

## **DSC** (Differential Scanning Calorimetry)



Differential Scanning Calorimetry or DSC is a thermal analytical method for performing heat analysis; measures the amount of energy absorbed while the sample is being heated, cooled, or held at a constant temperature. DSC is following the same principle of measurement as DTA. The main application areas of DSC are studies on phase changes such as exothermic and endothermic decomposition. DSC is used to measure thermal changes such as specific heat

capacity, phase change temperature, and reaction temperature.

## **DSC Applications:**

- Material Analysis
- Pharmacy
- Construction Sector
- Chemistry
- Food Sector

**Instrument Model:** TA Instruments Q20 DSC

## **Instrument Hardware and Features:**

**Temperature Range:**  $-180 \,^{\circ}$  C to 550  $^{\circ}$ 

**Temperature Accuracy:** +/- 0.1 ° C

**Hot Resolution:**  $+/-0.01 \circ C$ 

Sensitivity:  $0.2 \mu W$ 

Calorimetric Accuracy (indium metal): +/- 0.05%

Calorimetry Resolution (indium metal): +/- 0.05%