Abstract

Sephadex is a common sorbent in biochemistry for separation of molecules of a wide range of molecular masses. Sephadex is also used for purification or desalination of isolated proteins. Up to now, the gel chromatography has been performed in wide separation columns. Therefore, the isolation techniques for proteins had to be very effective to isolate enough proteins as a sufficient amount of the sample. The preparation and application of a capillary separation column packed with sephadex could decrease the needed sample amount and enable work with hardly isolable proteins obtained only in small quantities. In this bachelor project, the capillary column was packed with sephadex using the slurry packing procedure. The principle of monolithic columns was used to create a gel in the column. The column was packed in organic solvent first, and then hydrated when flushing with water to generate the gel.