Unit 6

Chromatography

1 What is the aim of chromatographic techniques?
2 What is the relation between the retention time and the speed of the analysis?
3 How do we measure efficiency?
4 What are the two main phases in chromatographic techniques?
5 What is the most important part of HPLC?
6 How do we put samples into the column?
7 In which phase do we use silica-based particles?
8 What is the commonest HPLC detection technique?

Vocabulary warm-up

stationary phase	column	retention time	microsyringe	device eluate
analyte	mobile phase	theoretical plate	chromatogram	
eluent	sample	injector	flow volume	

1_____ characteristic time it takes for a particular analyte to pass through the system

2_____ in many separation processes is a hypothetical zone or stage in which two phases, such as the liquid and vapour phases of a substance, establish an equilibrium with each other.

3_____ substance fixed in place for the chromatography procedure

4_____ phase that moves in a definite direction

5_____ substance to be separated during chromatography. It is also normally what is needed from the mixture

6_____ the visual output of the chromatograph

7_____ the mobile phase leaving the column

8_____ the solvent that carries the analyte

9_____ the matter analyzed in chromatography

10_____ a device used in conjunction with injecting samples

11_____ a glass tube with a diameter from 5 mm to 50 mm and a height of 5 cm to 1 m with a tap and some kind of a filter

12_____ an object or a piece of equipment that has been designed to do a particular job

13_____ a small pump with a plunger that fits tightly in a tube

14_____ amount of eluate passing through the column