## Global COE Program "Electronic Devices Innovation" Global Seminar



# Mathematical Modeling and Simulation of Advanced Semiconductor Devices

March 13, 2008 Division of Electric, Electronic and Information Engineering Graduate School of Engineering, Osaka University

Sponsored by Osaka University global COE program "Electronic Devices Innovation" (CEDI)

This Global Seminar will focus on the recent progress on mathematical modeling and simulation of advanced semiconductor devices, and provide an opportunity for scientists and engineers working in the field of semiconductor device modeling to make discussion with frontiers of applied mathematics in compact modeling and advanced semiconductor device design.

#### Program

13:00-13:50 Ellis Cumberbatch (Claremont Graduate University) "Mathematical issues of compact modeling of advanced semi-conductor devices"

14:00-14:50 **Shinji Odanaka** (Osaka University) "Numerical schemes of the quantum drift-diffusion equation for advanced semiconductor device design"

15:00-15:50 **Shinya Nishibata** (Tokyo Institute of Technology) "Mathematical analysis on model hierarchy of equations for semiconductors"

#### Venue

Room E3-316, Division of Electric, Electronic and Information Engineering, Osaka University located in SUITA campus of Osaka University. http://osaka-u.ac.jp/eng/accessmap.html (access map) http://www.osaka-u.ac.jp/eng/target/student/campus/suita.html (campus map)

### Contact

Nobuya Mori, Associate Professor,

Division of Electrical, Electronic and Information Engineering, Graduate School of Engineering, Osaka University E-mail: Nobuya.Mori@eei.eng.osaka-u.ac.jp

Web site of CEDI, http://www.eei.eng.osaka-u.ac.jp/gcoe/