



BILKENT UNIVERSITY

unam - INSTITUTE of MATERIALS SCIENCE & NANOTECHNOLOGY

FACULTY OF SCIENCE

**MATERIALS SCIENCE and NANOTECHNOLOGY
GRADUATE PROGRAM SEMINAR**

**“Development of Functional Nanofibers by
Electrospinning and Their Potential
Applications”**

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The University of Aarhus, Aarhus, Denmark

Electrospinning is a versatile and cost effective technique for producing fibers where the fiber diameters are in the range of few microns to few hundred nanometers. This technique is very promising since it facilitates to produce multi-functional nanofibers from various polymers, polymer blends and composite solutions, etc. In this technique, a continuous filament is electrospun from polymer solution or polymer melt under a very high electrical field which resulted in the form of non-woven consisting of nanofibers. Nanowebs produced by electrospinning technique have several remarkable characteristics such as very large surface area to volume ratio, pore size within nano range, unique physical performance along with the design flexibility for chemical/physical surface functionalization. This talk will cover our recent studies on the development of multi-functional nanofibers by electrospinning technique and their potential application areas including textiles, membranes/filters, biotechnology, etc.

Date : May 22, 2008 (Thursday)

Time : 15:40

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

Tea and cookies will be served after the seminar