

Random shifting of retention times in HPLC chromatograms – Tips & Suggestions

If you see retention times that are getting either higher or lower with each injection, this often points to a column equilibration issue.

However, if the retention time shifts are more random in nature from run to run, this may be due to the solvent proportioning valve instead. What this means is that the solvents are not being mixed in a consistent manner.

The best way to verify if this is the case is to prepare a premixed solvent using only one mobile phase line and see if the problem goes away.