

28 Mart 2008, Cuma Saat: 16:00

**İTÜ FEN-EDEBİYAT FAKÜLTESİ
FİZİK BÖLÜMÜ SEMİNERİ**

Crack Patterns in Drying Clay: experiments and simulation

Sujata Tarafdar

*Condensed Matter Physics Research Centre,
Jadavpur University,
Kolkata 700032, INDIA
e-mail: sujata_tarafdar@hotmail.com*

When clay dries, characteristic fractal patterns can be seen in the crack network. We have studied the synthetic clay 'laponite'. The area covered by the cracks, observed at different resolutions, have a characteristic shape on a log-log plot, and the curves for different film thickness, can be scaled by the thickness to collapse onto a master curve. Another interesting feature is that cracks in drying aqueous laponite suspensions can be controlled by a radial electrostatic field. A simple spring network model has been developed, which can reproduce the characteristics of the pattern.

Yer: Fizik Bölümü Toplantı Salonu (İTÜ, Fen Edeb. Fak. Binası, Maslak Kampüsü)

SAAT 16:00'DA ÇAY SERVİSİMİZ VARDIR