## A Study on Utilization Potential of Microbial Biopolymer treated Wastes in Civil Engineering



## Thesis submitted in partial fulfilment for the Award of Doctor of Philosophy

Submitted by

## **NITEESH SINGH BONAL**

## DEPARTMENT OF CIVIL ENGINEERING INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY)

**VARANASI – 221005** 

Roll No. 16061012 2022