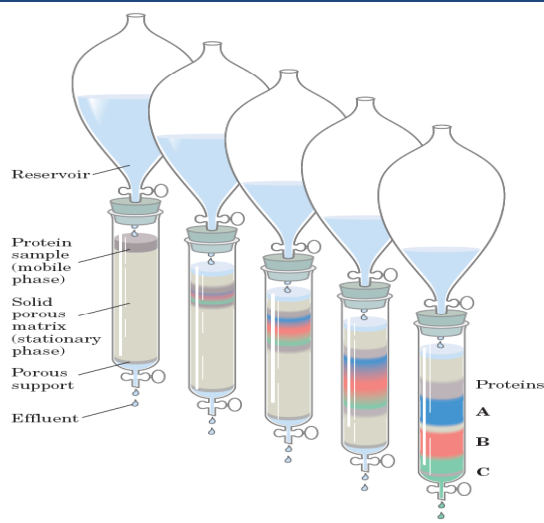




AMINO ACIDS, PEPTIDES, AND PROTEINS

Presented by Dr. A.H.Mahdavi

Working with Proteins



Column chromatography

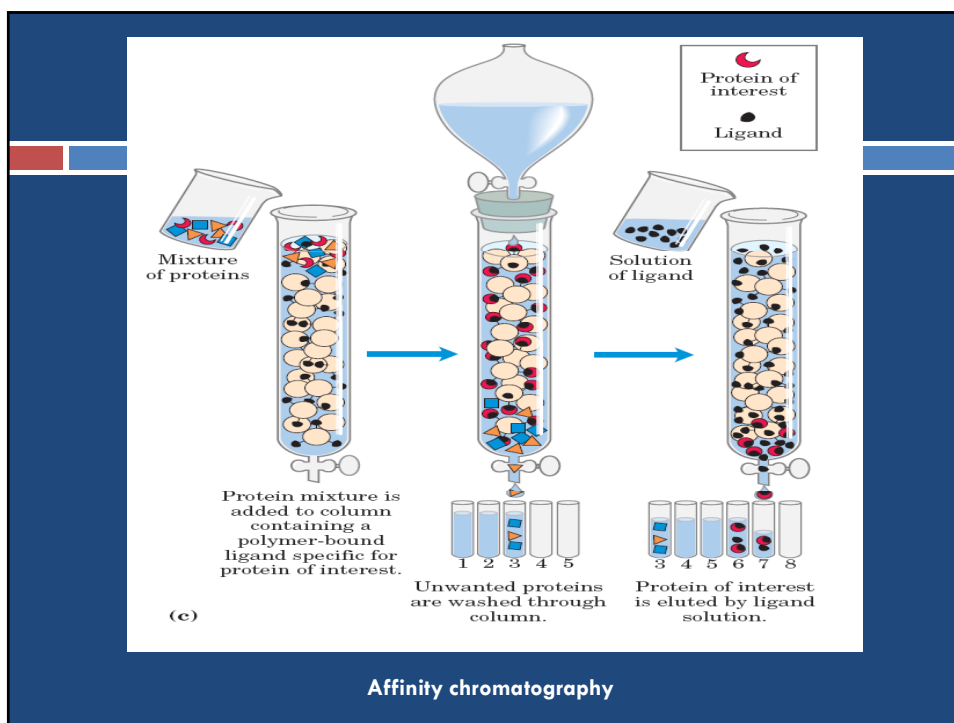
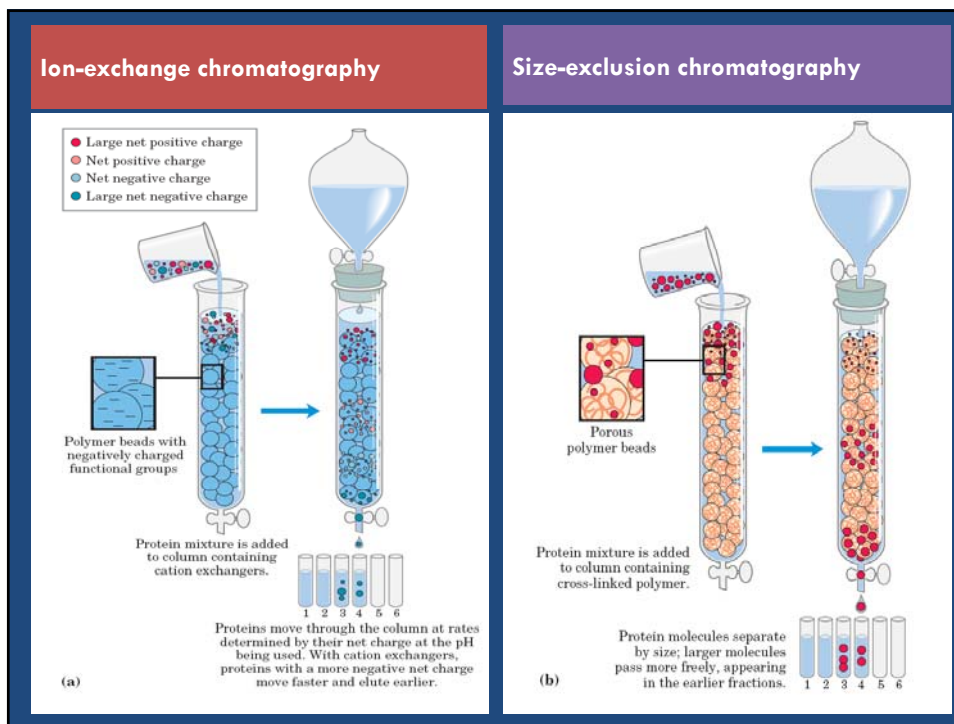


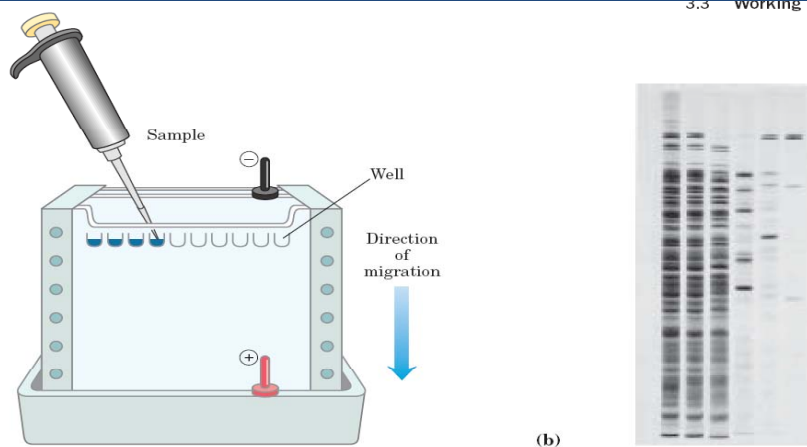
TABLE 3-5 A Purification Table for a Hypothetical Enzyme

Procedure or step	Fraction volume (ml)	Total protein (mg)	Activity (units)	Specific activity (units/mg)
1. Crude cellular extract	1,400	10,000	100,000	10
2. Precipitation with ammonium sulfate	280	3,000	96,000	32
3. Ion-exchange chromatography	90	400	80,000	200
4. Size-exclusion chromatography	80	100	60,000	600
5. Affinity chromatography	6	3	45,000	15,000

Note: All data represent the status of the sample after the designated procedure has been carried out. Activity and specific activity are defined on page 94.

Electrophoresis

3.3 Working with Proteins



(b)

