



BILKENT UNIVERSITY

unam - INSTITUTE of MATERIALS SCIENCE & NANOTECHNOLOGY

FACULTY OF SCIENCE

**MATERIALS SCIENCE and NANOTECHNOLOGY
GRADUATE PROGRAM SEMINAR**

“Cantilevers for biological detection: Novel imaging and sensing mechanisms”

Res. Asst. Prof. Dr. Aykutlu Dâna

Bilkent University

UNAM - Institute of Materials Science and Nanotechnology

Cantilevers have found wide application, from imaging to biomolecular sensing. This talk intends to give a contemporary summary of various cantilever sensors for advanced imaging and sensing. Novel cantilever designs developed at UNAM are presented in this context, such as specially designed tips for plasmon enhanced Raman Spectroscopy, grating coupled plasmon resonances as a readout mechanisms for massively parallel readout of cantilever deflection and cantilever arrays using this principle, cantilevers designed as nano-calorimeters and hybrid mems/nems cantilevers for novel imaging and sensing principles using nonlinear tip-sample interactions.

Date : October 22, 2009 (Thursday)

Time : 15:40

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

Tea and cookies will be served after the seminar at UNAM building 2nd floor.