Abstract Submitted for the APR10 Meeting of The American Physical Society

A FEM-FCT Modeling for Gas Discharge Simulation WOOK HEE KOH, Hanseo University — A fluid model for gas discharge simulation using finite element method flux corrected transport (FEM-FCT) scheme is presented. In this model, the convection-diffusion equations include the effects of ionization, attachment, recombination, electron diffusion, and is formulated by FEM-FCT. The electric field in discharge region is calculated by solving Poisson's equation. The results of applying to a corona discharge simulation agree well with previously published results.

Wook Hee Koh Hanseo University

Date submitted: 02 Feb 2010

Electronic form version 1.4