



EIXHMYΘ-ITE

ΣΕΜΙΝΑΡΙΟ

- ΟΜΙΛΗΤΗΣ:** Michael Tsapatsis
Associate Professor of Chemical Engineering
UNIVERSITY OF MASSACHUSETTS
- ΘΕΜΑ:** I) Molecular sieve nanoparticles, wires and films and
II) Spontaneous pattern formation in materials
- ΤΟΠΟΣ:** Αίθουσα Σεμιναρίων EIXHMYΘ
- ΗΜΕΡΟΜΗΝΙΑ:** 30 Δεκεμβρίου 1999
- ΩΡΑ:** 11:00

ΠΕΡΙΛΗΨΗ

In the first part of the talk an overview of our activities in hydrothermal growth of microporous and mesoporous molecular sieves will be presented. First a number of recent crystallographic studies on new structures will be discussed as an introduction to the structure and properties of zeolites and related materials. I will then describe our efforts in understanding nucleation and growth of these materials by combining experiments with mathematical modeling studies. The description of a processing scheme for the formation of molecular sieve films that we have been developing over the last five years will follow along with examples of potential applications that are under investigation in my lab. In the second part of the talk I will conclude with our more recent work on experiments and modeling of spontaneous pattern formation in materials by hydrothermal synthesis and CVD.