

CERTIFICATE

This is to certify that the thesis entitled “**BIODIVERSITY OF MANGROVE ACTINOMYCETES AND THEIR POSSIBLE UTILITY FOR ANTIMICROBIAL NANOPARTICLES AND PROBIOTICS**” submitted by **Mr. J. Sivakumar** for the award of the degree of **Doctor of Philosophy in Marine Science** is based on a result of studies carried out by him under my supervision and guidance at Department of Marine Science, School of Marine Sciences, Bharathidasan University, Tiruchirapalli, Tamil Nadu, India. This thesis or any part of this thesis has not been submitted elsewhere for the award of any other degree or diploma.

Date:

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