

## 무전극 램프에서의 히스테리시스와 모드 변환

이주호, 박대희  
원광대학교

### **Hysteresis and Mode Transition in Electrodeless Fluorescent Lamp**

Joo Ho Lee, Dae Hee Park  
Wonkwang Univ.

**Abstract :** Electrodeless fluorescent lamp exhibit two modes of operation : a low density mode in which the power is capacitively coupled to the plasma and which is known as the E-mode, and a higher density mode which is an inductive discharge known as the H-mode. The transition between these two(E to H) mode exhibits hysteresis. It is observed that transition currents change at different frequencies and hysteresis exists not only between the starting and minimum maintaining currents of the electromagnetic mode (H mode) discharge but also between the starting and minimum maintaining currents of the electrostatic mode (E mode) discharge. Hysteresis effect can be important role in dimming system.

**Key Words :** Hysteresis, Mode Transition, Electrodeless Lamp