

### Depolymerization kinetics of hemicellulose in lignocellulosic biomass

윤준호, Aye Aye Myint, 이현옥, 심승재, 이윤우\*

서울대학교

(ywlee@snu.ac.kr\*)

Alternative resource is one of the important issues of today. Biomass is a kind of promising alternative resources. Pretreatment step is necessary to use lignocellulosic biomass as resources. There are many kinds of pretreatment methods studied. In this study, Biomass was pretreated using hot compressed water. Size of biomass was 40 mesh to 60 mesh. Pretreatment was carried out in 26.7ml batch reactor. Biomass pretreatment was conducted at various temperatures and reaction times. Pretreated biomass was analyzed by using HPLC. Kinetics study was conducted using these results. Rate constants were calculated. Using these calculated rate constants, we can predict the results in other types and sizes of reactor.