



**BILKENT UNIVERSITY**

**unam** - INSTITUTE of MATERIALS SCIENCE & NANOTECHNOLOGY

***FACULTY OF SCIENCE***

**MATERIALS SCIENCE and NANOTECHNOLOGY  
GRADUATE PROGRAM SEMINAR**

**“Novel Inorganic Nanocomposites For Magnetic Drug Delivery”**

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*Department of Chemistry*

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There has been an increasing interest over the last two decades in the development of new nanoscale magnetic materials for biomedical applications. The interaction between magnetic nanoparticles and biological entities can be adjusted by coating nanoparticles with an organic or inorganic shell which prevents agglomeration and leads to a stable colloidal suspension for practical applications. To date, various iron oxide core-organic shell nanostructures have been successfully synthesized while coating of magnetic nanoparticles with an inorganic shell is a relatively novel approach. In addition to the silica or noble metal coating, Layered Double Hydroxides (LDHs) can be introduced as alternative coating systems for iron oxide particles. In this seminar, novel bioinorganic nanocomposites bearing iron oxide core-drug carrying LDH shell are presented.

**Date : May 28, 2010 (Friday)**

**Time : 15:40**

**Place : Faculty of Science Building, A Block, Seminar Room (SA 240)**

**Tea will be served after the seminar**