SOP for Running Spectroscopy:

1. Start laser chiller, camera, and fine stage.
2. Start camera software and LabVIEW.
3. When chiller has reached 28 degrees, arm room and local interlock for laser and then start laser. It is best practice to ensure laser path is blocked in safe location upon activation and that appropriate safety gear and filtering are in use.
4. After laser starts, run labview program. Make a set up file and run one short measurement to ensure the stage and monochromator are correctly initialized. It is best to do this before finding sample region of interest.
5. Turn off room lights
6. Start stage software to control coarse stage. Use joystick to focus on grid area and move the sample to the region of interest. After region of interest is located, switch to camera and move exact location of particle of interest to 989, 1130 based on mapping using coarse stage software (step size 0.005 is helpful).
7. Ensure sample is present when excited by laser and is at correct position in the camera field of view.
8. Turn on detectors to be used.
9. Once particle is in focus, create an xy grid in labview by setting a range for each component and make a map of signal intensity at each spot. Choose brightest spot and set LabVIEW XY to the spot collected one before it as it scans around the grid.
10. Run measurements of choice once sample is maximized.
11. Shutdown photodetectors and laser.
12. Shutdown all software
13. Turn off camera, stage, and laser chiller.