

### Coal kinetic 실험을 통한 분류층 석탄 가스화기 전산해석

임 호<sup>1</sup>, 이동방<sup>1</sup>, 김량균<sup>1</sup>, 김철웅<sup>2</sup>, 전충환<sup>1,3,\*</sup>

<sup>1</sup>부산대학교 기계공학부; <sup>2</sup>GS E&C;

<sup>3</sup>화력발전에너지분석기술센터(PC3)

(chjeon@pusan.ac.kr\*)

The gasification industry has defined improved performance of entrained gasifier as a key item to reduce the technical and financial risk associated with Integrated Gasification Combine Cycle(IGCC) power plants. One of the most effective ways is to develop using a numerical simulation model and to confirm the validity of the model. In this study, one entrained flow gasifier is modeled and simulated in commercial code. Specially, CPD(Chemical Percolation Devolatilization) model was applied as devolatilization model. It was confirmed temperature, syngas(CO, H<sub>2</sub>) and velocity distribution inside gasifier.