Gas Chromatography is an analytical technique used to separate and identify chemical compounds in a mixture.Common detectors include Flame Ionization Detector (FID), Thermal Conductivity Detector (TCD), and Electron Capture Detector (ECD).Carrier Gas: An inert gas (like helium or nitrogen) carries the vaporized sample through the column.This technique relies on the distribution of sample components between two phases: the stationary phase and the mobil1.Separation: As the sample travels through the column, different components separate based on their interactions with the stationary phase and their boiling points.Detection: After separation, the components exit the column and are detected by a detector.The column is coated with a stationary phase that interacts with the sample components.2.3.4.5.e phase.