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.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Excitation wavelength</th>
<th>Emission wavelength</th>
<th>Control</th>
<th>NOS</th>
<th>Fluorophore</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>590 (±10)</td>
<td>645 (±20)</td>
<td>0</td>
<td>370</td>
<td>C-Phycocyanin</td>
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<tr>
<td>2</td>
<td>530 (±12.5)</td>
<td>645 (±20)</td>
<td>0</td>
<td>91</td>
<td>R-Phycocyanin</td>
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<tr>
<td>3</td>
<td>530 (±12.5)</td>
<td>590 (±17.5)</td>
<td>0</td>
<td>22</td>
<td>B-Phycoerythrin</td>
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