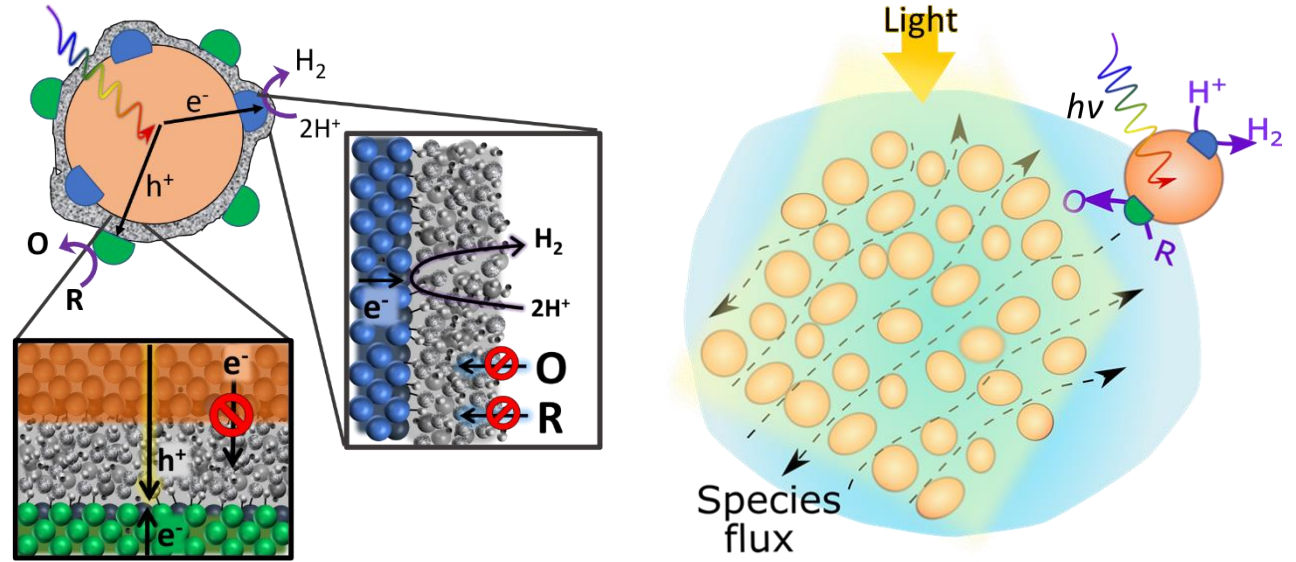


Ensembles of Photosynthetic Nanoreactors (EPN)

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MISSION: To understand, predict, and control the activity, selectivity, and stability of solar water splitting nanoreactors in isolation and as ensembles.

<https://photosynthesis.uci.edu/>



RESEARCH PLAN

EPN will strive to advance the frontiers of discovery and fundamental interdisciplinary knowledge in photochemical energy conversion basic science and engineering. Research goals are to extend photocarrier lifetimes and control their dynamics during infrequent photon absorption events; enhance charge-separation yields and redox selectivity, and therefore stability, under conditions of low-flux carrier transport; and program ensembles of artificial photosystems for large solar-to-hydrogen energy conversion efficiencies.



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