Personnel performing this procedure will have training provided by trained UF personnel

I. PURPOSE

The purpose of this S.O.P. is to describe the steps taken when using the polishing wheels.

II. PERSONAL PROTECTIVE EQUIPMENT (PPE)

A. Users must wear safety glasses, long pants, gloves, and closed toed shoes at all times
B. If user is wearing long sleeves, the sleeves must be rolled up to elbow length to avoid injury of sleeve getting caught in the polishing wheel equipment.

III. BACKGROUND

To operate the polishing wheel, the user must first get familiar with the polishing wheel interface. Figure 1 below shows this interface.

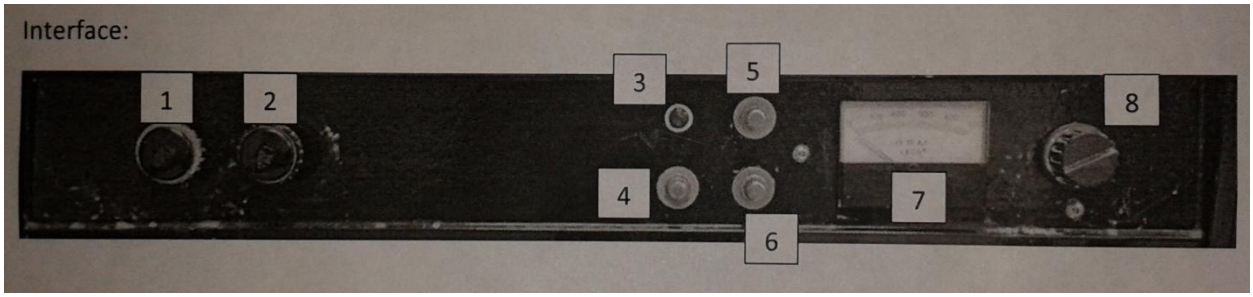

Fig. 1. Polishing wheel interface.

The following list describes the function of each item on the interface in Figure 1:

1. "SPIGOT VALVE"- Controls water flow from spigot
2. "FLUSH VALVE"- Controls water flow that flushes out the basin
3. "ON LIGHT"- Indicates if the polishing wheel is turned on
4. "POWER BUTTON"- Turns power to the polishing on or off
5. "WHEEL ON"- Allows the polishing wheel to start rotating
6. "WHEEL OFF"- Stops the wheel from rotating
7. "RMP GAUGE"- Indicates how fast the polishing wheel is spinning
8. "SPEED CONTROL"- Sets the speed of polishing wheel

IV. OPERATING PROCEDURE

1. Ensure the ON LIGHT is **NOT** lit.
2. Ensure that water faucet (source of water for polishing wheel) is **NOT** on and that the hose connected to it is tightly secured to faucet.
3. Place sandpaper or polishing cloth on the polishing wheel and secure it to the wheel as shown in Figure 2 below.

Fig. 2. Final set up of polishing wheel—ready to polish specimen

The steps to do this are as follows:

- First remove metal and plastic splash guard (if not on wheel already then skip this step)

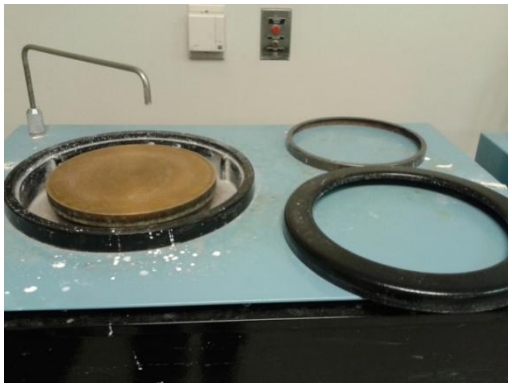

Fig. 3. Set up of polishing wheel—beginning of process.

- Then place sandpaper or polishing cloth on wheel

Fig. 4. Set up of polishing wheel—placement of polishing medium.

- Secure sandpaper or polishing cloth with metal guard

Fig. 5. Set up of polishing wheel—securing polishing medium to polishing wheel.

- Replace plastic splash guard

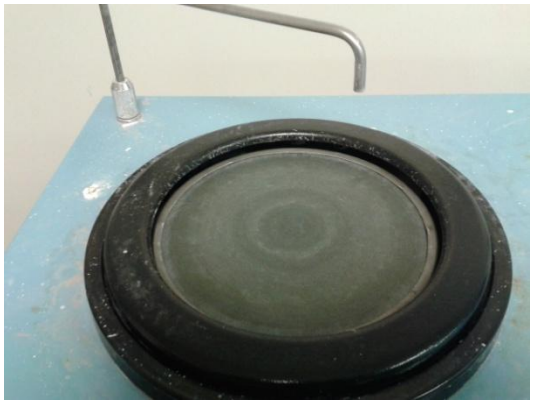

Fig. 6. Set up of polishing wheel—plastic splash guard in place.

4. Check to make sure that the SPEED CONTROL knob is turned all the way down (counterclockwise).
5. Press the POWER BUTTON, the ON LIGHT should light up.
6. Press the WHEEL ON button.
7. SLOWLY increase the speed of the polishing wheel by turning the SPEED CONTROL knob clockwise. Wheel should start spinning and increasing in speed as knob is turned.
8. If needed, turn on the spigot by opening the SPIGOT VALVE to allow water flow from spigot.

Fig. 7. Set up of polishing wheel—polishing wheel ready for use with water flowing from spigot.

9. Polish sample.
10. After sample is polished, turn the SPEED CONTROL knob counterclockwise all the way to stop the polishing wheel.
11. Press the WHEEL OFF button and the POWER BUTTON to turn off the polishing wheel.
12. Remove polishing cloth or sandpaper.
13. Open the FLUSH VALVE and the SPIGOT VALVE to clean the basin of the wheel and top of wheel, respectively.

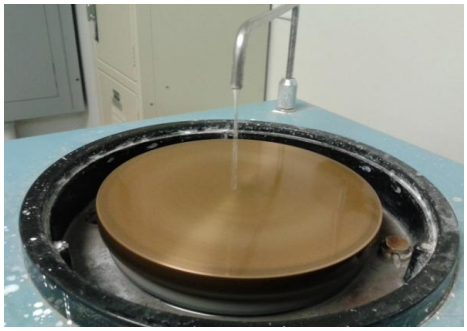

Fig. 8. Cleaning of polishing wheel shown. Wheel is rotating, but this is not clear in the picture.

14. Close the FLUSH VALVE and the SPIGOT VALVE (counterclockwise). This concludes the use of polishing wheel. Machine should be turned off and in a clean state.

Fig. 9. Set up of polishing wheel—end of process.