逆流式流動薄膜質傳裝置效率之研究

In the membrane mass exchanger, where the solute transports throughthe membrane by the effects of dialysis and ultrafiltration, the masstransfer rate is affected by the sieving coefficient, feedconcentration and flow rate, and the flow arrangement. This studyfocuses on the counter-current flow type with effects of dialysis andultrafiltration. At same sieving coefficient and feed concentration,the effectiveness increase with the ultrafiltration flux; theeffectiveness also increases with the ratio of dialysate flow rate toretentate flow rate. Based on same flow rate ratio and ultrafiltrationflux, effectiveness increases with the sieving coefficient. Theeffectiveness chart of a counter-current membrane mass exchanger wasplotted in this work, which can be used in the design of a membranemass transfer.