


## C E R T I F I C A T E

This is to certify that the data embodied in the thesis entitled "Optical and Related Studies of Crystals" (Ammonium Hydrogen d-tartarate single crystals) is an original piece of work by Smt. Annie Kuruvilla carried out under my immediate supervision and guidance. She has put in research for the requisite number of terms as required by the University. It is also certified that the work has not been submitted to any other University/Institute for any research degree.

  
(Prof. J.R. PANDYA)  
Guiding Teacher