Seminar

Parametric Oscillation in chemical systems

Deb Shankar Ray

Indian Association for the Cultivation of Science, Kolkata

A nonlinear chemical system in a stable steady state when subjected to a time-periodic sinusoidal forcing of a suitable scaling parameter at a frequency twice the oscillation frequency and strength of perturbation exceeds a critical threshold; the system undergoes sustained Rayleigh-type periodic oscillations. We discuss a general scheme with an application to chloride-iodide-malonic acid system. The theory is extended to reaction-diffusion systems to realize spatio-temporal profiles in the form of standing clusters observed in experiments.

Thursday, Oct 12th 2017

04:00 PM (Tea/Coffee at 03.45 PM)

Auditorium, TIFR-H (FReT-B)