

Colloquium

Department of Physics

Photoinitiated processes in biologically relevant molecules

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Abstract

We are interested in understanding photophysical and photochemical processes in molecules using quantum mechanical approaches. For these studies accurate description of the excited electronic states, the nonadiabatic processes, and conical intersections is required. A major component of our research focuses on understanding the photophysical and photochemical properties of the building blocks of nucleic acids, the nucleobases and their analogues. DNA absorbs UV radiation which some times may lead to photochemical damage. Consequently, understanding the behavior of the electronically excited states is very important. In the talk we will discuss the various processes that occur after absorption of UV radiation in DNA.

Monday, September 14, 2015 at 3:00pm

SERC, Room 110B

Refreshments served at 2:45pm