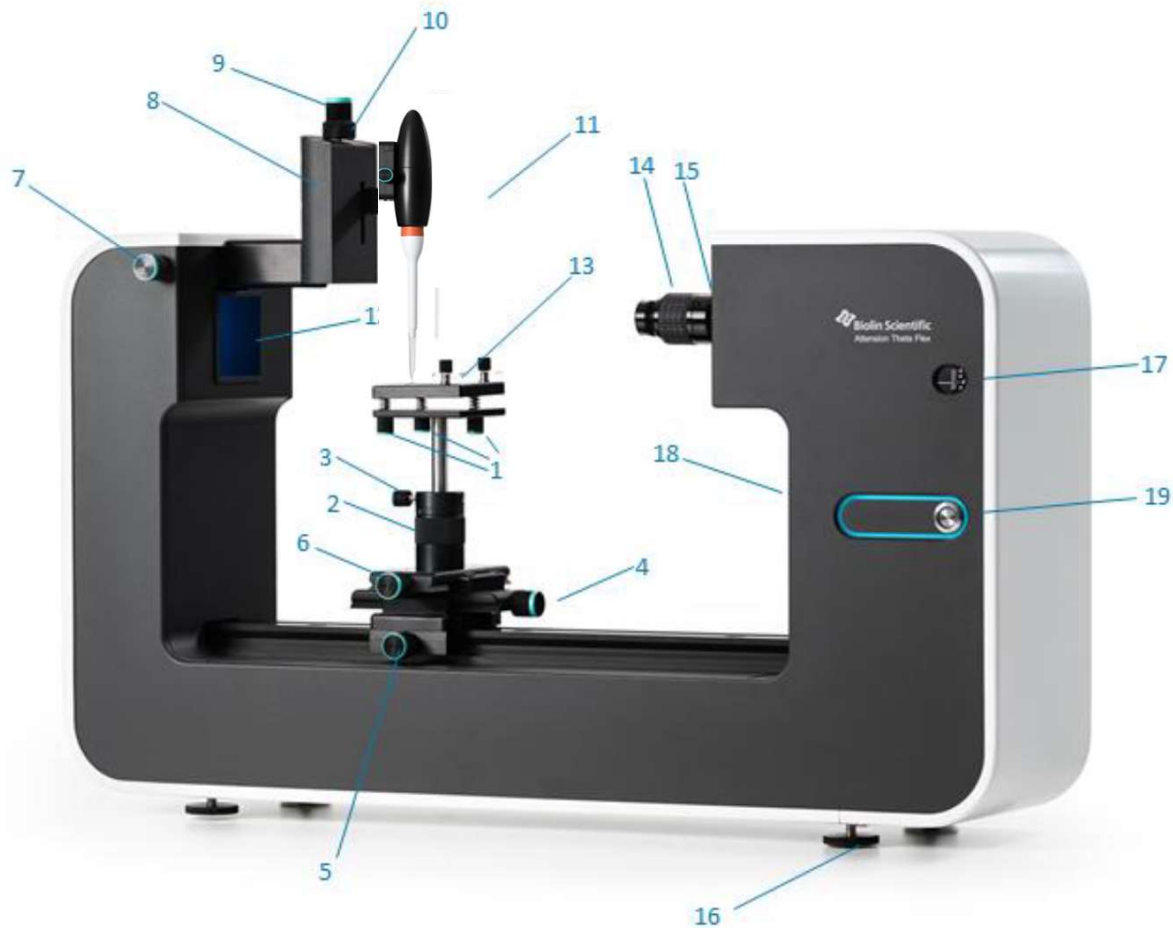


# Contact Angle (Sessile Drop) measurement



- |   |  |
|---|--|
| 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 Contact Angle (Sessile Drop) measurement

- Log On.

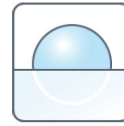
- Start Instrument



- Click open OA One Attention Software

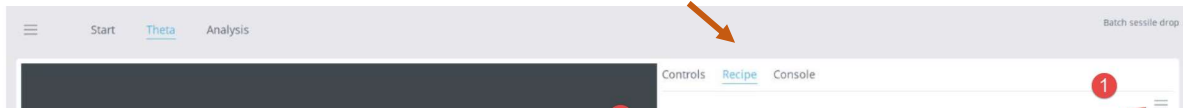


- Click Select Sessile Drop (for Contact Angle Measurement)



- Click **Recipe**

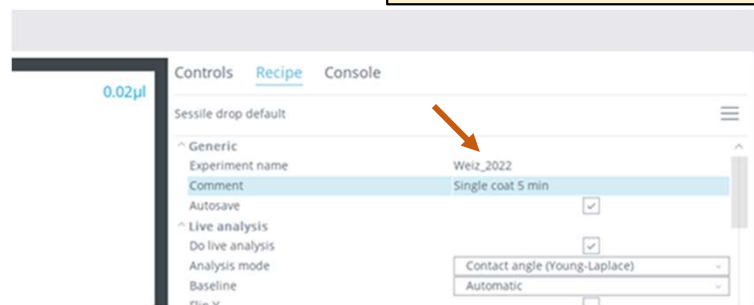
Sessile drop experiment



- ( 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

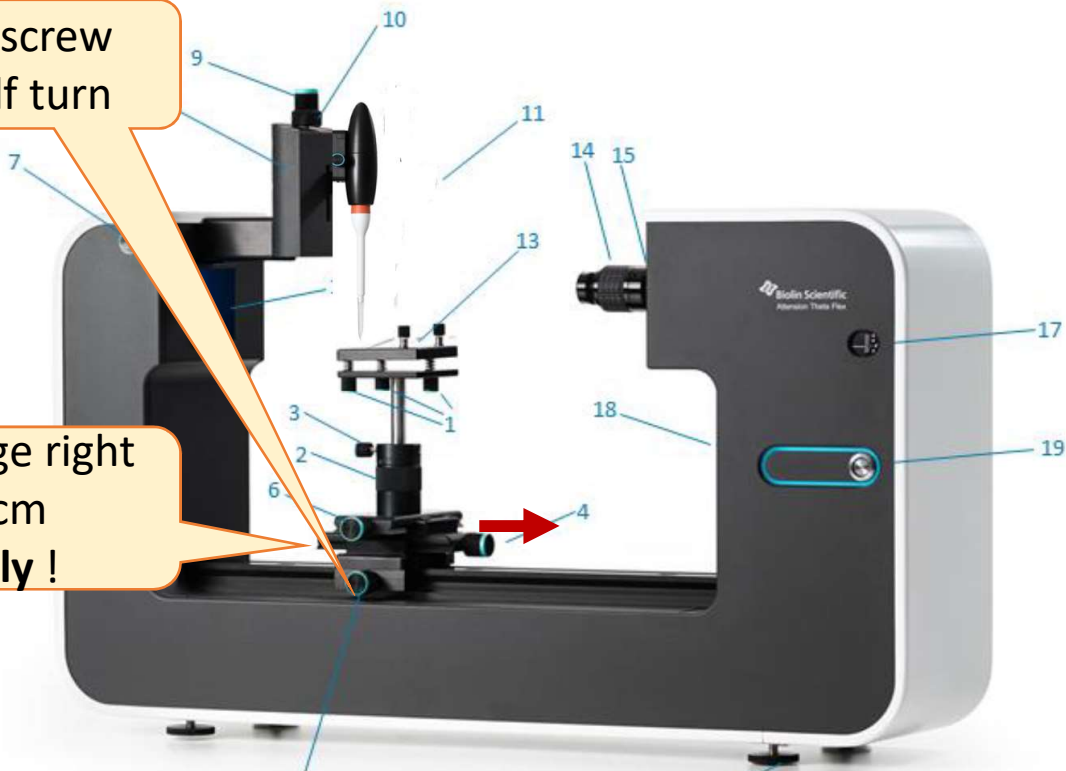


- **Filling the Tip with solvent:** If Needed.

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

Unscrew half turn

Slide stage right 6-7 cm Gently !



# Filling the Tip with solvent

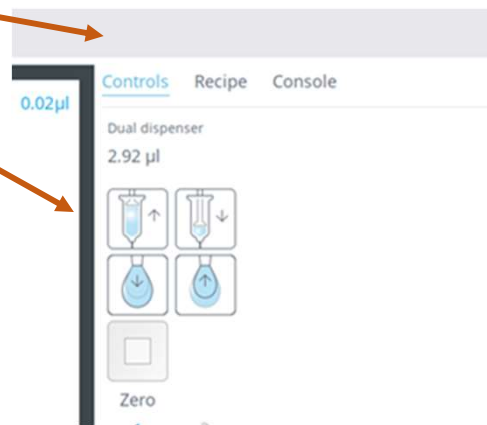
- Click **Controls**

- Click Dispense.

- Hold a Beaker with Pure Water below the tip

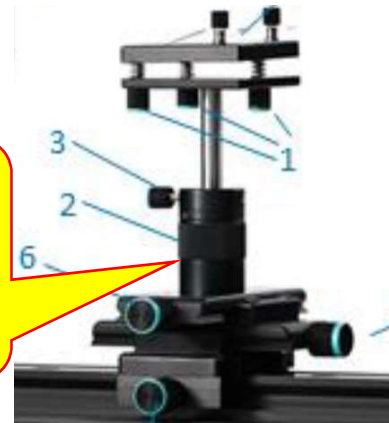
- Click Fill, wait till full.  
(ul volume steady)

- Click Zero when Tip full.

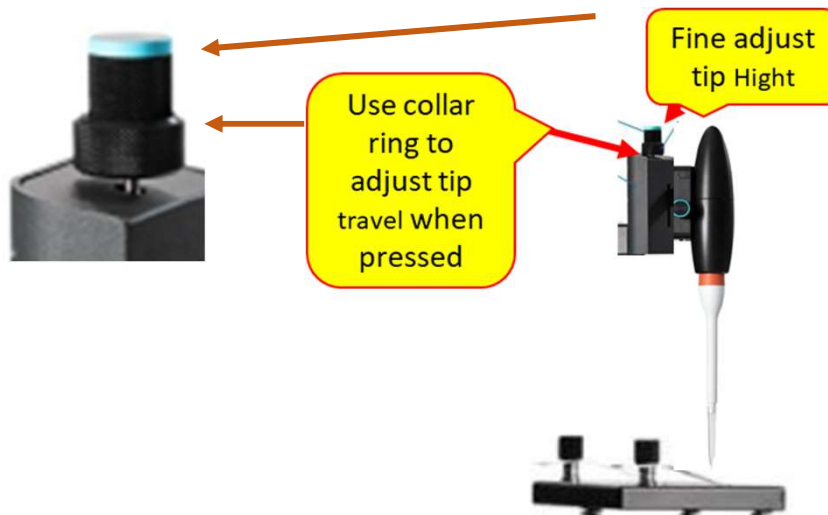


- Slide the stage back under the tip.
- Adjust the Height if needed.
- Place your material on the stage  
(try to keep the straight end parallel to the stage).
- Adjust the Height of the stage using the rotating collar on the stage support. Your test material should be Adjusted to approx. 7 mm below the tip.  
**(Do Not use holding Screw 3)**

Use collar ring to adjust stage Height

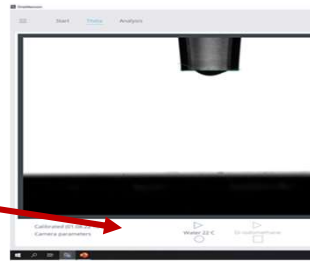


- Place your material on the stage (try to keep the straight end parallel to the stage).
- Adjust the Tip Height using the top screw to 6-7 mm above your material.
- Only if needed, adjust the travel of the dispenser using the collar ring 10 To a distance that will allow only the drop bottom, to touch your material. When pressed approx. 3-4mm.

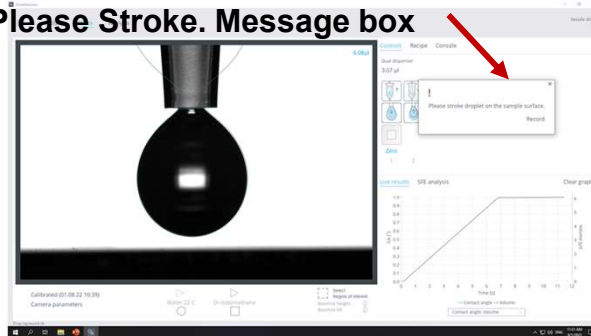


# Running the experiment

- Click the small Triangle below the picture -to start. (A drop will be dispensed **automatically**.)



- Wait for the **Please Stroke. Message box**

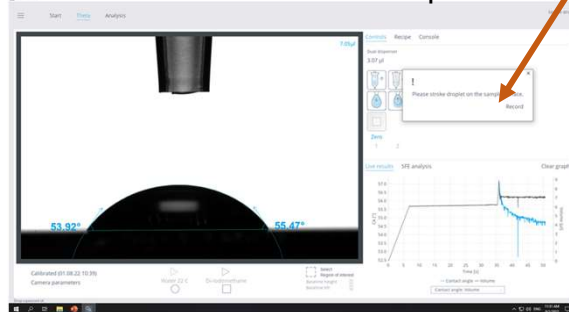


- Then press downwards the button on the mount of the dispenser to deposit the drop on the surface.

- Wait few seconds, assure that the contact angle displayed, is reasonable,
- Only in case focus is poor adjust with screw 4 on the stage (Please do not touch the lens)




- Press **Record** in the window next to the picture on the top right.



- Wait till blue light by the power button stops circulating.

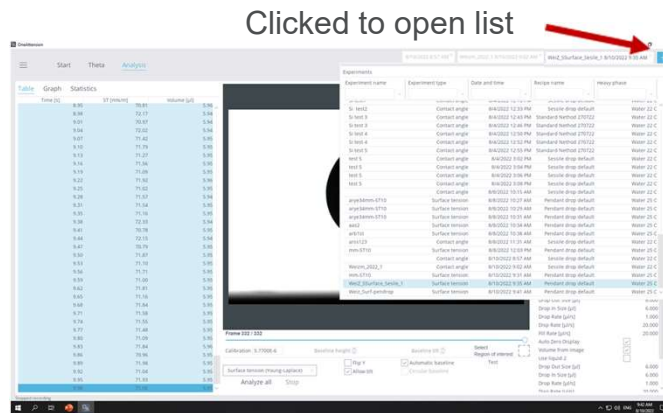
- Click **Analysis** select your file,



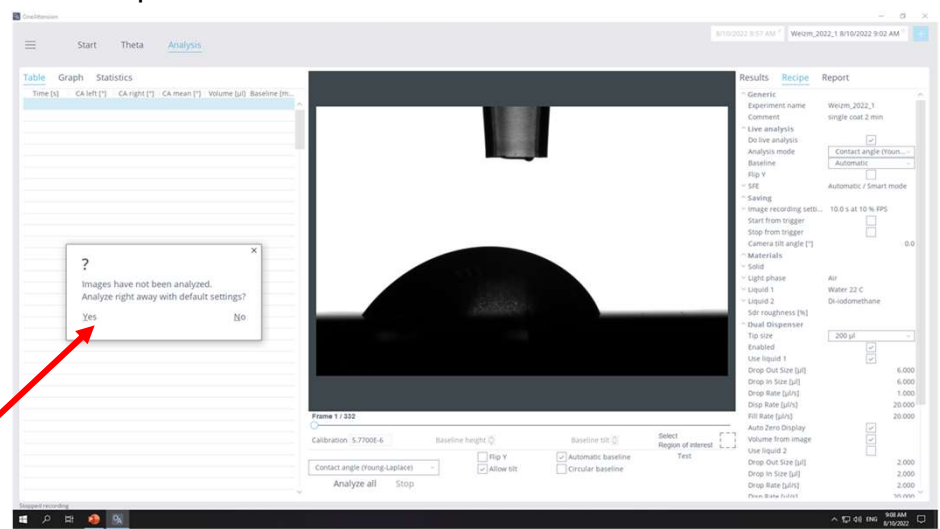
- If a list of your experiments will not appear click the  on the top right .

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

# Results and Report

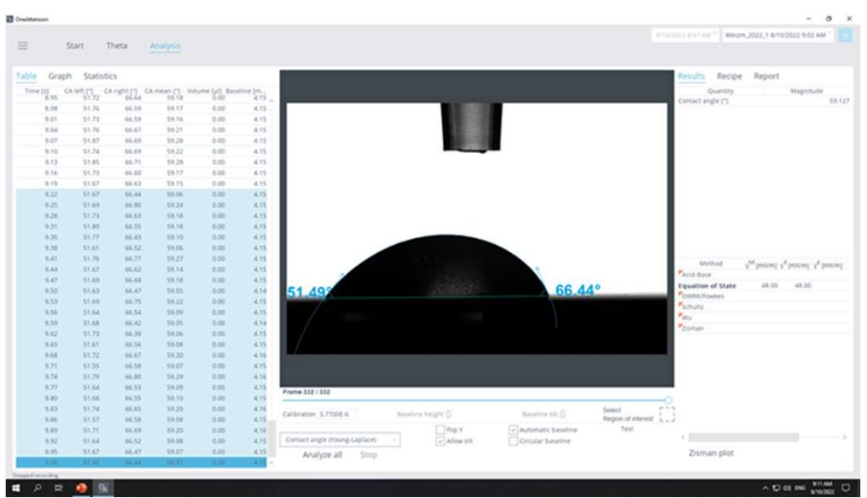


- And double Click your experiment file.
- Your experiment window will open.



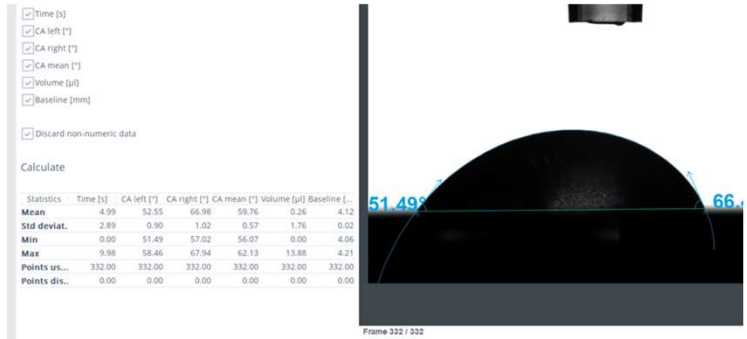
- Click Yes to analyze

- Data will be calculated.



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

- You can click **Statistics** to display calculations and select export.



- When done chose **Report**
- select:  
Export info: select **Calculated results**; **Theta image**; **Data table**.
- 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 will be saved as the experiment name)
- It is saved in your documents with the Experiment name.

