



This guide obtains just brief information. In case you need detailed instructions, read the Woolam IR-VASE manual. It is recommended to read the **Safety Instruction and Basic Troubleshooting** manual prior to your work.

## Woolam IR-VASE

## Starting the measurement

1. **OPTIONAL**: Switch on Control Module (fig. 2) **ONLY** after shutdown (also check the spectrometer power and light source /glow bar/ supply)

The instruments are normally left running.. (including the power supply for the light source)

- 2. Start SW (program VASE-IR on desktop)
- 3. Alignment of the sample
  - a. Switch small (orange) pump under the table
  - b. Put in the sample, if rectangular, then along the beam (switch for vacuum on the bottom Release-Hold)
- 4. Alignment of angles
  - a. Menu  $\rightarrow$  Motors  $\rightarrow$  Incidence angle  $\rightarrow$  60 (check!)
  - b. Menu: Align  $\rightarrow$  Align sample tilt
  - c. Align the cross to the center. If the intensity is too low (<1), the laser fails to hit the detector and it is necessary to get it centered with the help of a paper. Typical intensity is >10
- 5. Alignment of z-position:
  - a. Menu  $\rightarrow$  Motors  $\rightarrow$  Incidence angle  $\rightarrow$  60
  - b. Close the iris at the detector side
  - c. Menu  $\rightarrow$  Align  $\rightarrow$  translate sample stage (laser), the spread of reading is dependent on the resolution, you may decrease the resolution to speed up (manual knob on the spectrometer)

No calibration needed (unlike VIS-VASE)

## **Measurement notes**

- 1. Open the iris at detector and source side
- 2. Menu  $\rightarrow$  VASE  $\rightarrow$  VASE Scan
- 3. Load settings, in D:\usersIR-VASE folder, are stored standard settings
- 4. Angle smaller than 45 deg is not possible
- 5. Resolution is set manually on the spectrometer
- 6. Start the measurement



## Finishing the measurement

- Do NOT switch the instrument off
- Only turn off the vacuum pump for the sample
- Close the iris at the detector and spectrometer side (protects the polarizers)

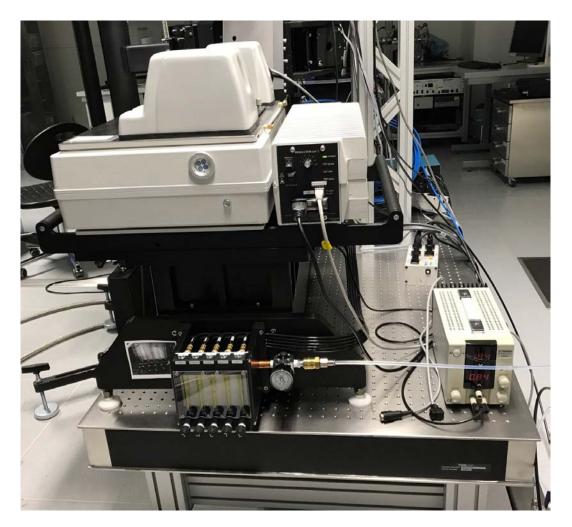


Figure 1: main switch of the Fourier spectrometer and power supply (bottom right)