

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Understanding the relaxation of excited-state cis-1,3,5-hexatriene in order to augment the preferred pathway for control MICHAEL OROZCO, KUO-CHUN TANG, ROSEANNE SENSION, Dept. of Chem., University of Michigan- Ann Arbor — A study of the ground and excited-state relaxation of cis-1,3,5-hexatriene in various solvents and temperatures has been performed. The role solvent plays in the relaxation dynamics and relaxation pathways has been assessed and modeled to achieve a better understanding of the energy landscape. This information will be used to determine the preferred relaxation pathways and inform efforts to use sculpted UV pulses to influence the excited state dynamics through pump-dump interactions. Finally, further experiments are proposed wherein UV pulse-shaping will used to study and control other reactive systems.

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Date submitted: 27 Nov 2007

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