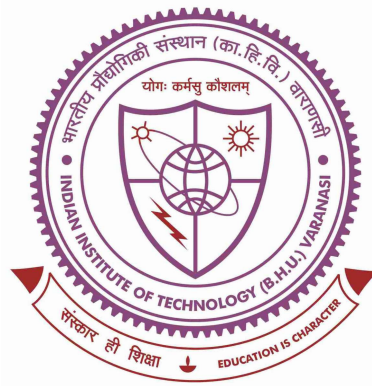


**Impact of long and short-range atomic ordering on  
ferroelectric properties of perovskite-based lead-free  
functional materials**



**Thesis submitted in partial fulfillment  
for the Award of  
DOCTOR OF PHILOSOPHY  
in  
PHYSICS**

*by*  
**DIGVIJAY NATH DUBEY**

*Under the supervision of*  
**Dr. Saurabh Tripathi**

**DEPARTMENT OF PHYSICS  
INDIAN INSTITUTE OF TECHNOLOGY  
BANARAS HINDU UNIVERSITY  
VARANASI - 221 005**

ROLL NUMBER  
17171006

YEAR OF SUBMISSION  
2022