7th International Workshop on Compact Modeling

Room 201B, Taipei International Convention Center (<u>TICC</u>), Taipei, Taiwan January 18, 2010

Advance Program

On-site Registration: 8:00 – 9:00 am, Room 201B, TICC, registration fee: US\$30

Session 1 (9:00 – 11:40am), Chairs: Zhiping Yu (Tsinghua U, Beijing) & Young June Park (SNU)

(9:00 – 9:05) Opening Remark, M. Miura-Mattausch (Hiroshima U), Workshop Co-Chair

- 1. (9:05 9:35am) Goichi Yokomizo and Hiroo Masuda (STARC) (<u>Invited</u>), "STARC-QA on compact model and parameters"
- 2. (9:35 10:00am) Jian Zhang, Jin He (Peking U), "A charge-based non-quasi-static transient model for SOI MOSFETs"

(10:00 – 10:20am) Coffee Break

- (10:20 10:50am) James B. Kuo, J. S. Su, D. Chen, and C. S. Yeh (Nat'l Taiwan U & UMC) (<u>Invited</u>), "Compact Modeling of the 40nm PD SOI NMOS Device Via SPICE BJT/MOS Model Approach Considering the Floating-Body Effect"
- 4. (10:50 11:15am) Ze Yuan and Zhiping Yu, (Tsinghua U, Beijing) "Comprehensive modeling of subthreshold swing and threshold voltage roll-off for short-channel double-gate MOSFETs"
- 5. (11:15 11:40am) K. Ishimura, S. Kusu, and M. Miura-Mattausch (Hiroshima U), "Compact model HiSIM-DG valid for independent DG-MOSFETs structures"

(11:40am - 1:00pm) Lunch Break

Session 2 (1:00pm – 4:45pm), Chairs: M. Miura-Mattausch (Hiroshima U) & Jin He (Peking U)

- 1. (1:00 1:30pm) Darsen Lu, Chung-Hsun Lin, Ali Niknejad, Chenming Hu (UC Berkeley) (Invited), "A Multi-Gate CMOS Compact Model BSIMMG"
- 2. (1:30 1:55pm) Bastien Cousin, Marina Reyboz1, Olivier Rozeau1, Marie-Anne Jaud, and Jalal Jomaah, (LETI, Minatec, France), "A compact model of short channel effects for undoped cylindrical gate-all-around MOSFETs"
- 3. (1:55 2:20pm) Sooyoung Park, and Young June Park (SNU), "A new strategy for modeling of mobility limited by discrete charge effects in scaled MOSFETs"
- 4. (2:20 2:45pm) Chi Liu, et al., Jin He (Peking U), "Signal transient response compact modeling of the dispersionless interconnect with capacitive and inductive load terminals"

(2:45 – 3:00pm) Coffee Break

- 5. (3:00 3:30pm) Weidong Liu (Synopsys) (Invited) Topic to be announced
- 6. (3:30 3:55pm) Reiji Takashina and Zhong Wang (NEC/Synopsys), "TCAD-based compact model parameter extraction for VBIC"
- 7. (3:55 4:20pm) Y. Shintaku, S. Kusu, G. Suzuki, K. Konno, and M. Miura-Mattausch (Hiroshima U), "Modeling of photocurrent for high performance optoelectric circuit simulation"
- 8. (4:20 4:45pm) Huang Wang, Lingling Sun, Jun Liu, Huanhuan Zou, Zhiping Yu, and Jianjun Gao (Hangzhou Dianzi University, China) "Comparisons of modeling approaches for RF CMOS spiral inductors"

4:45pm: Closing Remark, Zhiping Yu (Tsinghua U, Beijing) Co-Chair