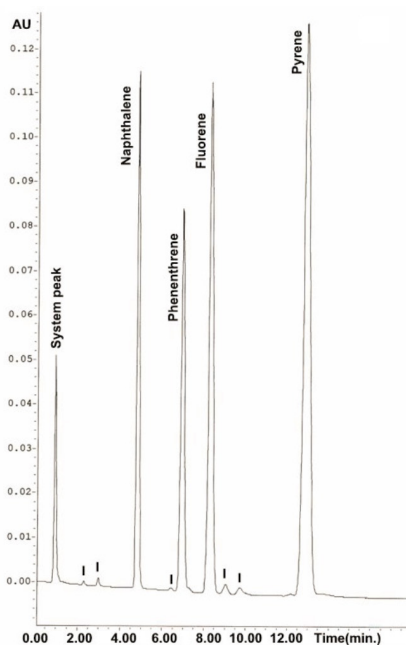
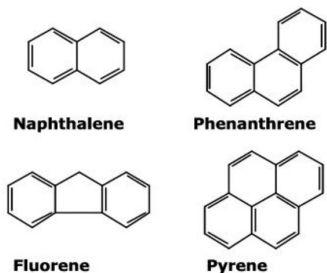


Polycyclic Aromatic Hydrocarbons (PAH)

A Reverse Phase Separation



Notes: Cogent Bidentate C18 with Selectivity3™ operates in three modes of chromatography (reversed phase, aqueous normal phase and organic normal phase). Separation of PAHs illustrates its excellent capabilities in the reversed phase mode.

Method Conditions

Column: Cogent Bidentate C18™, 4µm, 100Å

Catalog No.: 40018-75P

Dimensions: 4.6 x 75 mm

Mobile Phase: 70% Acetonitrile/ 30% DI H₂O

Injection vol.: 1µL

Flow rate: 0.5 mL/min

Detection: UV 254 nm

Sample: 1 mg of each sample was dissolved in 1 mL of the mobile phases

- Peaks:**
1. Naphthalene
 2. Phenanthrene
 3. Guafenesin
 4. Pyrene
 - I. Impurities or decomposition products

Discussion

PAH (Polycyclic Aromatic Hydrocarbons) determination in several matrices (soil, food, air, body fluids etc.) is a topic of interest for routine quality control or screening analyses. Cogent Bidentate C18 columns offer good resolution, reproducible retention time and peak shape for PAH compounds. In addition to the main components, small peaks due to impurities or decomposition products are well resolved.