



كلية : التربية للعلوم الصرفة

القسم او الفرع : علوم الحياة

المرحلة: الاولى

أستاذ المادة : د.أسراء عبد الكريم معروف العاني

اسم المادة باللغة العربية : كيمياء تحليلية

اسم المادة باللغة الإنكليزية : Analytical Chemistry

اسم المحاضرة الثامنة باللغة العربية : تجفيف الراسب

Drying of Precipitates . اسم المحاضرة الثامنة باللغة الإنكليزية :

- ***Drying of Precipitates***

- After filtration, a gravimetric precipitate is heated until its weight becomes constant. Heating serves the purpose of removing the solvent and volatile electrolytes carried down with the precipitate; in addition, this treatment may induce chemical decomposition to give a product of known composition.
- The temperature required to produce a suitable product varies from precipitate to precipitate.

- ***Time Required for a Gravimetric Analysis***

- In considering the time required to perform an analysis, it is necessary to differentiate between elapsed time and operator time. The first refers to the clock hours or minutes between the start of the analysis and the report of the result. Operator time, on the other hand, represents the actual time the chemist or technician must spend in performing the various manipulations required to complete the analysis and calculate the result. A characteristic of the gravimetric method is that the difference between elapsed time and operator time is large, when compared with other methods, because the most time-consuming steps in the analysis do not require the constant attention of the analyst. For example, drying of crucibles,

evaporation of solutions, digestion of precipitates, and ignition of products frequently take several hours to complete but require, at the most, a few minutes of the analyst's time, thus leaving him free to perform other tasks.