QNERC Workshop on Nano Devices and Materials

Tuesday, 4th November, 2014

Conference Room 605, Ookayama South-9, Tokyo Institute of Technology

10:00 – 10:10 Shunri Oda/ TIT Welcome Address

10:10 – 10:40 Simon Deleonibus/CEA-LETI, Towards full 3D, zero variability and zero power future micro/nano-electronics.

10:40 – 11:05 Mutsuko Hatano/ TIT, Diamond semiconductor devices for power electronics and sensing application.

11:05 – 11:30 Hiroshi Wakabayashi TIT, Advanced-CMOS Device Benchmarks and following Transition-Metal Dichalcogenides (TMDs) for 2D FETs.

11:30 – 11:55 Hiroshi Mizuta/ JAIST, Downscaled graphene nanoelectronic and nano-electro-mechanical (NEM) devices.

(Lunch Break)

13:00 – 13:25 Ken Uchida/ Keio U. Thermal-aware device design of advanced nanosclae electronic devices.

13:25 – 13:50 Mohamed Boutchich/ U. Paris, Characterization of doped epiaxial graphene grown on SiC(0001).

13:50 – 14:15 Chuanbo Li/ IoS-CAS, Si/Ge nanomaterials and their device application.

14:15 – 14:40 Marolop D. K. Simanullang/ TIT, Synthesis, passivation, and characterisation of germanium nanowires.

14:40 – 15:05 Zhengyu Xu/ TIT, Impact of gold catalyst evolution on Ge nanowire morphology.

(Coffee Break)

15:25 – 15:50 Buwen Cheng/ IoS-CAS, Toward group-IV laser for integrated silicon photonics.

15:50 – 16:15 Tetsuo Kodera/ TIT, Quantum devices using group IV materials.

16:15 – 16:40 Jaime Oscar Tenorio Pearl/ Cambridge/TIT, Coherent control of a trapped electron in a disordered dielectric.

16:40 – 17:05 David Herbschleb/ Cambridge/TIT, Charge-writing induced quantum devices in graphene.

17:05 – 17:30 Chunlai Xue/ IoS-CAS, Si based Ge and GeSn photodetectors for optical communication and data center.

17:30 – 17:55 Yukio Kawano/ TIT, Nano-carbon devices as an enabler of Terahertz technology.