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## **Seminar**

# **Understanding the role of electrostatic interactions and ultrafast dynamics in biophysical processes**

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The functions of the biological molecules are intimately related to their ability to undergo structural and conformational changes (dynamics) and their ability to interact with the surrounding environment/ molecules (electrostatic interactions). Thus a complete understanding of these processes requires a detailed description of the structures, interactions and dynamics of the biological systems. In my talk, I will focus on understanding the dynamics and electrostatic interactions of biomolecules using novel experimental approaches of two dimensional infrared (2D-IR) spectroscopy and vibrational Stark effect (VSE) spectroscopy. These experimental approaches provide a platform to get a qualitative as well as quantitative insight about the role of ultrafast dynamics and electrostatic interactions towards biological functions.

***Thursday, May 14<sup>th</sup> 2015***

***11:30 AM (Tea/Coffee at 11:15 AM)***

***Seminar Hall, TCIS***