

CERTIFICATE

It is certified that the work contained in the thesis titled “*In-situ Growth of Metal and Metal Sulfide Nanoparticles within Solution Processed TiO₂ Thin Film for Photodetection and Energy Harvesting Applications*” has been carried out under my supervision and that this work has not been submitted elsewhere for a degree.

It is further certified that the student has fulfilled all the requirements of Comprehensive, Candidacy, and SOTA for the award of the Ph.D. degree.

Date:

Place: Varanasi

Dr. Bhol Nath Pal
(Supervisor)