



## Declaration

I hereby declare that the work presented in this thesis is original and has not formed the basis for the award of any degree or diploma by any university or institution.

.....*Manan*.....

**Ms. Manan Vyas**

**(Candidate)**

Theoretical Physics division  
Physical Research Laboratory  
Ahmedabad - 380 009, India.

Place: Ahmedabad

Date: May 04, 2011

**Certified by:**

.....*K.V. Krishna Brahman*.....

**Prof. Venkata Krishna Brahman Kota**

**(Guide)**

Theoretical Physics division  
Physical Research Laboratory  
Ahmedabad - 380 009, India.

.....*A. Sharma*.....

**Head, Department of Physics**

The Maharaja Sayajirao University of Baroda  
Vadodara - 390 002, India.