on to the bottom pedestal. Never use a squirt bottle to apply de-ionized water or any other liquid to the surface of the instrument.
2. Lower the upper pedestal arm to form a liquid column; let it sit for approximately 2-3 minutes.
3. Wipe away the water from both the upper and lower pedestal with a dry, lint-free lab wipe.

- **Between measurements:** Wipe the sample from both the upper and lower pedestals with a clean, dry, lint-free lab wipe, to prevent sample carryover and avoid residue buildup.
- **Between users:** A final cleaning of both measurement surfaces with dH_20 is recommended after the last sample measurement.
- **Additional cleaning:** Substitute 0.5M HCl for the dH_20 in the procedure above when proteins have dried on the pedestal.
- **Decontamination:** Use a sanitizing solution, such as a 0.5% solution of sodium hypochlorite (1:10 dilution of common commercial bleach solution, freshly prepared), to decontaminate the measurement pedestals. Follow with 3- 5 ul of dH20.

The use of detergents or isopropyl alcohol is **not** recommended as they may un-condition the pedestal measurement surfaces. If a solution containing either is used, it is important to follow with 3- 5 ul of dH20.

Pedestal Reconditioning

Use the instrument pedestal reconditioning kit, PR-1, as a rapid means of reconditioning the pedestals when the surface properties have been compromised and liquid columns break during measurement.

1. Open the vial containing PR-1 and use the applicator provided in the kit to remove a pin-head sized amount of the compound.
2. Apply a very thin, even layer of PR-1 to the surface of the upper and lower pedestals and wait 30 seconds for thee PR-1 to dry.
3. Fold a clean, dry laboratory wipe into quarters and remove the PR-1 by aggressively rubbing the surface of the upper and lower pedestals until all compound residue is removed. The appearance of a black residue on the laboratory wipe is normal.
4. Use canned air to remove excess lint from the diaphragm.

Test the effectiveness of the re-conditioning by pipetting a 1ul sample of dH_2O (using a calibrated 2 ul pipettor) onto the lower measurement pedestal.

The figure on the left is a flat bead of water on an unconditioned pedestal. The figure on the right is a1ul sample of dH_2O on a properly conditioned pedestal.

Un-conditioned Pedestal-water "Flattens out"

Properly Conditioned Pedestal-water "Beads up"

Cuvette Cleaning

- For routine, daily cleaning use a dry lab swab or lab wipe to wick away any spills within or around the cuvette holder assembly.
- The cuvette holder assembly may be cleaned of excess dust using canned air.
- DO NOT squirt any liquid into the block as the liquid will flow into the instrument. If liquid does get into the block, it is best to use a lab wipe or a lab cotton swab to absorb the liquid.
- Follow the recommendations of the cuvette manufacturer for the cleaning and maintenance of cuvettes.
- Cuvettes with scratches in the optical path should not be used. Ensure all optical surfaces are free of lint and fingerprints prior to insertion in the NanoDrop 2000c cuvette holder.