



سمینار هفتگی ماده چگال نرم

## **Solar Tracking: The Biology and The Pathways**

**Mobina Toosian**

*Physics Department*

*Sharif University of Technology*

### **Abstract**

Solar tracking is a dramatic example of a diurnal rhythm in plants. During the day, the shoot apex continuously reorients, following the sun's relative position so that the developing heads track from east to west. At night, the reverse happens, and the heads return and face east in anticipation of dawn. Although shoot apical heliotropism has long been the subject of physiological studies in plants, the underlying developmental, cellular, and molecular mechanisms that drive the directional growth and curvature of the stem in response to extrinsic and perhaps intrinsic cues are not known. In this review, we discuss the current state of knowledge about this complex, dynamic trait. Candidate mechanisms that may contribute to daytime and nighttime movement are highlighted, including light signaling, hormonal action, and circadian regulation of growth pathways.

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مکان (کلاس مجازی آقای دکتر اجتهادی):

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