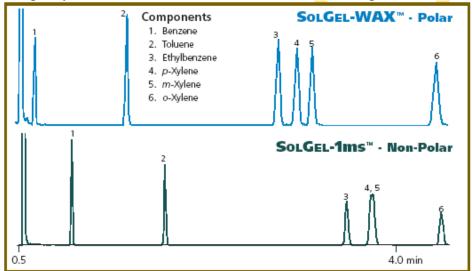
#### **COLUMN SELECTION**

## **Stationary Phase:**

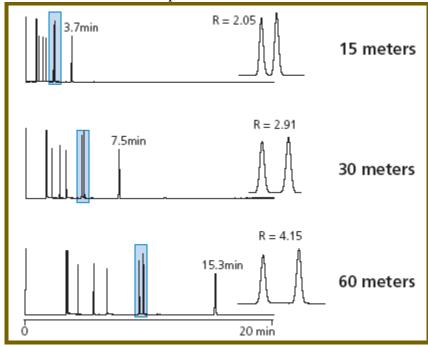
- Choose the least polar phase that will perform the separation you require.
- Choose SOLGEL-WAX<sup>TM</sup> to separate compounds such as alcohols, ketones, aldehydes and esters.
- The 5% phenyl columns (BPX5) can be used in 90% of all separations.



Effect of stationary phase. BTEX analysis on two phases of columns. 30m x 0.25mm ID x 0.25mm film (SGE).

## Length

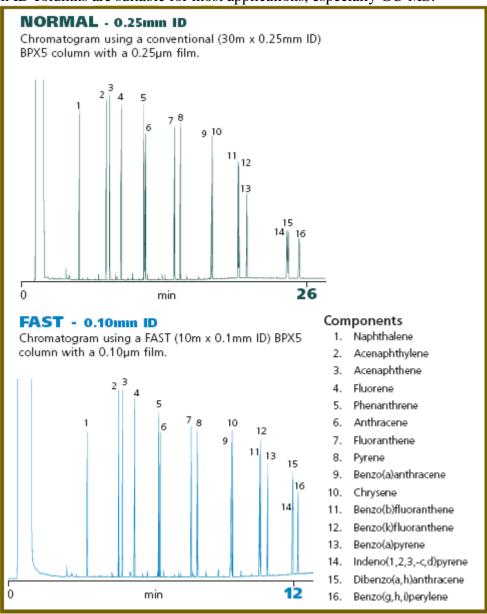
- Doubling the column length improves resolution by 40%.
- 30 meter columns are standard.
- Choose short columns for active compounds.



Effect of length (SGE).

# **Internal Diameter**

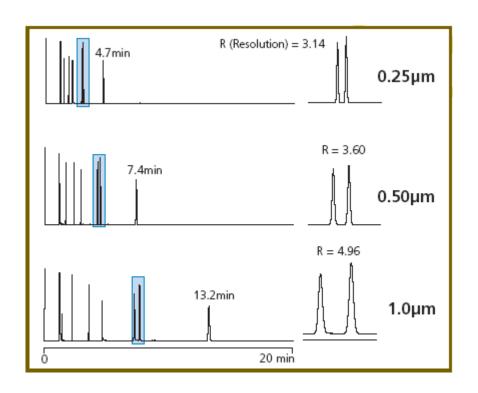
- The smaller the diameter, the faster the analysis.
- 0.25mm ID columns are suitable for most applications, especially GC-MS.



Effect of internal diameter. Polynuclear Aromatic Hydrocarbon (PAH) analysis (SGE).

#### **Film Thickness**

- 0.25um films are standard.
- Use >= 0.5um films for volatile compounds.
- Thicker film columns will result in longer run times but better resolution.



Effect of film thickness (SGE).