

## 녹색 발광 알루미늄네이트계 구형 형광체의 직접 제조

구혜영, 주서희, 정대수, 강윤찬\*  
건국대학교 화학공학과  
(yckang@konkuk.ac.kr\*)

High brightness (CeTb)MgAl<sub>11</sub>O<sub>19</sub> phosphor particles were directly prepared by high temperature spray pyrolysis. Boric acid flux added into spray solution influenced on the morphology and photoluminescence intensity of the CTMA phosphor particles directly prepared by spray pyrolysis. The phosphor particles prepared from spray solution with 20 wt.% boric acid of the product had complete spherical shape and filled morphology at 1600°C. The phosphor particles prepared by spray pyrolysis under reducing atmosphere at 1600°C had high photoluminescence intensities under ultraviolet. Boric acid flux improved the photoluminescence intensities of the CTMA phosphor particles directly prepared by spray pyrolysis.