

**STUDY OF NEUTRON INDUCED REACTION CROSS SECTIONS UP TO 18 MeV  
FOR ADVANCED REACTOR DESIGN**

**THESIS SUBMITTED TO  
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA  
FOR THE DEGREE OF**

**DOCTOR OF PHILOSOPHY  
IN  
PHYSICS**



**Submitted by**

**VIBHA B. VANSOLA**

**Under the Supervision of**

**Prof. S. MUKHERJEE**

**AUGUST, 2019**

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