## Workshop organized in Japan-Czech bilateral joint research project (JSPS)

## Silicon Nanocrystals -Fundamental Physics, Plasmonic Nano-composites, Biomedical Applications

November 4, 2015

Takikawa Memorial Hall, Kobe University

## Organization:

- 1. Japan-Czech bilateral joint research project (JSPS)
- 2. Smart materials team in organization of advanced science and technology, Kobe University.

## Program

10:00 Welcome address (Minoru Fujii)

10:05 Minoru Fujii, Kobe University, "All-Inorganic colloidal silicon nanocrystals"

10:25 Hiroshi Sugimoto, Kobe University, "Boron-Silicon-Phosphorus-based nanocrystals"

10:45 Jan Valenta, Department of Chemical Physics and Optics, Charles University in Prague,

"Luminescence quantum yield and absorption cross section of B,P codoped SiNCs compared to other SiNCs"

11:15 Takashi Kanno, Kobe University, "Surface functionalization of silicon nanocrystals"

11:35 - 13:10 Lunch break

13:10 Anna Fucikova, Department of Chemical Physics and Optics, Charles University in Prague, "Characterization of silicon nanoparticles"

13:40 Hiroshi Sugimoto, Kobe University, "Metal/silicon-nanocrystal-coupled system I –radiative rate engineering"

14:10 Asuka Inoue, *Kobe University, "Metal/silicon-nanocrystal-coupled system II –excitation efficiency enhancement"* 

14:30 - 14:50 Break

14:50 Lucie Ostrovská, Faculty of Medicine, Charles University in Prague, "Silicon nanoparticles in cell biology: From the primary challenges to the present findings"

15:20 Shinya Kano, Kobe University, "Single-electron tunneling via nanocrystals"

15:45 Hui Lin, Kobe University, "Reversible emission variation behavior of gold, silver clusters stabilized in zeolites and BSA"

16:10 Kenji Imakita, *Kobe University, "Nano-imprinting of phase-separated porous silica for photonics applications"* 

16:35 Kanna Aoki, Kobe University, "Magnetic assembly of plasmonic nanostructures"

17:00 Closing remark (Minoru Fujii)