

Introducing Recycle Ratio On kMC Simulation to Consider Back-mixing Effect of PE Autoclave Reactor

조지영, 이원보[†]

서울대학교

(wblee@snu.ac.kr[†])

It is MWD shoulder that a special property of polymer product (Specially, for PE) produced in commercial autoclave reactor. I have researched on that by using kMC simulation to take into account dynamic properties of autoclave reactor, especially for back-mixing property. My recent work considered this by introducing recycle ratio and the result of the model I made have MWD shoulder, but I didn't have any sensitivity analysis on recycle ratio so that I put it on the back-burner for future work and finally I'm doing it now.

It will be a remarkable work because there are just few papers which deal with MWD shoulder molecular simulation like kMC. The simulation will be conducted by MATLAB and C code.