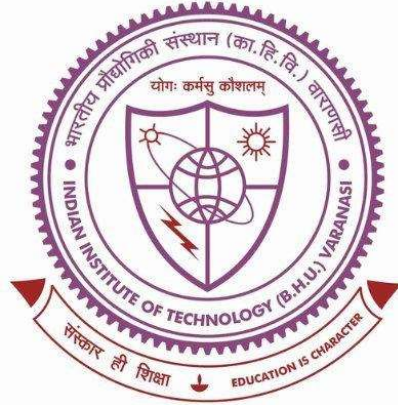


**FABRICATION OF POLYMERIC MICROSTRUCTURES  
HARNESSING THIN-FILM INSTABILITIES AND ITS  
APPLICATION IN POINT-OF-CARE OPTICAL SENSING**



A thesis submitted in partial fulfillment  
for the award of the degree

Doctor of Philosophy

by

Shubham Mishra

**DEPARTMENT OF CHEMICAL ENGINEERING  
AND TECHNOLOGY**

**Indian Institute of Technology**

**(Banaras Hindu University)**

**Varanasi**

Roll No: 16041008

2022