Problem

Stages in Triglyceride chromatography. HPLC of stearic-oleic-steric glyceride gives a peak leaving the column after 85 minutes. The wdth of this peak when concentration is half the maximum is 5 minutes. Estimate the no. of hypothetical stages in this column.

Problem

Chromatography of Bovine Serum Albumin. 10 g of this albumin is eluted from an 80 liter Sephadex column which has a void fraction of 0.4. The concentration in the column peaks after 470 liters are eluted; this maximum concentration is 1.8% of that originally in the column.

Estimate:

(a) The equilibrium constant for binding the albumin to the Sephadex;
(b) The number of stages in the column; and
(c) The concentration profile in the column.