

- Squalane is an example of polar columns of GC which is used to separate general low boiling point hydrocarbons.
- Polyethylene glycol (trade name Carbowax) is an example of non polar GC column which is used to separate aldehydes, ketones, Fatty acid methyl esters etc.

Principals of Separation

- Column is selected, packed with Liquid Phase, and installed.
- Sample injected with microliter syringe into the injection port where it is vaporized and mixed into the Carrier Gas stream (helium, nitrogen, argon).
- Sample vapor becomes partitioned between Moving Gas Phase and Stationary Liquid Phase.
- The time the different compounds in the sample spend in the Vapor Phase is a function of their Vapor Pressure.
- The more volatile (Low Boiling Point / Higher Vapor Pressure) compounds arrive at the end of the column first and pass into the detector.