

## SENSITIZATION OF PHOTOELECTROCHEMICAL CELLS BY RESONANT ENERGY TRANSFER BETWEEN TWO DYES

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**Abstract :** It is found that when a semiconductor electrode surface in a photoelectrochemical cell is coated with a dye that can transfer a charge carrier upon excitation into an energy band and if a layer of a second dye that readily transfers the energy of photon excitation into an inner one by resonance is deposited on top of the first dye, then stability and quantum efficiency of photocurrent are both improved. Observations based on dye coated CuCNS photocathodes are presented to illustrate the phenomenon. Photochemical processes involved are discussed.