

A study on reverse pervaporation using avian eggshell as membrane

Abstract

The development of new technologies on separation methods and applications on pervaporation has been discovered during the past decades. Based on the similar techniques, a new concept Reverse Pervaporation (RP) of gas separation into liquid has been used. The experiment was carried out by simple diffusion of free atmospheric oxygen to pure water through a prepared eggshell column which acts as natural ceramic membrane. The parameters used in this investigation are water flow rate and external pressure. Analysis on diffusion rate and influence of water flow rate and external pressure on flux performance was carried out.