

# DEPARTMENT OF APPLIED CHEMISTRY

## COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY



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### **CERTIFICATE**

This is to certify that the dissertation entitled **“DEVELPPMENT OF SUBSTITUTED METALLOPHTHALOCYANINE AND STUDY THE SYNTHESIS, CHARACTERISATION AND PHOTOPHYSICAL PROPERTIES”** submitted to the Markaz Arts and Science College, Athavanad in partial fulfillment of the requirement for the degree of Master of Science in Chemistry is an original work done by **SAMEERA KC (Reg No. MZAVMCH012)** under my guidance in the Department of Applied Chemistry, Cochin University of Science and Technology during the period of April 2023. The results embodied in the dissertation work have not been submitted to any other institution or University for award of any Degree or Diploma.

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