CIRC 2024–2025 Symposium Series

Accessing Biological Systems with Excited-State Chemistry

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Excited-state species, generated by light, heat, or chemical reactions can stimulate distinct modes of chemical reactivity. Biomolecular excited-state species, like those involved in bioluminescence and magnetoreception, can promote new catalytic processes with potential applications in chemical synthesis and access photo- and magnetic controlled regulation of gene expression in cells. Mechanistic investigations and applications of biomolecular excited states remain challenging because of their transient lifetime and instability outside biological contexts. Our lab therefore will employ an interdisciplinary approach based on organic synthesis, physical chemistry, biophysical chemistry, and biochemistry to study and utilize biomolecular systems that host excited state processes for catalysis and photoresponse biology.

Friday, November 15, 2024 | 12:00 PM – 1:00 PM | Wegmans 1400

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