High Performance Liquid Chromatograph

HPLC is a physical separation technique in which a sample dissolved in liquid is injected into a column packed with small particles and separated into its constituent components. It is the widely used analytical technique for the quantitative analysis of organics and biomolecules.



HPLC utilises a liquid mobile phase to separate the components of a mixture. The sample mixture to be separated is introduced in a discrete small volume and forced to flow through a chromatographic column under a high pressure. Mobile phase pumped through column at high pressure. In the column, the mixture separates into its components. The components of the sample move through the column at different velocities. Components that have a higher affinity for the mobile phase compared with the stationary phase migrate more rapidly, while components that have a higher affinity for the stationary phase are eluted from the column later. Each sample component will elute from the column, one at a time, and will be detected by a UV detector. Each compound eluted will show up as a peak on the chromatogram.

For charging and staff in-charge information, please refer to the charges for the use of instrument.