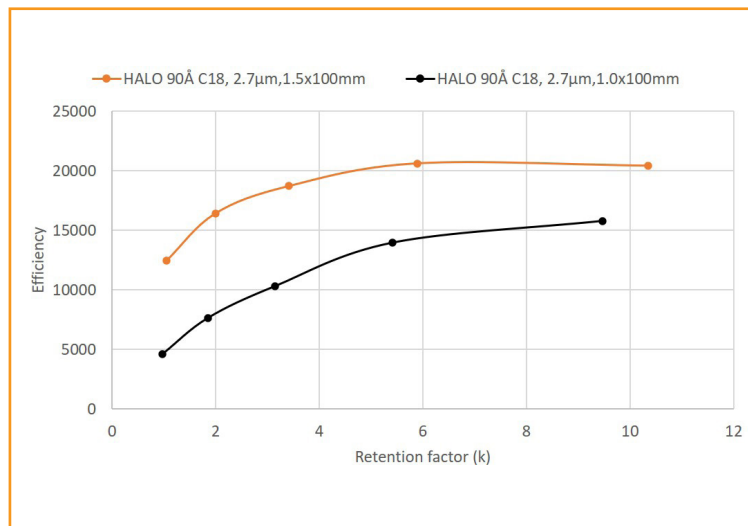
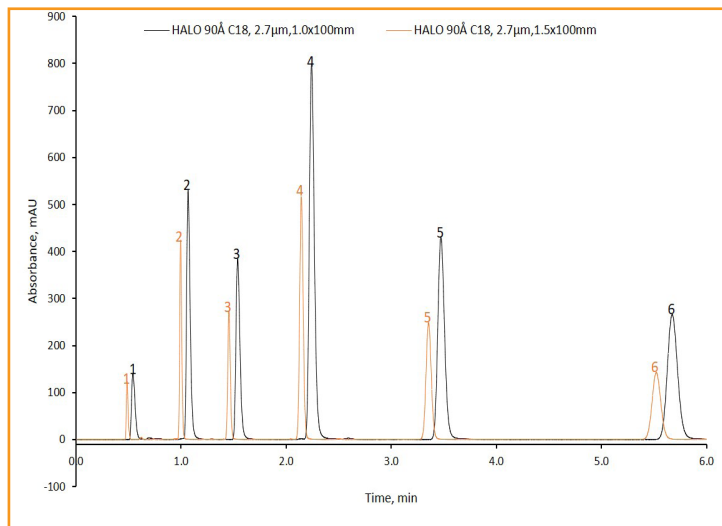




Efficiency of 1.5 mm ID Columns Demonstrated Using Alkylphenones

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.

