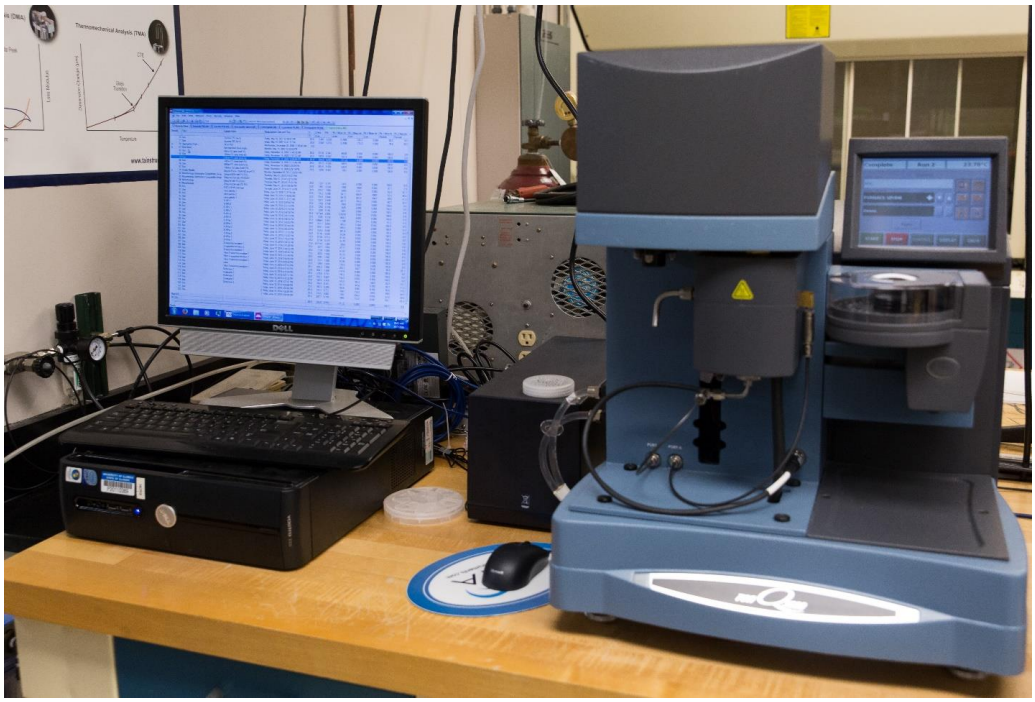
TGA Q5000 (TA Instruments)



Thermogravimetric analysis (TGA) is a weight change analysis system. The Thermogravimetric Analyzer measures the amount and rate of weight change in a material, either as a function of increasing temperature, or isothermally as a function of time, in a controlled atmosphere. It can be used to characterize any material that exhibits a weight change and to detect phase changes due to decomposition, oxidation, or dehydration.

System specifications:

- Temperature Range: Ambient to 1000 °C
- Mass sensitivity: 0.1µg
- Accuracy: 0.1 % or 10 µg
- Sample size: < 1 g
- Heating rate: 0.1 to 100 °C/min
- Auto sampler
- Sample pans: Platinum, high Temp. platinum, Ceramic (under 600C should place your sample in a DSC pan and then place it in the platinum pan)
- Controlled Atmosphere: Nitrogen, (Ar, O_2 can be requested if needed)

- Users can purchase the consumable aluminum sample pan/lid (for measurements below 600 °C) from NCF website. Super users can purchase the batches of 100 pan/lid from “DSC consumables” or “TA instruments”.

Safety notes:

- **Never Open the furnace when the temperature is higher than 40 °C, it can cause serious damage to the furnace and balance.**
- **Never try to load/unload your pan manually on the hang down wire.**
- **Furnace should be kept close at all times(before loading your pan into auto sampler and after unloading it)**