# Supplementary data

## Photocurrent Generation by Immobilized Cyanobacteria via Direct Electron Transport in Photo-Bioelectrochemical Cells

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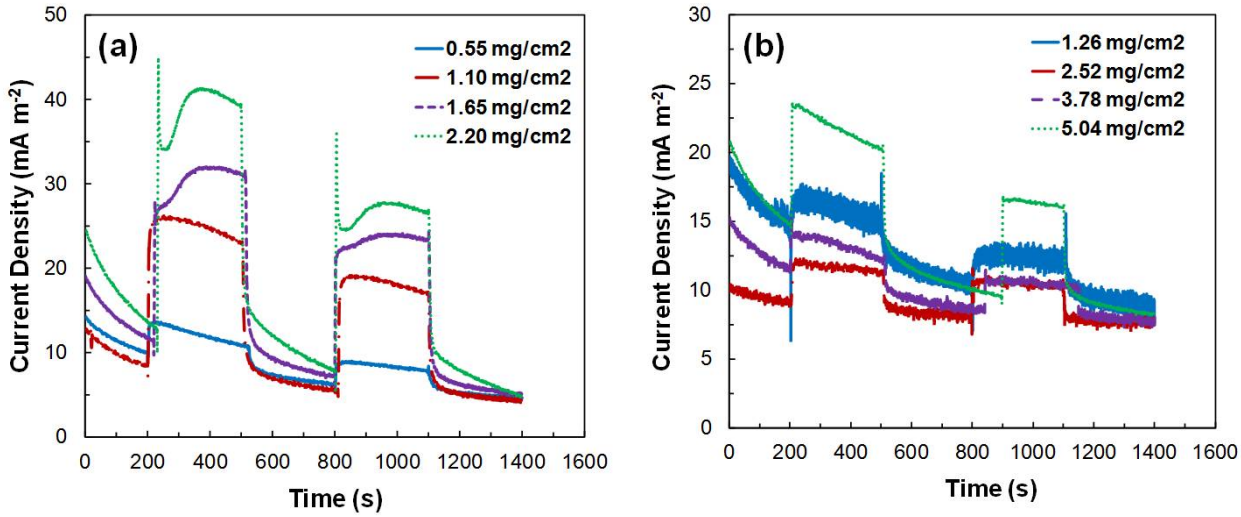


**Fig. S1.** Optimization of cyanobacteria loading on the CNT modified electrodes for the photocurrent generation: (a) NOS and (b) AV. The photocurrent density increased loading until 2.2 mg $cm^{-2}$ and 5.04 mg $cm^{-2}$ for both NOS and AV respectively beyond which the photocurrents decreased.

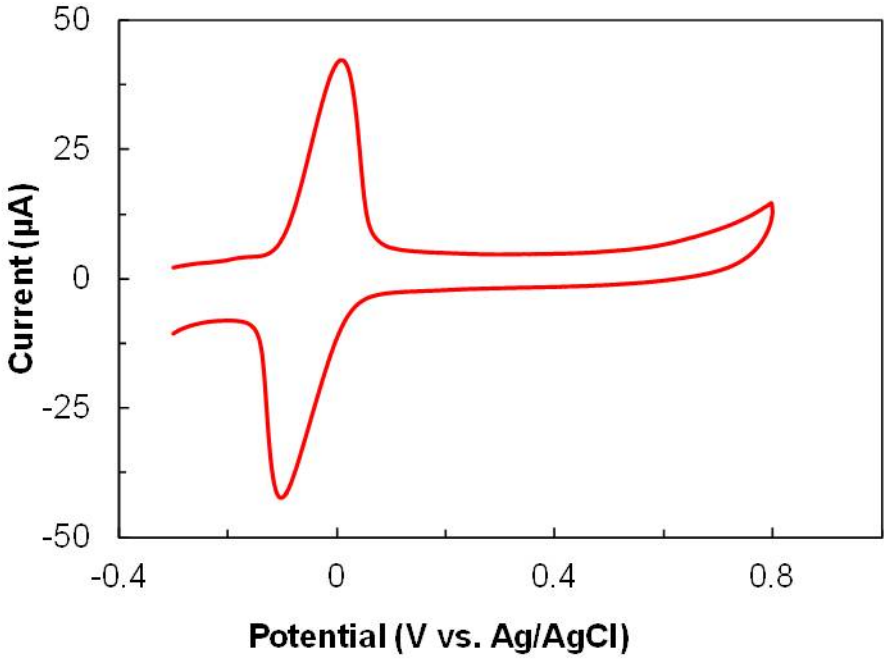


**Fig. S2.** Cyclic voltammogram showing redox peaks of DBMIB

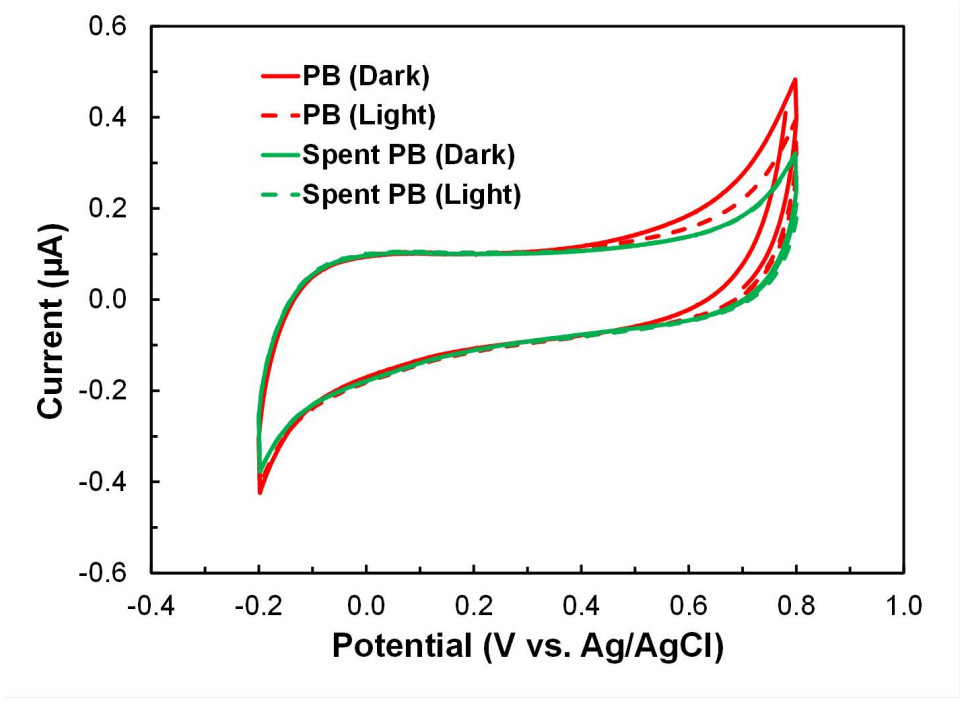


**Fig. S3.** Cyclic voltammograms of fresh phosphate buffer (PB) and spent phosphate buffer (Spent PB) under dark and light conditions

**Table S1:** Fluorescence measurement of NOS for examining the accessory photosynthetic pigments.

| S. No. | Excitation wavelength | Emission wavelength | Control | NOS | Fluorophore |
|---|---|---|---|---|---|
| 1 | 590 (±10) | 645 (±20) | 0 | 370 | C-Phycocyanin |
| 2 | 530 (±12.5) | 645 (±20) | 0 | 91 | R-Phycocyanin |
| 3 | 530 (±12.5) | 590 (±17.5) | 0 | 22 | B-Phycoerythrin |