

## How to use the EasyDrop

- 1. Turn on the PC
- 2. Login to Windows with:

Username: administrateur

Password: whisky

- 3. Open CAE from the desktop
- 4. Login using your GASPAR credentials
- 5. Click on MXC906 Easy Drop
- 6. Click on "Valider", the instrument should turn on
- 7. Don't forget to remove the camera's cache
- 8. Reassemble and Install the syringe piston first, then the glass body (adjust the height of the piston to fit in the instrument)
- 9. Open software Drop Shape Analysis
- 10. Open the different windows:

Under File -> Open FG-Window

Click on the Open Result-Window shortcut



Click on the Device Control Panel shortcut



Under FG -> click Acquire (or press F5)

- 11. You can manually adjust the syringe position so that you can see the tip of the needle in the upper  $\frac{1}{4}$  of the frame
- 12. Manually magnify and focus on the tip of the needle
- 13. On the Device Control Panel, go under the "Refill "tab, dip the needle in your liquid and click "Refill now!" select the rate according to the liquid viscosity
- 14. Go under the "Dosing " tab, enter the volume (recommend.  $2-5~\mu L$ ) and the rate (recommend.  $250-350~\mu L/min$  for water)
- 15. Click multiple times on the up arrow until you see a drop appear on the needle's tip
- 16. Remove that drop (avoid using a tissue)
- 17. The instrument is now ready. Produce a drop and slowly raise the sample until the drop deposits itself on the surface
- 18. Quickly press F6 to freeze the image (under FG -> Freeze)
- 19. You can adjust the baseline manually or use the "Baseline detection"



- 20. You can measure the angle using the default method by pressing or go under Profile -> Contact Angle Using -> your preferred method
- 21. You can save a picture by selecting the FG-Window, under File -> Save as...
- 22. Once you're done, remove, clean and dismantle the syringe
- 23. Place the camera cache back on
- 24. Turn off the instrument on the CAE interface

E-mail: yann.lavanchy@epfl.ch Website: epfl.ch/research/domains/mhmc