

# Surface Tension (Pendant drop) measurement



- |   |  |
|---|--|
| 1) Stage level adjustment                 | 11) Liquid Automatic Dispenser   |
| 2) Stage height adjustment                | 12) LED light source   |
| 3) Stage height lock <b>Do Not change</b> | 13) Sample stage with sample attachment clips  |
| 4) Stage linear adjustment                | <b>14) Camera lens focus adjustment</b> → <b>Do Not Change Focus !</b><br><b>(move stage along light line instead)</b> |
| 5) Stage rail lock                        | 15) Camera lens zoom adjustment  |
| 6) Stage lateral adjustment               | 16) Level adjustment feet  |
| 7) Syringe lateral adjustment             | 17) <b>Camera tilt indicator</b>   |
| 8) Liquid dispenser holder                | 18) <b>Camera tilt adjustment</b>  |
| 9) Syringe height adjustment              | 19) <b>Power button and status indicator light</b>   |
| 10) Manual dispenser adjustment           |  |

# Performing Surface Tension (Pendant drop) measurement

- Log On.

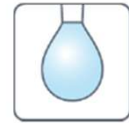


- Start Instrument



- Click open OA One Attention Software

- Click Select Pendant Drop (for Surface Tension Measurement)



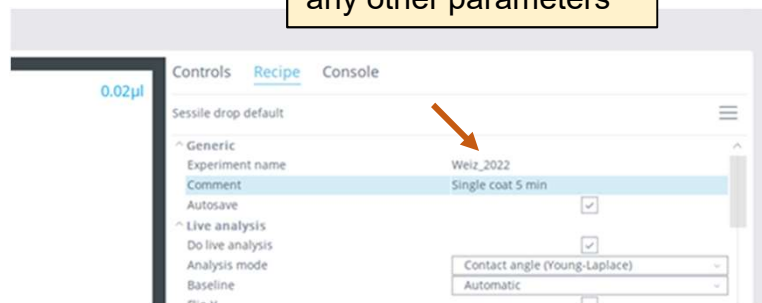
- Click **Recipe**



- ( In case you have a personal method load it manually).

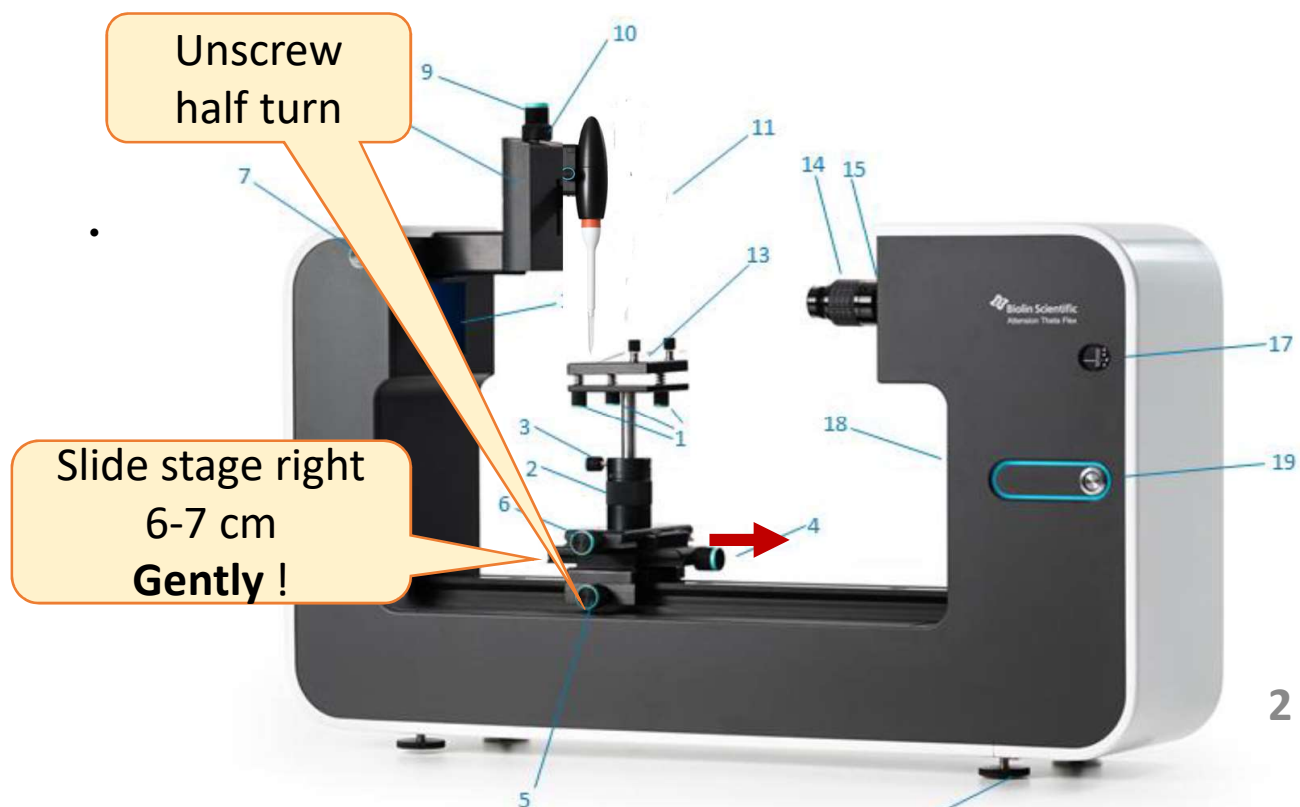
- Fill in your (Sample/Experiment; ID) name.
- Fill Comment. (optional)

Please do not change - any other parameters



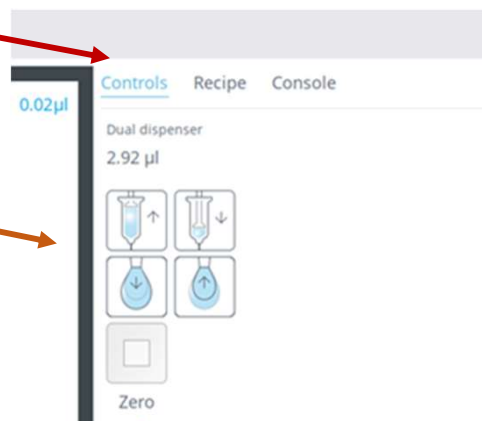
- **Filling the Tip with solvent:** If Needed.

- On the Instrument Loosen the sliding stage screw HALF a turn,
- and than slide the stage gently, to the right about 6-7- cm.



# Filling the Tip with sample

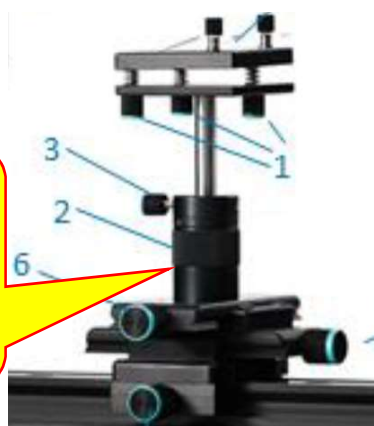
- Replace Tip.
- Click **Controls**
- Click Dispense.
- Hold a Beaker with Pure Water below the tip
- Click Fill, wait till full.
- (ul volume steady)
- Click Zero when Tip full.



- Place a tissue or paper on the stage. (In order to protect the stage from your sample).

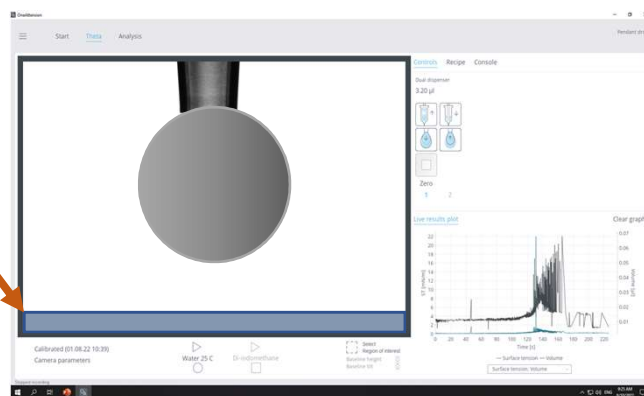
- Slide the stage back under the tip.

Use collar ring to adjust stage height



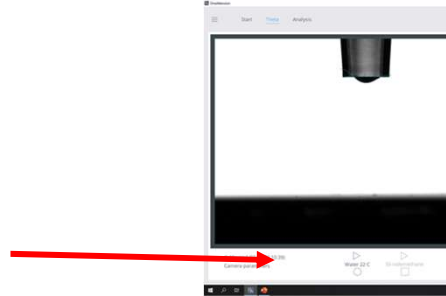
- Lower the Height of the stage using the Rotating collar on the stage support. Until it is barely visible on the image. (To clear the space for your drop to hang.)

**(Do Not use holding Screw 3)**



# Running the experiment

- To Start the experiment. Click the small triangle.




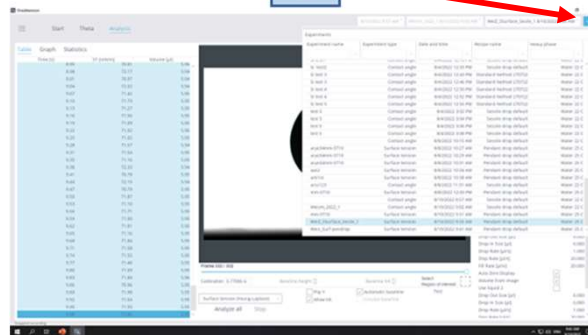
- The system will start to build the drop automatically. you get no indication But the Blue light around the power button will circulate.



- After about 20-30 sec. the light around the power will stop circulating.

- Click **Analysis**.

- If a list of your experiments will not appear click the  on the top right .



- In the window that opens, double click your experiment file.

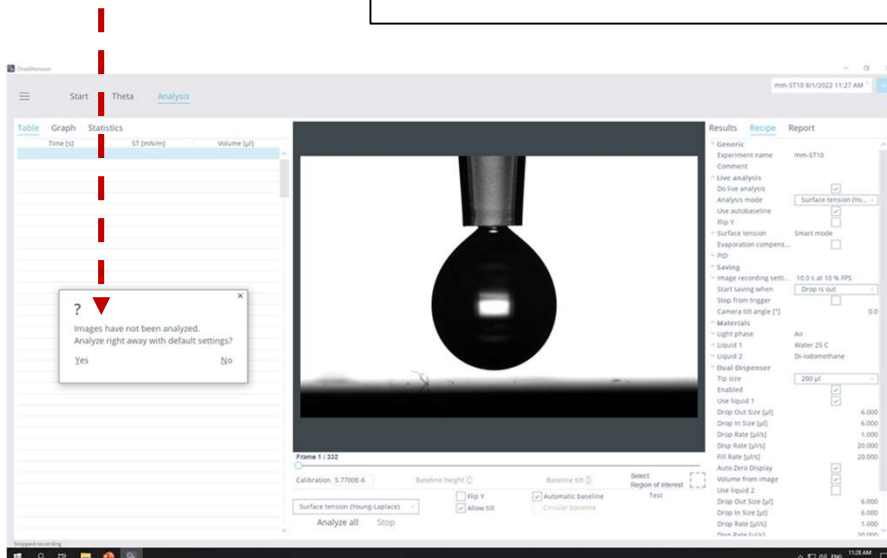
- Your experiment will open.

- A note will display on the left side of the image.



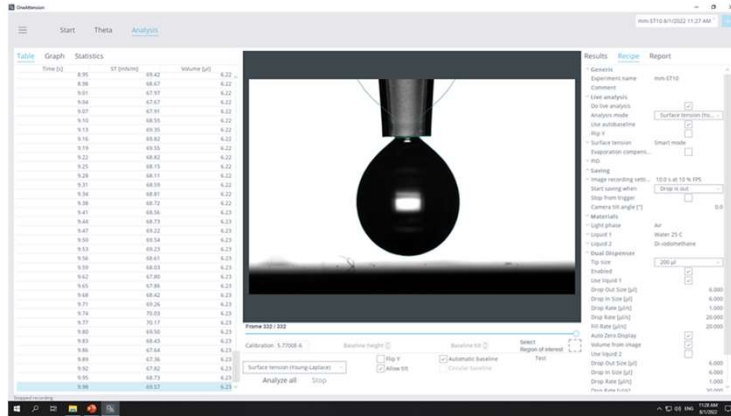
Image have not been analyzed  
Analyze right away with default setting?  
**Yes** **No**

- Click **Yes**.

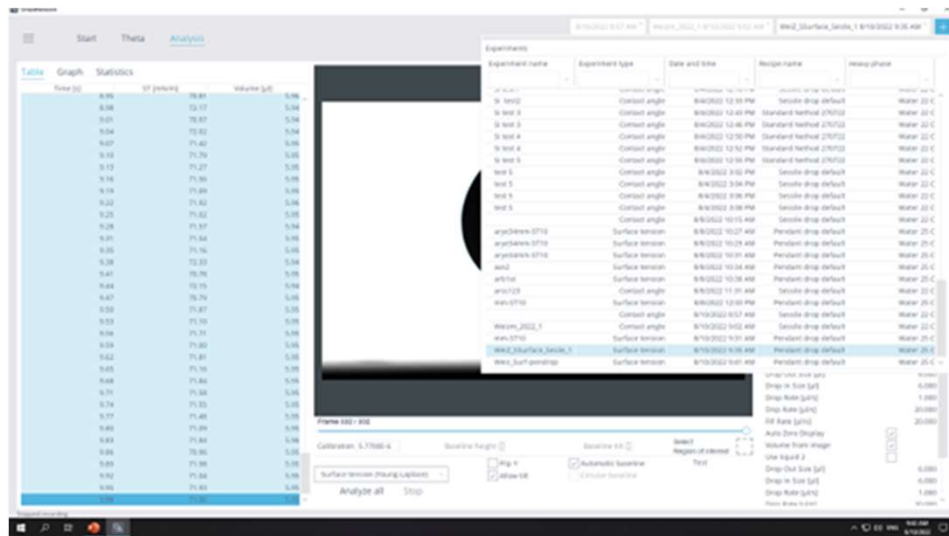


# Results and Report

- And the results will be calculated.



- Wait for the last row to turn green. (You can click any table to select and save it as xlsx file ).



- You can click **Statistics** to display calculations and export it. (It does not appear on the report).

32 rows  
(1 rows)

numeric data

f [s]	CA left [°]	CA right [°]	CA mean [°]	Volume [µl]	Baseline [mm]
4.99	52.55	66.98	59.76	0.26	4.12
2.89	0.90	1.02	0.57	1.76	0.02
0.00	51.49	57.02	56.07	0.00	4.06
9.98	58.46	67.94	62.13	13.88	4.21
332.00	332.00	332.00	332.00	332.00	332.00

- Click **REPORT**.

- Select

Export info; Calculated results; Theta image; Data table. (Statistics are not reported ).

- Click Generate report

## **Saving your data.**

- Save in your directory in:  
Desktop / Contact angle Users / **Your** directory.
- It opens automatically for you.

- **Just click Save.**

- It is saved in your documents with the Experiment name.

