



CHROMATOGRAPHIC ANALYSIS - A VITAL TOOL FOR SYNTHETIC CHEMISTRY

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ABSTRACT

Chromatography is the separation and identification technique. Structurally or chemically similar components of homogeneous mixture can be separated using this technique. Separation is based upon component's relative ability to adsorb and/or partition between mobile phase and the stationary phase. Depending upon separation principle, geometry of method, mode of chromatography, the technique is classified in various types. Chromatography is very commonly used technique in synthetic chemistry for identifying compounds, determining their purity and following the progress of a reaction by studying the components present; and in separating reaction intermediates. The TLC based chemical screening approach has been developed for the investigation of metabolites from the microbial culture. In the field of synthetic chemistry and drug development process the chromatography has proven a crucial role. It may be concluded that drug discovery phenomenon is incomplete without chromatographic techniques. Depending on the nature of analyte if proper chromatographic method is supported with suitable detection technique, the analysis is no longer a challenge. The current paper attempts to analyze the importance of chromatography in synthetic chemistry.

KEYWORDS- TLC, HPTLC, Paper Chromatography, Synthetic Chemistry, Drug Discovery.
