

(2019-20) 1.3.4 (1104)

CERTIFICATE

This is to certify that the dissertation entitled "**Purification, characterization of alkaline lipase enzyme from *Aspergillus flavus* and using this enzyme for biofuel production in submerged state fermentation**" submitted to the Karpagam Academy of Higher Education in partial fulfillment of the requirements for the award of the degree of **Master of Science in Microbiology** is a bonafide record of original research work done by **Peter Francis ER** during the period 2019-2020 of their study in the department of Microbiology at Karpagam Academy of Higher Education, Coimbatore, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree/Diploma/Associate/Fellowship or similar title to any candidate of any University.



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