- The purpose of chemical analysis is to establish the composition of naturally occurring or artificially manufactured substances.
  This is usually done in two distinct steps:
  - 1. Qualitative analysis; which is used to identify the sample components
  - 2. Quantitative analysis; in which the relative amounts of these components are determined.
- In this course, the traditional methods of qualitative analysis are introduced. These can be divided into two categories *dry reactions* which are carried out on solid samples usually at elevated temperatures and *wet reactions* that uses dissolved samples and reagent solutions. In both types, the chemical change that appears or disappears is observed and used for the elucidation of sample composition.
- It must be ensured that the study of classical qualitative inorganic analysis is invaluable for any chemist as this where he first comes across and handles materials related to chemistry science.
- The intelligent study of qualitative analysis requires a certain level of theoretical background in general chemistry. Such a background involves chemical symbols, formulae, equations, theory of electrolytes, equilibria in electrolyte solutions, acid base theory, strength of acids, pH, buffer systems, hydrolysis, ......etc.