

## Voltammetry Simple Instructions

- Turn on the power at the rear of the voltammetry interface box (says BAS 100A on front of box).
- Select Bas100W from the desktop.
- All electrodes should be immersed in the solution without touching the bottom of the beaker. Use a 30-mL beaker or smaller. Place Parafilm over the top.
  - Attach the wires on the voltammetry cell stand to the corresponding electrodes.
    - Attach the auxiliary electrode to the red wire. The auxiliary electrode is a platinum wire.
    - Attach the working electrode to the black wire. The working electrodes are graphite or platinum. Both look like black cylinders, the platinum electrode has a silver disk on the bottom, while the graphite electrode has a black disk at the bottom.
    - Attach the reference electrode to the white wire. The reference electrode is usually Ag/AgCl. It should be stored in a 2 M solution of NaCl when not in use and rinsed with distilled water before being used.
- Insert the plastic tubes and bubble nitrogen through the solution. If you are not seeing any bubbles, check to make sure that the regulator at the tank is delivering gas, that the valve on the gas line next to the tank is open, and that the N<sub>2</sub>- valve in the center aisle is open. Make sure that the N<sub>2</sub>- valve in the center aisle is closed at the end of the day.
- From the menus at the top of the screen, select **Select Mode**. Select the correct method.
- Select **Method** and then **General Parameters**. The parameters will change with the method.
  - For example assume that you are doing Cyclic Voltammetry. Low E would be the switching potential, high E is the most positive potential, and initial E is same as high E.
- Initial scan direction is often negative.
- Go to **Control** and **Start Run**.
- To save data, go under **File** and **Save data**.
- To analyze data, select **Data Analysis, Results, and Options**. To choose the correct parameters, see *Chapter 7: Analysis* in the **MF-9094 Instruction Manual**.

For further information on the software, see the **MF-9094 Instruction Manual**. For further information on the hardware and the techniques, look at the sections on your technique in the **MF-9062 Instruction Manual**.