TCI SEMINAR

Theoretical studies of photoinitiated processes in biologically relevant molecules

Monday, April 15, 2013
3:00 p.m. Room 8335

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Host: Professor Ned Sibert

The theoretical description of photophysical and photochemical processes in molecules is challenging, since it requires accurate description of excited states and their potential energy surfaces away from equilibrium. Nonadiabatic events are also essential for the description of photoinitiated processes. Great progress has been made in this field, and we can now use quantum mechanics to provide insight in photoinitiated processes in biological chromophores. This talk will present our contributions to studies of photonitiated processes in nucleobases, the basic DNA chromophores. This work provides insight into DNA photostability and can also be useful in developing efficient fluorescent probes to be incorporated in DNA.

Theoretical Chemistry Institute Seminar Series