

## Decomposition of calcium oxalate

### Experimental:

Instrument : *Labsys*<sup>TM</sup> evo TGA-DSC with a DSC 1600°C rod.

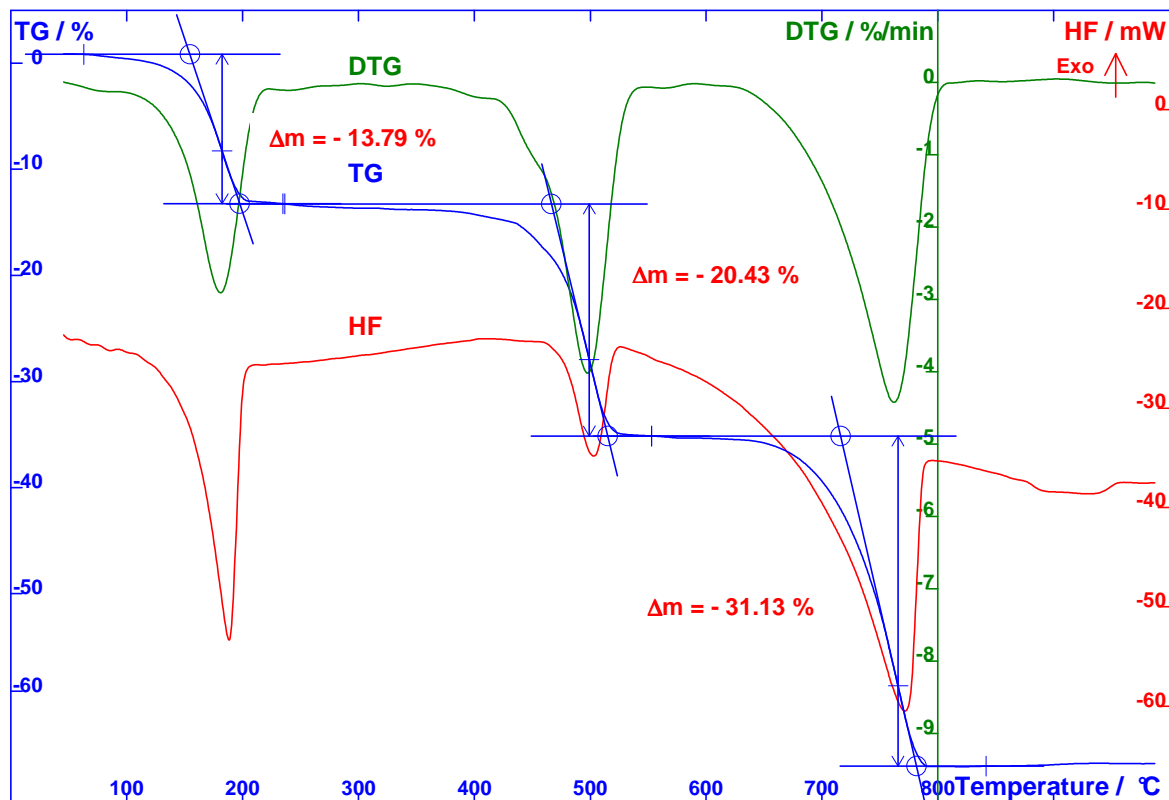
Sample :  $\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O}$  : calcium oxalate hydrate.

Sample mass : 10.13 mg

Crucible : alumina

Atmosphere : helium

The temperature is programmed from ambient up to 1 000°C at 10 K.min<sup>-1</sup>.



### Conclusion:

The curves TG (%), DTG (%/min) and DSC are drawn versus the temperature.

Three mass losses are observed:

- $\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O} \rightarrow \text{CaC}_2\text{O}_4 + \text{H}_2\text{O}$
- $\text{CaC}_2\text{O}_4 \rightarrow \text{CaCO}_3 + \text{CO}$
- $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$

Notice : The TG curve is presented after correction from a blank test carried out with empty crucible.

### Instrument:

Labsys TGA-DSC evo

Ambiant to 1600°C



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