

SPEAKER

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To Understand Effect of Order-Disorder Phase Transitions within Hybrid Perovskite Light Absorbers and Solar Cell Application

Wednesday, August 12, 2015 10:00 - 11:00 @ Meeting Room C756, Lab 3

<u>Abstract</u>: Since, involving organic inorganic perovskite light absorbers and applications for developments of high efficiency solar cells. These are showing the favor for the number of researchers in a research field of new generation solar cell toward the obtaining high power conversion efficiency and discovering new insight phenomena.

In this presentation, it try to talk for the co-related understanding its nature between local phase transition with temperature dependence and halide substitution on lead based hybrid perovskite materials. The local phase transition as (first-second) order-disorder transition should be investigating due to the elucidation of long term stability and different halide substitution for hybrid perovskites.

We will be able to know these materials what are showing different properties in solid state physic compare to pure natural materials. How much is it important to understand their fundamental properties for solar cell application and commercialization of them.

Biography:

June 2015 ~ Present (Researcher in Konkuk University, South Korea) Department of applied chemistry in Prof. Jae-joon Lee's group Prof. Lee has a collaboration with Prof. Sang-hyuk Im's group in Kyung Hee university what are in topics for novel perovskite materials and quantum dot solar cells application

May 2014 ~ April 2015 (Full time Researcher, Uppsala University, Sweden) Physical Chemistry, Department of Chemistry - Ångström Laboratory

May 2012 ~ April 2014 (Post-doctoral fellowship in Uppsala university, Sweden) Physical Chemistry, Department of Chemistry - Ångström Laboratory

April 2009 ~ March 2012 (Doctoral fellow in Kyushyu Institute of Technology, Japan) Organic electronics, Department of Biological Functions and Engineering

