

Sector 3 Online Raman system

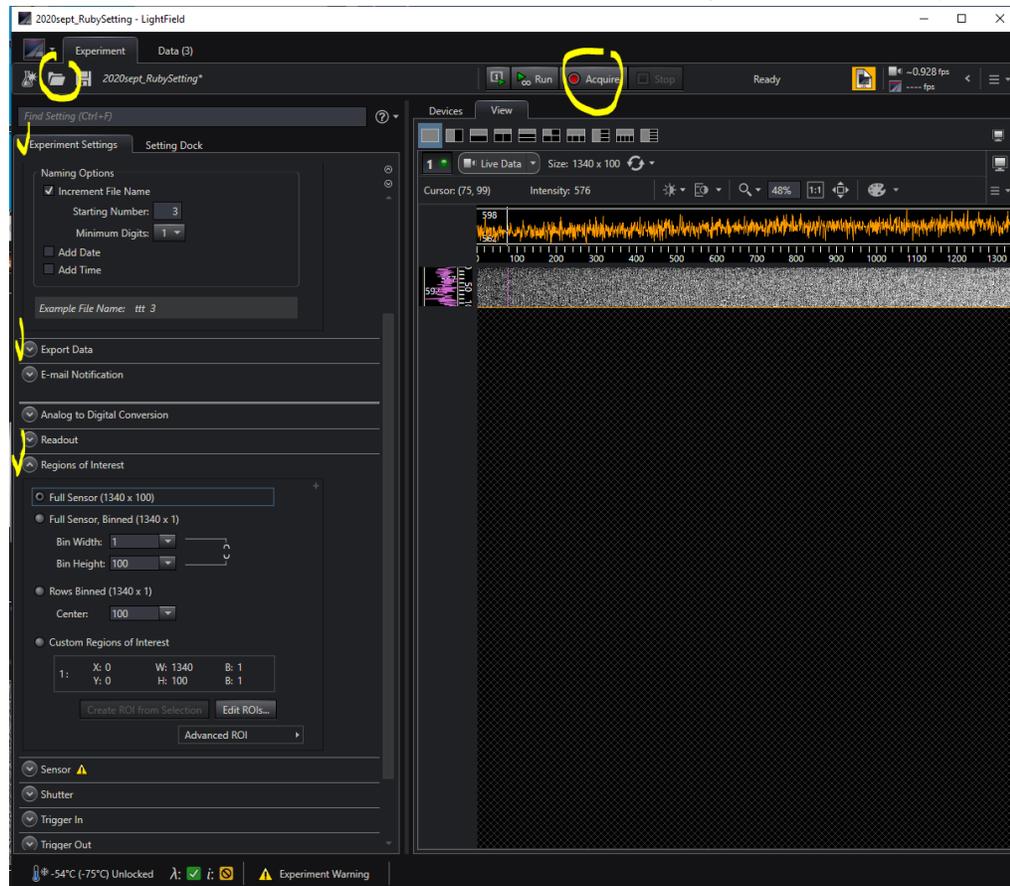
Collecting and fitting ruby fluorescence data

In most cases you will find the programs already running, otherwise use the links on the desktop to open the software.

1) Lightfield

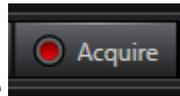


a. Double click on the icon , the following window will open:

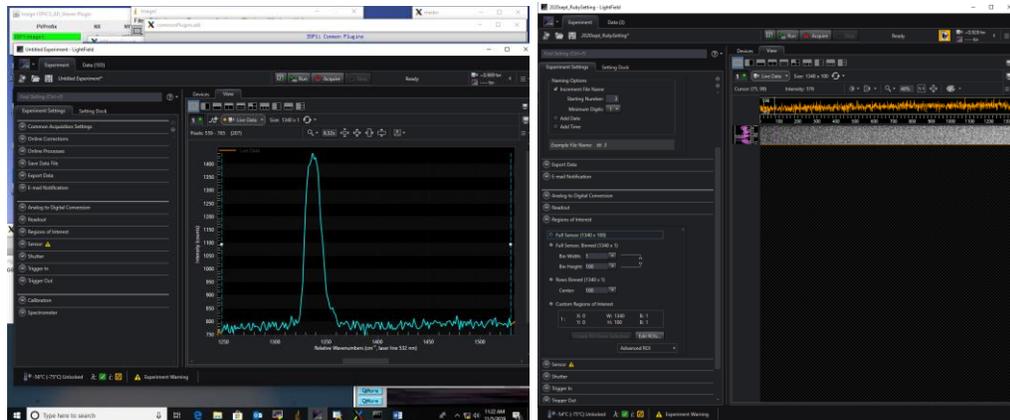




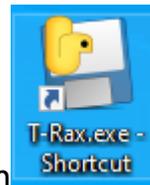
- b. Load experiment “ 2020sept_RubySetting
- c. Click on **common acquisition** settings tab, set the exposure time, 1 s is typically sufficient at modest pressures.
- d. Set your folder data under **Save Data file tab**
- e. Selecting the appropriate options in the “**region of interest**” will allow you to observe the spectrum within the software (use Full sensor, Binned (1340x1)) or export data that can be analyzed using T-rax (**Full Sensor (1340x100)**)



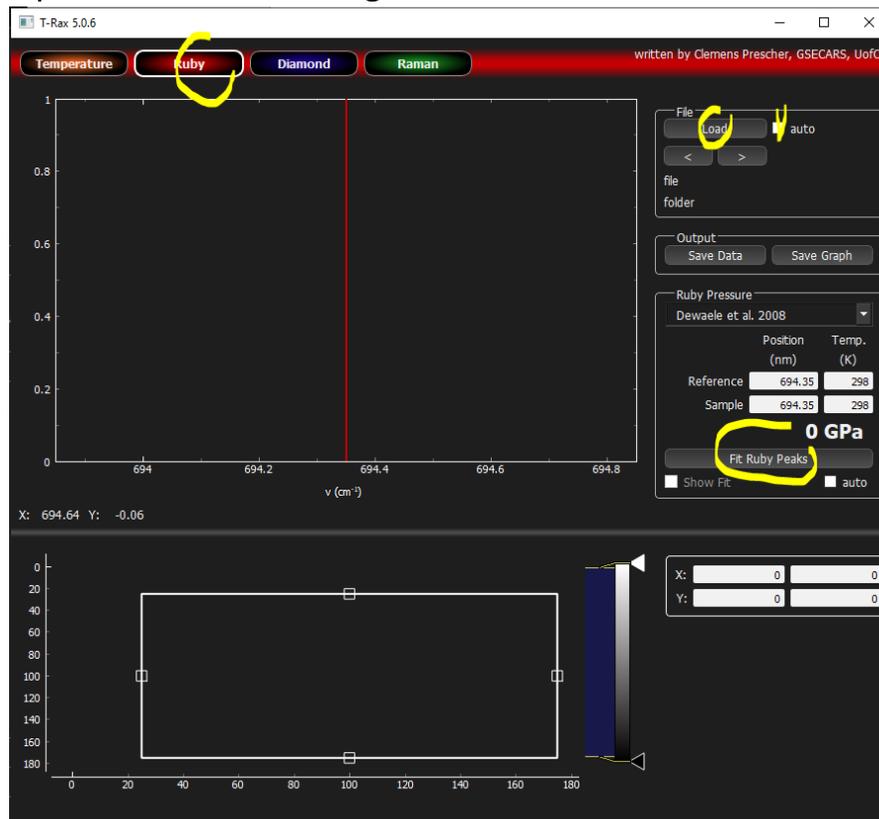
- f. Click Acquire to collect a single spectrum. If the Full sensor, Binned (1340x1) option is used you will see the spectrum as in the screenshot on the left. If the other option is used, you will obtain an image of the full sensor as in the screenshot on the right.



2) T-rax

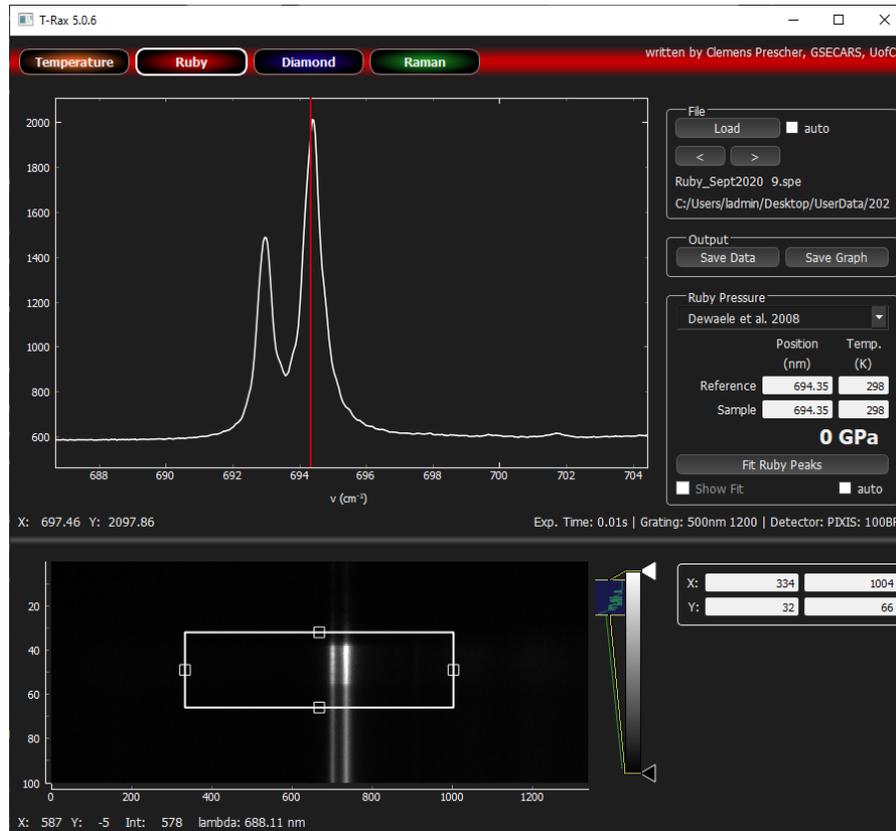


a. Open the software using the icon the software will open:



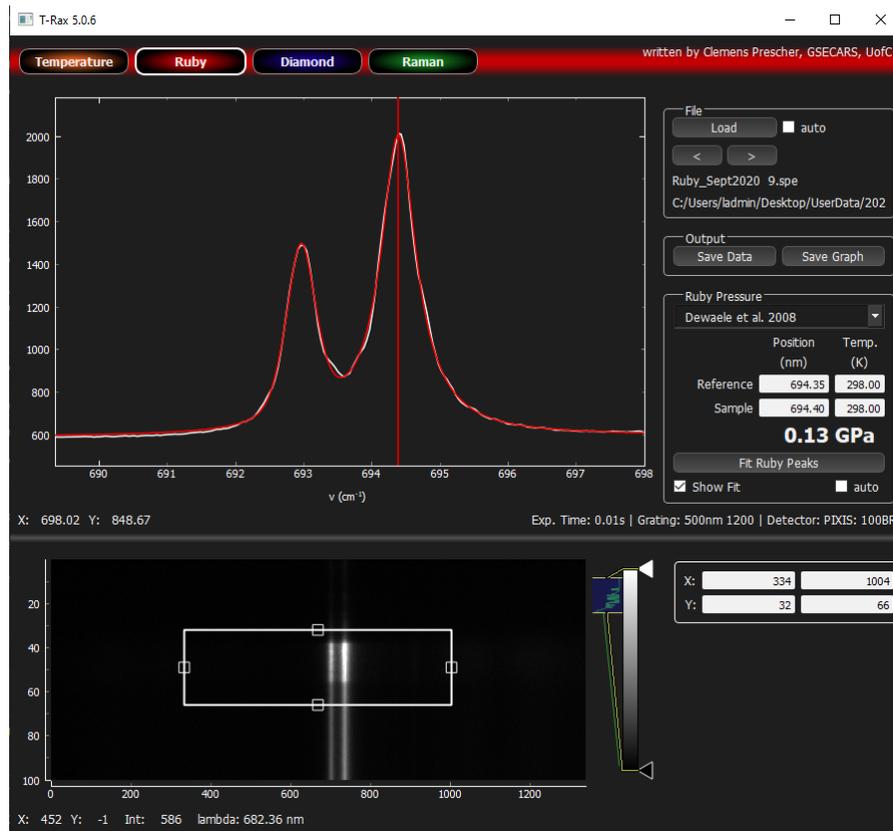
b. Click on the ruby tab

- c. Click on the “load” button and open your file collected using the full sensor option (if you attempt loading a spectrum written as “full-sensor binned” the software will crash)



- d. You may need to adjust the visualized portion of the spectrum. Right-click to zoom out, draw a square to select an area.

- e. Click on the ruby peak and on “fit ruby peaks” button to calculate pressure



- f. Selecting “auto” will automatically load new files saved in the same directory