

TEMPLE UNIVERSITY, DEPARTMENT OF CHEMISTRY

ACS PHILADELPHIA SECTION AWARD

*"Strong Field Chemistry:
From Photonic Reagents to Standoff Detection"*

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The ability to create ultra-intense radiation pulses using femtosecond laser technology has opened the door to reprogramming the Hamiltonian of any molecule. Put another way, since the interplay of electrons and protons in a molecule controls chemical reactivity, these intense laser pulses have allowed us to control chemical reactions. The ability to tailor the shape of the "strong field" laser pulse has further enabled the production of designer photonic reagents. I will review our progress in understanding strong field chemistry (from nonadiabatic dynamics to dimensionality reduction) and will present some applications of the technology as well as prospects for analytical chemistry at distances up to 1 km.

Thursday, October 18, 2007 / 6:00 pm / Beury Hall, Room 162

\$10 parking in Campus Lot 1 (15th & Broad Streets).

See directions and map at <http://www.temple.edu/maps/maps/main.pdf>.

Reception at 5:00 pm at the Chemistry Lobby & Dinner after the talk at the Diamond club.



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For more information, contact Bobbi Johnson at (215) 204 6738