

## SIMULTANEOUS THERMAL ANALYSIS (STA)

This technique combines the benefits of thermal analysis and differential scanning calorimetry (measurement of the energy flow to or from the sample, quantifying the changes as exothermic or endothermic) into a single experiment. The instrument also has a maximum temperature range extending to 1500°C. The enthalpy changes can be precisely correlated to the TGA events resulting from mass loss. Thus if an exothermic process just precedes loss of material, this is very different from an exothermic change during material loss (condensed phase oxidation), so the sequence of events can be clearly known.