

CERTIFICATE

This is to certify that this thesis “**Metabolic Engineering of *E. coli* for Biotransformation of Eugenol to Ferulic Acid**” embodies the work carried out by **Dinesh Kalra** herself under my supervision and that it is worthy of consideration for the award of the Ph.D. degree.

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DECLARATION

I hereby affirm that the work presented in this thesis is exclusively my own and there are no collaborators. It does not contain any work for which a degree/diploma has been awarded by any other University/Institution.

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