

furnace pyrolysis

in spectrochemical analysis

A flowing stream of gas (hydrogen, oxygen, nitrogen, chlorine, etc.) required to produce volatile species of the elements being determined, is passed over the test sample in a heated furnace. The analytes leave the furnace in the gas stream, or are entrained by a carrier gas. The analytes in the gas stream may be collected in an absorbing solution, on a carbon or other filter or by condensation on a cool surface. In the case of mercury this can also be done by amalgamation with a noble metal. The analytes may then be swept and released from the trap, by heating, into a sampling source for analysis.

Source:

PAC, 1988, 60, 1461 (*Nomenclature, symbols, units and their usage in spectrochemical analysis-X. Preparation of materials for analytical atomic spectroscopy and other related techniques (Recommendations 1988)*) on page 1470