

## PREPARATION AND INVESTIGATION OF PHOTOELECTROCHEMICAL BEHAVIOUR OF Ce AND W CO-DOPED TiO<sub>2</sub> COMPOSITE FILM

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**Abstract:** Ce and W co-doped TiO<sub>2</sub> photocatalyst composite material has been fabricated by sol-gel method. The composite coated ITO film was then prepared via electrophoretic deposition method. In order to understand the morphology, structure and optical properties, the composite material was characterized with XRD, SEM, UV-vis and FT-IR spectroscopy. The characterization results showed a uniformly distributed porous composite film on ITO substrate. Ce and W as oxides are dispersed on the substrate. A significant photocurrent was developed under solar simulator irradiation and the value was observed higher as compared with pure titania film electrodes.