



Showcasing research from Professor F. D'Souza's laboratory, University of North Texas, Denton, TX, USA.

Symmetry breaking charge transfer leading to charge separation in a far-red absorbing bisstyryl-BODIPY dimer

Symmetry breaking charge transfer is one of the important photo-events occurring in photosynthetic reaction centers of green plants and bacteria that is responsible for initiating electron transfer leading to a long-lived charge-separated state and has been successfully employed in light-to-electricity harvesting optoelectronic devices. In the present study, we report a newly synthesized, far-red absorbing and emitting BODIPY-dimer to undergo symmetry-breaking charge transfer leading to charge-separated states of appreciable lifetimes in polar solvents upon far-red light illumination; using a variety of physico-chemical and advanced time-resolved spectroscopic techniques.

As featured in:



See Francis D'Souza *et al.*, *Chem. Sci.*, 2024, 15, 906.