The working principle of the device: The device separates the components of the sample, then recognizes and quantifies them, and the separation is done by distributing the sample between the two phases of the moving phase (liquid) and the stationary phase (liquid or solid), depending on the different physical properties of each component, as it moves through the stationary phase at different speeds, which leads to the separation of the components from each other in the form of layers, where the time of exit of the separate components from the column is measured to identify the material and measure its ?? concentration, usually the fixed phase is in a column about