Waters
Lab Highlights
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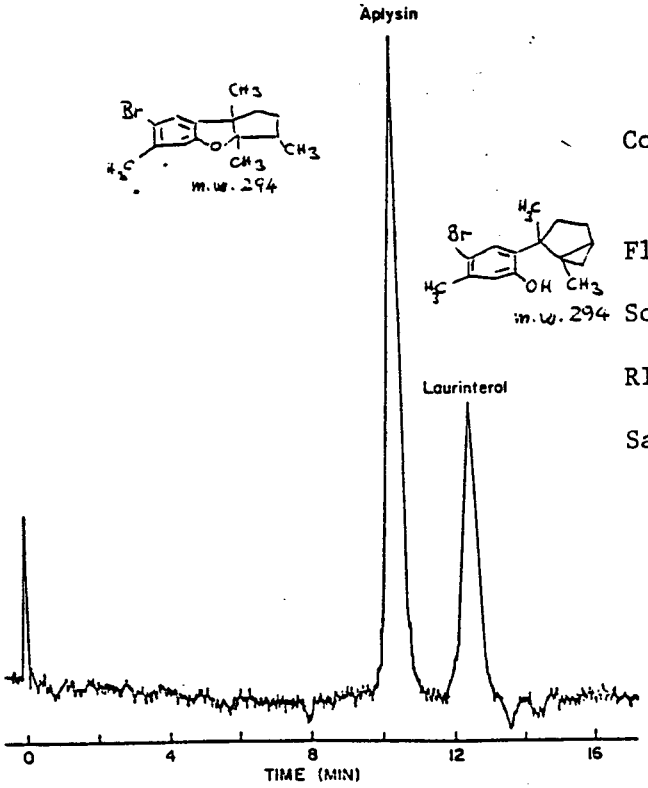
SMALL MOLECULE GPC: I. A TECHNIQUE FOR EVERYONE

Every chromatographic laboratory should have the capability of GPC to separate small molecules (less than 2,000 molecular weight). Small molecule GPC is a fast, easy to use method which is, literally, "dilute, filter and shoot."

Unfortunately, most people think of GPC as belonging to "Polymer People" only, but this is not true. The example below shows the separation by size of two similar molecules. Most chemists would approach the separation using reversed-phase. However, these chemists knew the value of small molecule GPC and simply dissolved the sample. In 20 minutes the entire separation was complete (methods development included).

In light of the introduction of ULTRASTYRAGEL™ Columns with very high efficiencies and the fact that most organic molecules are soluble in THF, small molecule GPC should be considered as a possible first approach to many separation problems.

Additionally it should be remembered that a sample of small molecules as high as 15% concentration can be injected for preparative work which makes small molecule GPC even more attractive.



Column: 2 ft. X 7.8mm ID
μSTYRAGEL™ 100Å

Flow Rate: 1.3 ml/min

Solvent: $CHCl_3$

RI Detector

Sample: 60 μg of each

S.Caccainese and K.C.Rinehart(Univ.of Illinois) 170th ACS Meeting,Chicago (1975)

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