

**“ EFFECT OF SUBSTITUTION ON TRANSITION TEMPERATURES OF  
PEROVSKITE  $\text{KNbO}_3$  SEMICONDUCTING FERROELECTRIC CERAMICS ”**

A DISSERTATION SUBMITTED TO THE  
SHIVAJI UNIVERSITY, KOLHAPUR  
FOR THE DEGREE OF

**MASTER OF PHILOSOPHY  
IN  
PHYSICS**

By  
**JALANDAR N. PATIL**  
M. Sc.

Research Guide  
**DR. K. L. NARAYANA**

DEPARTMENT OF PHYSICS  
SHIVAJI UNIVERSITY, KOLHAPUR - 416 004,

**MAY-1989**

SOR-2669-1778626