## Studies on Hydrogen Production by Steam Reforming of Acetic acid on MOFs derived Nickel Catalysts for Utilization of Biomass



## Thesis submitted in partial fulfilment

## for the Award of Degree DOCTOR OF PHILOSOPHY

by
ANKIT KUMAR

Department of Chemical Engineering & Technology
Indian Institute of Technology
(Banaras Hindu University)
Varanasi – 221005 India

Roll No: 13041501 2020