CERTIFICATE

It is certified that the work contained in the thesis titled "Photocatalytic degradation of dye (Direct Blue 199) from carpet industry waste water using synthesized anion and cation doped TiO₂ photocatalysts" by Sudhakar Saroj has been carried 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 Examination, Candidacy and SOTA for the award of Ph.D. Degree.

Satya Vir Singh

Supervisor