CORE-CM SEMINAR
Michigan State University — Department of Chemistry

Dr. Sergei Tretiak
Los Alamos National Laboratory

Photoexcited Conjugated Chromophores: Conformational Dynamics, Relaxation Pathways and Energy Transfer

Using our recently developed non-adiabatic excited-state dynamics simulations framework, we study ultrafast dynamics and exciton transport in several large molecular systems. These simulations reveal a fascinating interplay of conformational vibrational dynamics and internal conversion followed photoexcitation, which has specific spectroscopic signatures and can be observed using time-resolved pump-probe spectroscopies. Observed relationships between spatial extent/properties of electronic wave functions and resulting electronic functionalities allow us to understand and to potentially manipulate excited state dynamics and energy transfer pathways in a number of organic molecular materials suitable for a variety of technological applications.

Thursday, April 24, 2014
12:00 PM
Room 1400 – BPS
Professor Ben Levine – Host

Accommodations for persons with disabilities may be requested by calling the Chemistry Department at (517) 355-9715, X345 two days prior to the event to ensure sufficient time to make arrangements. Requests received after this date will be met when possible.