

Title: Thermal Analytical Methods (IR, DSC & TGA)

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Description about the Program:

Dr.Tripathi explained in detail different methods used in thermal analysis in like IR, DSC & TGA. Thermal analysis is defined as a group of methods based on the determination of changes in chemical or physical properties of material as a function of temperature in a controlled atmosphere. Thermal analysis is a good analytical tool to measure:

- Thermal decomposition of solids and liquids
- Solid-solid and solid-gas chemical reactions
- Material specification, purity and identification
- Inorganic solid material adsorption
- Phase transitions.

Based on this information, one can characterize polymers, organic or inorganic chemicals, metals, semiconductors and other common classes of materials. The principal techniques of thermal analysis are differential scanning calorimetry (**DSC**) and dynamic thermogravimetry (**TGA**).

