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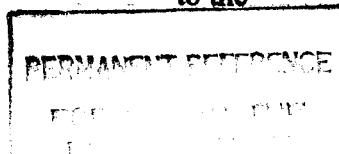
**SOLAR CELLS BASED ON
DYE SENSITIZED NANOPOROUS TiO₂
SEMICONDUCTING FILMS.**

A PROJECT REPORT PRESENTED

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ABSTARCT.

Nanoporous TiO_2 on FTO glass has greater anchoring ability for dyes. The dye Brazilin extracted from *Caesalpinia Sappan* (Singhala; Pathangi) gets strongly adsorbed on TiO_2 . A photovoltaic cell was fabricated by sandwiching an electrolyte with an n- TiO_2 photoanode and Pt counter electrode. Its I-V characteristics, photocurrent action spectra, UV-visible absorption spectra were recorded. When 1 cm^2 of the cell was illuminated $V_{oc} = 348 \text{ mV}$ and $I_{sc} = 0.62 \text{ mA}$ were obtained. The highest absorbance was recorded at 575 nm wavelength and highest photocurrent was recorded at a wavelength of 550 nm .