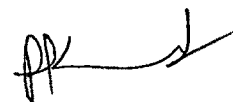


## CERTIFICATE

I certify that this thesis has been composed by Ms Parvathi B based on investigations carried out by her at the Department of Physics, Mangalore University, under my supervision. The subject matter of this thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or any other similar title.



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