

Effect of operating conditions in forward osmosis membrane process

박은현, 구보람, 양대륙*
고려대학교
(dryang@korea.ac.kr*)

Recently forward osmosis(FO) membrane process is attracted as a alternative membrane process. The strengths of FO process are requiring less energy than reverse osmosis(RO) process and operating at low or no hydraulic pressure. The energy is used in pumping and recycle. The driving force is osmotic pressure difference between a concentrated draw solution and a dilute feed solution. FO process is affected by various factor such as a membrane material, membrane structure, draw solution and operating conditions. As simulating FO membrane performance at various operation conditions, the points of operating conditions for optimization are calculated.