

## Ινστιτούτο Θεωρητικής και Φυσικής Χημείας Εθνικό Ίδρυμα Ερευνών Βασ. Κωνσταντίνου 48, Αθήνα

## ΔΙΑΛΕΞΗ

"Intermediate Range Order in Alkali Borate Glasses and Some Related Topics"

**Professor S. Feller** 

**Physics Department, Coe College** 

Cedar Rapids, IA, USA

Τρίτη 18 Απριλίου 2006, ώρα 12:00

Αίθουσα σεμιναρίων στο ισόγειο του ΕΙΕ

## **Intermediate Range Order in Alkali Borate Glasses** and Some Related Topics

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Through the use of modern NMR techniques it is possible to detect two tetrahedral boron responses from differing sites in various superstructual groupings present in alkali borate glasses. The focus of this talk is a thorough examination of these responses from both borate glasses and crystals along with the use of other ancillary information to identify the presence and kinds of these superstructural ring formations. Included with this talk with be an update on the fraction of four-coordinated borons  $(N_4)$  with alkali oxide concentrations exceeding 40 molar percent. Up to about 30 molar percent alkali oxide  $N_4$  is seen to be independent of alkali. A clear dispersion is seen in the fraction for larger alkali oxide concentrations.

