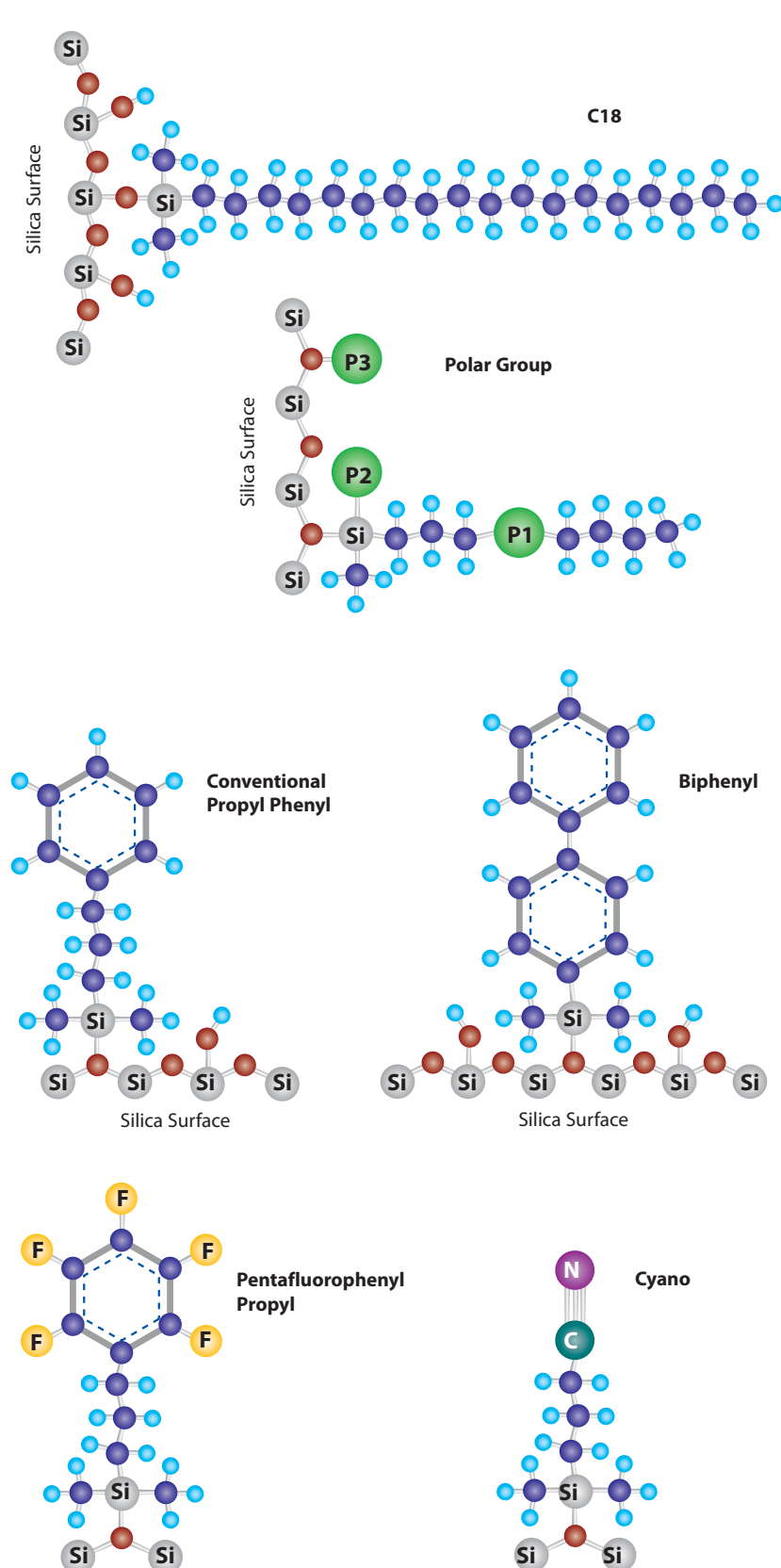


Figure 2 Stationary phase comparison.

**Alkyl phases (e.g. C18)**

Alkyl-based stationary phases, such as C18, are best suited for analyzing hydrophobic molecules with a high carbon:heteroatom ratio.

**Alkyl phase with polar functional group**

An alkyl-based stationary phase with either an embedded polar group (P1), a polar side chain (P2), or a polar end-cap (P3), has significantly greater interaction with polar compounds than a traditional alkyl phase.

**Phenyl & Biphenyl phases**

Phenyl stationary phases interact with compounds containing aromatic groups or unsaturated bonds through  $\pi$ - $\pi$  interactions. The biphenyl stationary phase has even greater interaction due to the higher concentration of aromatic rings.

**Cyano & Fluorinated phases**

Fluorinated phases, such as the pentafluorophenyl propyl (PFP propyl), and cyano-based phases interact strongly with basic, nitrogen-containing and halogenated analytes.