

## Dynamics of pre-metered/post-metered film coating processes

유보경, 이시형, 신동명, 정현욱\*, 현재천  
고려대학교 화공생명공학과  
(hwjung@grtrkr.korea.ac.kr\*)

Pre-metered coating processes, e.g., curtain and slot coatings, are mainly used for the manufacture of multi-functional film products. However, producing very thin uniform coating film is a difficult task because of the occurrence of unexpected coating defects during the coating operations. In this study, the sensitivity of these coating flows has been investigated using frequency response method. That is, variation of final coating thickness with time has been estimated with respect to various sinusoidal disturbances at web speed, flow rate, etc, using various models. Also, theoretical results have been compared with those by experiments.