How To

Measure modulated C$_P$

with Chip DSC
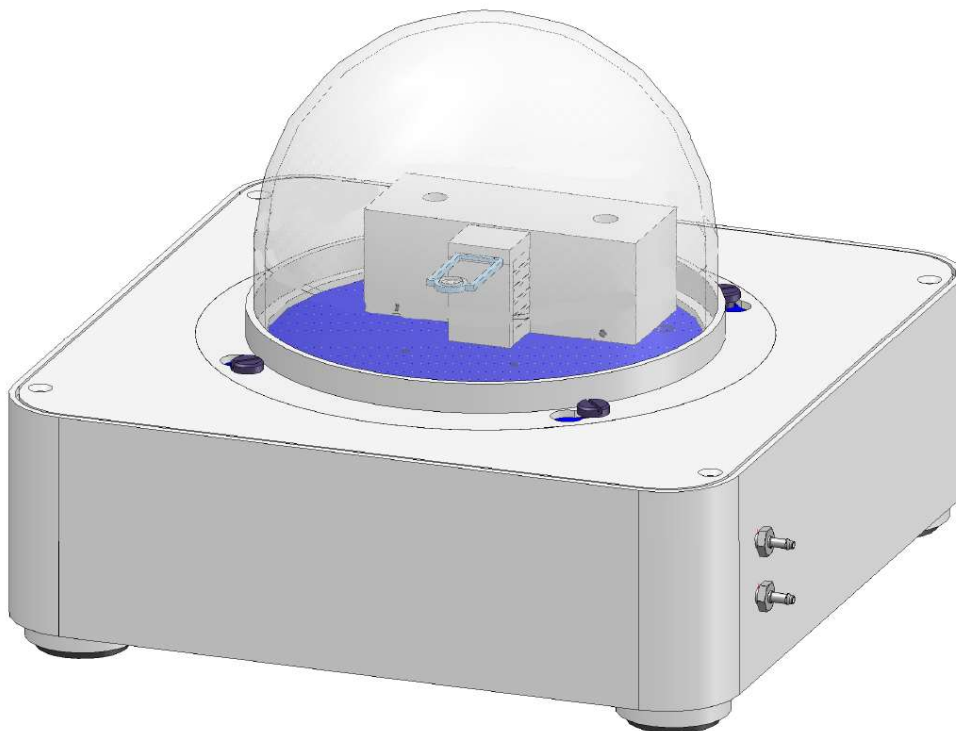
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1. Prepare temperature modulation function
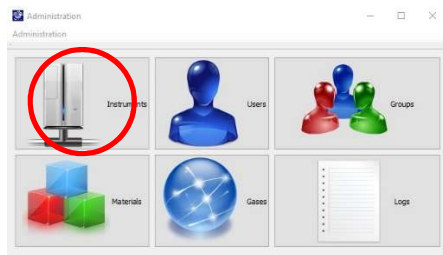
1.1 Administration

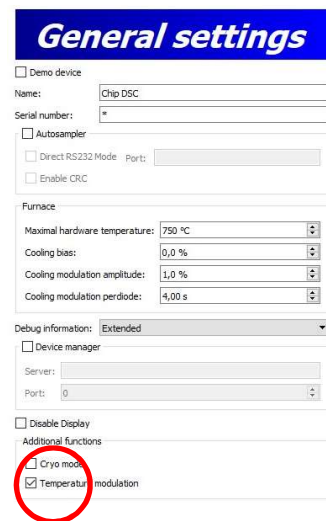- Make sure you have a Dongle for Chip DSC and it is connected to your PC

- Open the Administration Tool and log in as Superadmin

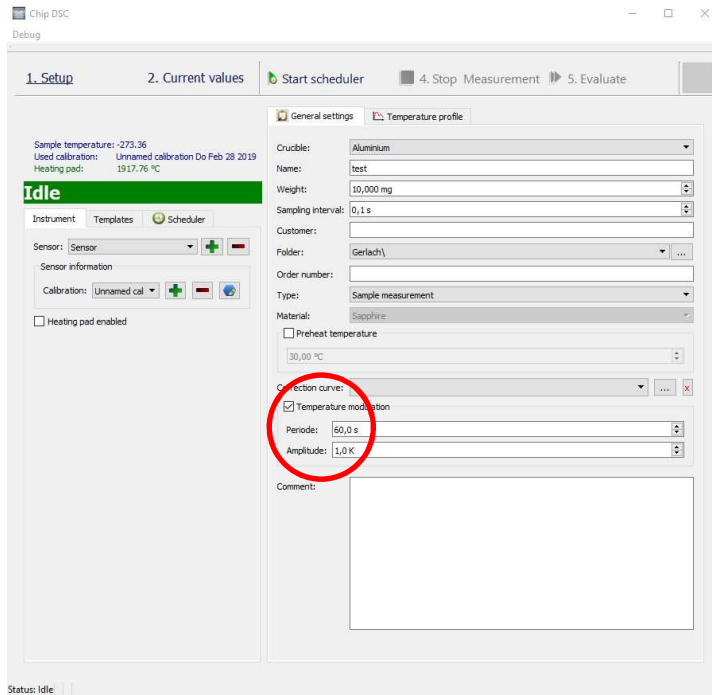- Select Instruments and your Chip DSC

- In General Settings enable the temperature modulation
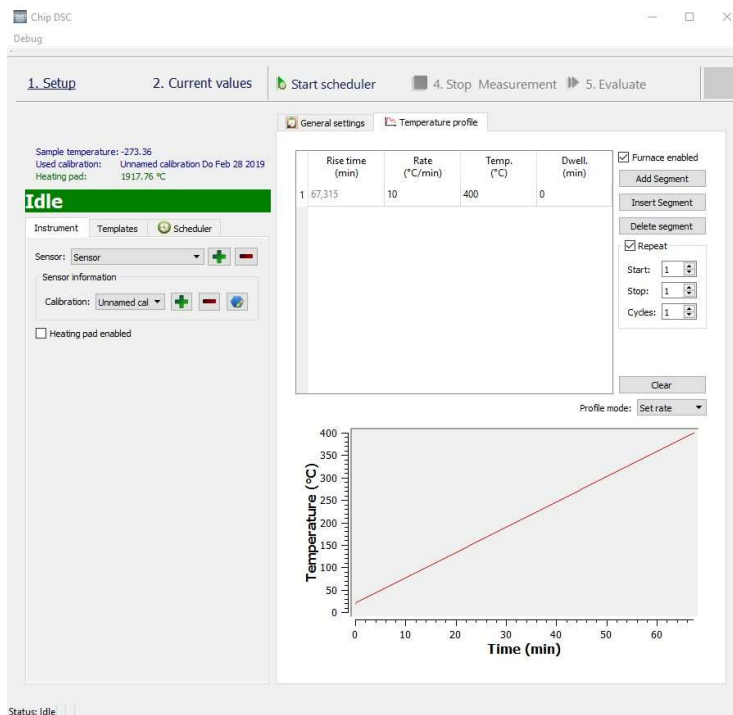
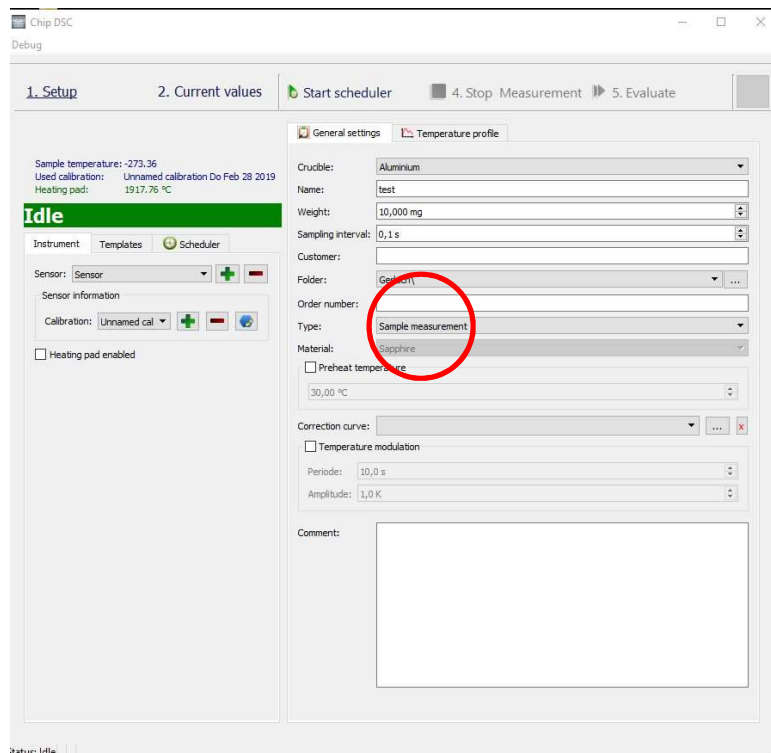## 2. Measuring

2.1 Measuring Software

- o Open the Chip DSC measurement software and enable the temperature modulation

- o For Period 60s and Amplitude 1K are recommended

- o Set the Temperature profile you want to measure

- o For heating rate 10 K/min are recommended

- o Now run the measurements

- o At first decide if you want to use a crucible or not (you should use the same crucible for every needed measurement) If you choose not to use a crucible please be aware the sample might stick to the sensor. If this is a concern please have a plan for cleaning the sensor.

- o Setting a Preheat temperature is recommended

- o Select Correction (Type) and run the measurement without any sample on Sensor/in crucible (insert any Weight it is not evaluated in the correction)

- o Select Calibration (Type) and run the measurement with the material you want to calibrate with (insert the weight as precise as possible)

- o Select Sample (Type) and run the measurement with the sample material you want to measure (insert the weight as precise as possible)

- o For every measurement: make sure all samples and the crucibles have good contact to the bottom and lay in the centre of the sensor / crucible!
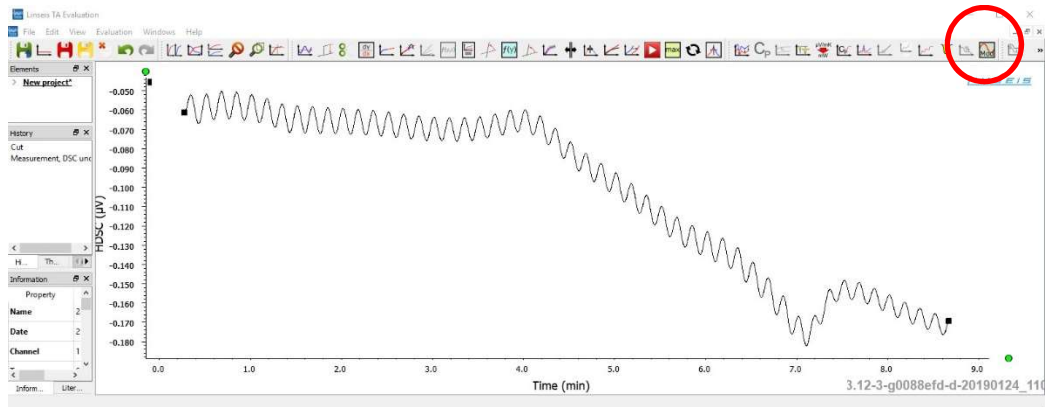
4. Evaluate

3.1 Evaluation Software

- o If all measurements are done start the evaluation software and load the Calibration

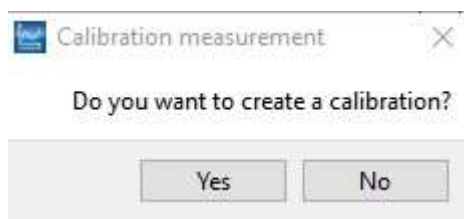   and sample curve (RAW – signal over time)
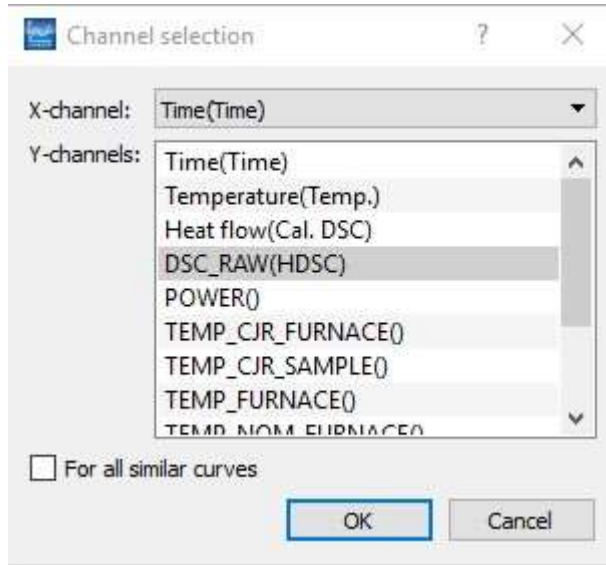
3.2 Calibration

- o Select the calibration curve
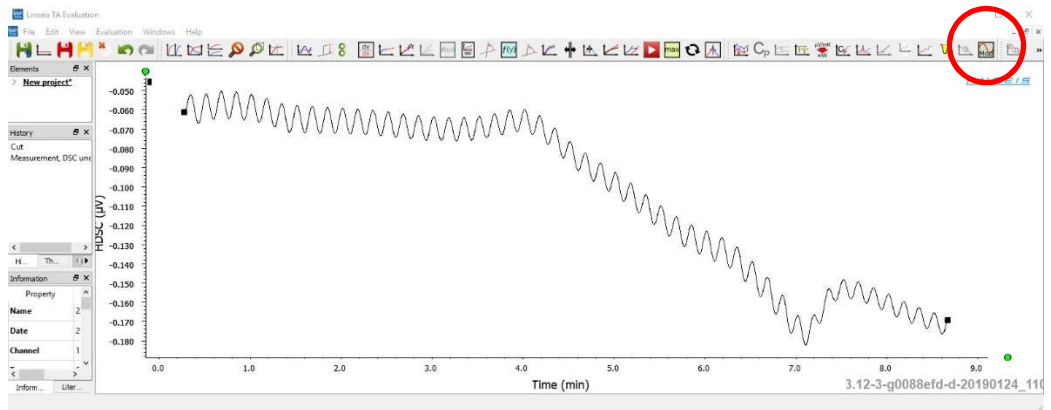
- o Click on the modulation – button

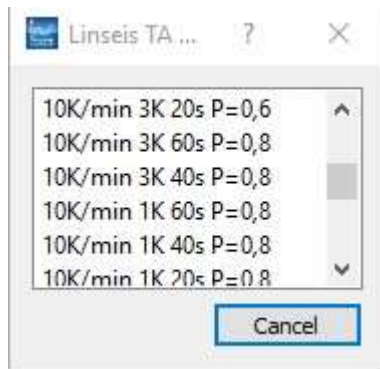- o In the selection window click „yes"

- o Choose the right correction curve

- o Give your calibration a name

3.3 Sample evaluation

- o Select your sample curve

- o Click on the modulation – button

- o Choose the right correction curve (the same from 3.2)

- o Choose the right C$_P$ – calibration and double click on it

3.4 Finish the evaluation

- o Now you have your C$_P$ value of the sample

- o You can modify your results in the evaluation tool