**DECLARATION** 

I herby declare that the entire work embodied in this thesis is the result of the

investigations carried out by me in the Department of physics, Gauhati University

under the guidance and supervision of my respected research Guide, Prof. M. N. Bora.

Retd. HOD & Professor, Department of Physics, Gauhati University as Principal

Guide and respected Dr. J. Kotoky Assistant Prof. Division of Life Sciences Institute of

Advanced Study in Science & Technology, Paschim Boragaon Guwahati-16 as Sub-

Guide. I also declare that this thesis as a whole or any part thereof has not been

submitted by me for any research degree to this University or any other

University/Institution.

February, 2008

Mahendra Kalifa (Mahendra Kalija)