Using and Calibrating a pH Probe

Techniques for using a pH probe:

1. Keep a waste beaker near the probe to collect the rinses.
2. Rinse the probe with DI water taking care to rinse the bulb at the end. Dry with a Kimwipe.
3. Place the probe into the solution and swirl. Record the pH.
4. Rinse the probe with DI water taking care to rinse the bulb at the end. Dry with a Kimwipe.
5. Put the probe back into its special buffer solution. The probe can not sit out of a solution for long or it will dry up and not work anymore.
6. Note: The probe has a hard time reading pH values below 1.5. It takes a long time for the probe to properly respond to solutions so acidic.

Note: The storage solution is a special buffer solution to preserve the probe. If the solution is spilled, notify the instructor to have the bottle refilled. Do not pour water or any other solution into the sensor container!

Calibrating the pH probe/sensor:

1. Rinse the pH sensor with distilled water from a wash bottle and dry gently with a KimWipe. Place the sensor in the pH 7 buffer solution. If the pH reading is 6.9-7.1, you do not need to calibrate the pH probe. If the pH reading does not fall in this range, calibrate the sensor using the directions below.

   From the “Experiment” menu select “Calibrate” ➤ CH1: pH. When the calibration window opens, click on “Calibrate Now”.

   **First calibration point**
   A. Rinse the sensor with deionized water, pat dry, and place it in the pH 4 buffer.
   B. Type “4” in the box below “Reading 1”.
   C. Swirl the sensor, wait until the voltage for Reading 1 stabilizes, and then click “Keep”.

   **Second Calibration point**
   A. Rinse the sensor with deionized water, pat dry, and place it in the pH 7 buffer.
   B. Type “7” in the box below “Reading 2”.
   C. Swirl the sensor, and wait until the voltage for Reading 2 stabilizes. Click “Keep”, and then click “Done”.