The 192nd MANA Special Seminar

Controlled synthesis and assembly of transition metal oxide nanomaterials via solution routes

Chair: Dr. Yoshio Bando (MANA COO)

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Transition metal oxide nanomaterials have received increasing attention due to their various applications in electronic nanodevices, catalysis and biomedical applications, etc. Many research efforts have been made to design and fabricate novel transition metal oxide nanostructures with controlled chemical and physical properties in the past decades. Hydrothermal/solvothermal routes offer advantages such as high crystallinity at low temperatures, robust synthesis parameters and ability to control the crystal growth. The main topic of this presentation is about controlled synthesis and assembly of several kinds of transition metal oxides nanomaterials via hydrothermal/solvothermal routes. In addition to selective adsorption, the ions seem to play key roles in controlling assembly of the nanostructures in hydrothermal reactions. While in solvothermal conditions, the solvents are not only involved in the reaction with precursor, but also involved in assembly of nanostructures in some cases.

Venue: **Seminar Room #431, MANA Bldg.**

Date: **January 12th (Wed)** ***Time:*** **15:30-16:15**

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