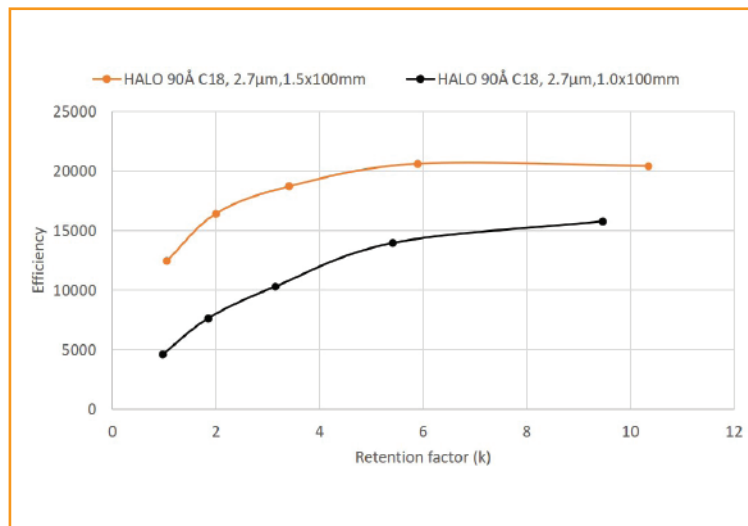
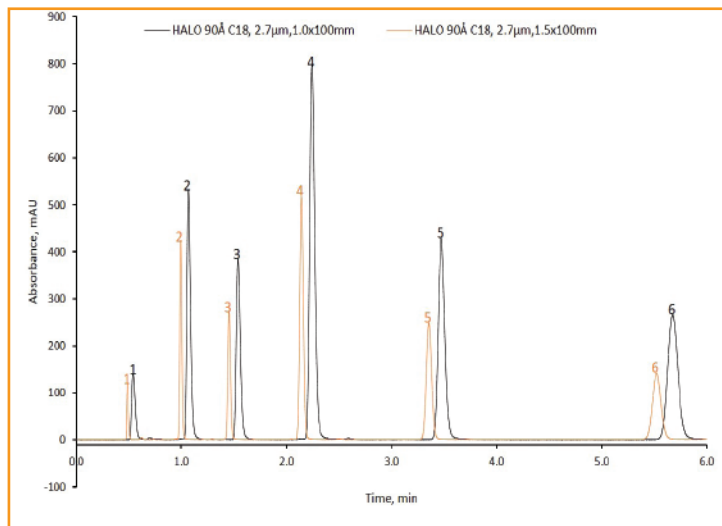




Efficiency of 1.5 mm ID Columns Demonstrated Using Alkylphenones

288-P



TEST CONDITIONS:

Column: HALO 90 Å C18, 2.7 μm, 1.5 x 100 mm

Part Number: 9281X-602

Column: HALO 90 Å C18, 2.7 μm, 1.0 x 100 mm

Part Number: 92811-602

Mobile Phase A: Water

Mobile Phase B: ACN

Isocratic: 50/50 Water/ACN

Flow Rate: 0.20 mL/min (1.5 mm)
0.09 mL/min (1.0 mm)

Pressure: 236 bar (1.5 mm)
193 bar (1.0 mm)

Temperature: 35 °C

Injection Volume: 0.5 μL

Detection: UV 254 nm, PDA

Instrument: Shimadzu Nexera X2

PEAK IDENTITIES

1. Uracil
2. Acetophenone
3. Propiophenone
4. Butyrophenone
5. Valerophenone
6. Hexanophenone

A separation of alkylphenones was performed on a HALO 90 Å C18 column. The 1.5 mm ID column has increased plate efficiency compared to the 1.0 mm ID column. While the 1.0 mm ID column has increased area compared to the 1.5 mm, this area increase is in width and not completely in peak height. In order to reap the benefits of a 1.0 mm ID column a specialized micro flow HPLC system is needed. The 1.5 mm ID column can give an increase in sensitivity and efficiency without the investment into a specialized system.

