

19-05-20

Spectrometer Notes

Voigt Profile.

Grating	Range (nm)	
1800	474-497.5	Centred 486 nm)
1200	468-503	

From 0

6.10^{-5} torr increase in OC. Smallest amount

Initial settings: $g_{\text{min}} = 1.20$, $\lambda = 492.5 \text{ nm}$.

Moving to grating 2. (600)

w/ 600, can see (w/ long exposure), 471 line, but that's it.

1200 grating. Centred at 480 nm. gets 471.3 and 492.2 nm.

At 40 s acquisition, ~ 6500 pulses per

1800 used at 489 nm $g_y = 1.1$ to 1.96

Looking at this 1
1800, 25 s acquisition, 496 nm.
Subtracting BG
Scanned ~ 14:39.

Moved to 482 nm ~ 14:35 Scanned ~ 14:40.

Increasing power: 14:47. ("power 2")

BG at 14:51, scanned spectrum at 14:52. ← (482 nm)

BG at 14:53, scanned spectrum at ~ 14:53 ← (496 nm)

Lines
471.3
492.2
504.8

Using FWHM on fit left part.
Helium plasma only.
Helium only.

Moving to $A_1 P_3$ where $P_3 < P_1 < P_2$ (pressure).
At 15:29,
Bg at 15:30.

496 mm showed strong spikes that other spectra didn't.
Swed 496 again, spikes went away.