

Program of pre-summer-camp mini workshop on
Micro- and Nano- materials and thermal engineering

Date: Sep. 25, 2014, 9:45-16:00

Place: The University of Tokyo, Engineering Building II, 3rd Floor,
Seminar room 232 (2-301)

- 9:45-10:00 **Registration**
- 10:00-10:05 **Shigeo Maruyama (the University of Tokyo)**
Opening talk
- 10:05-10:25 **Kehang Cui (Maruyama Group, the University of Tokyo)**
Breath figure directed self-assembly of SWNTs for solar cells
- 10:25-10:45 **Lee Weinstein (Gang Chen group, MIT)**
Optical cavity for improved performance of solar receivers in solar-thermal systems
- 10:45-11:05 **Takaaki Chiba (Maruyama Group, the University of Tokyo)**
Characterization of SWNT counter electrodes in dye-sensitized solar cells
- 11:05-11:25 **Cody Sewell (J. Kono group, Rice University)**
Development of graphene-based infrared and terahertz devices
- 11:25-11:45 **Takafumi Oyake (Shiomi Group, the University of Tokyo)**
Thermal boundary conductance between Au and ionic liquid measured by time-domain thermoreflectance
- 11:45-12:05 **Aditya Sood (Ken Goodson group, Stanford University)**
Thermal transport in nanoscale materials: from ordered to disordered
- 12:05-13:15 *Lunch break*
- 13:15-13:35 **Kazuki Ogasawara (Maruyama Group, the University of Tokyo)**
FT-ICR study of chemical reaction of cobalt clusters with acetonitrile
- 13:35-13:55 **Ahmed Zubair (J. Kono group, Rice University)**
Carbon nanotube fiber based broadband photodetector
- 13:55-14:15 **Keigo Otsuka (Maruyama Group, the University of Tokyo)**
Creation of semiconducting single-walled carbon nanotube arrays by organic film-assisted electrical breakdown
- 14:15-14:35 **Gabbi Coloyan (Li Shi group, UT Austin)**
Basal plane thermal conductivity of thin germanane layers
- 14:35-15:00 *Break*
- 15:00-15:20 **Xiao Chen (Maruyama Group, the University of Tokyo)**
Synthesis of large-sized single-crystal graphene by alcohol CVD method
- 15:20-15:40 **Patrik Laiho (Esko Kauppinen group, Aalto University)**
Thin film electronics based on aerosol-synthesized single-walled carbon nanotubes
- 15:40-16:00 **Feng Yang (Yan Li group, Peking University)**
Chirality-specific growth of single-walled carbon nanotubes catalyzed by high melting point tungsten-based alloy nanocrystals