Photocatalytic Conversion of Cellulosic Biomass into Gaseous Fuels

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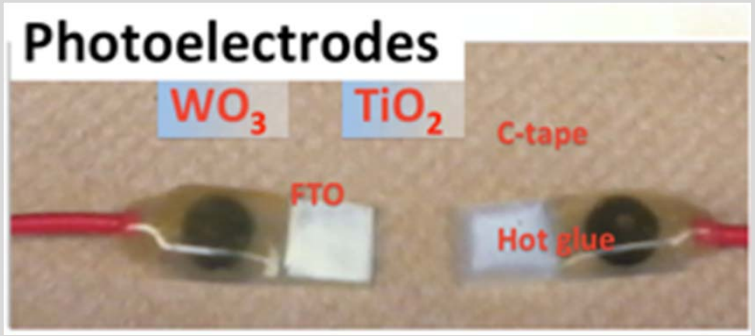
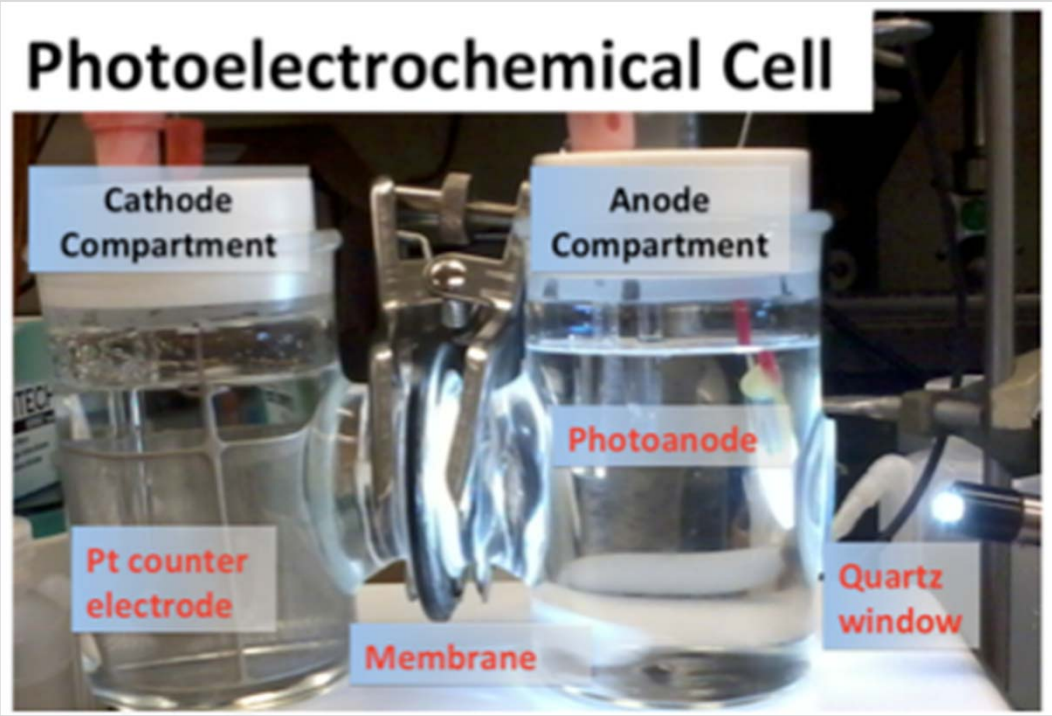
WO_3 and TiO_2 films promote the photocatalytic conversion of glucose and methanol into electricity





Material	Illumination	V_{oc} (V)	I_{sc} (A)	FF	Efficiency (%)	Reference
TiO_2	395 nm at 0.043 W/cm^2	1.13	4.30e-3	0.15	1.7	This work
WO_3	435 nm at 0.025 W/cm^2	0.46	1.66e-4	0.63	0.19	This work
TiO_2	Sunlight at 100 mW/cm^2	1.10	3.30e-3	0.15*	0.5	This work
WO_3	Sunlight at 100 mW/cm^2	0.58	2.20e-4	0.63*	0.08	This work