

SWAMI VIVEKANANDA INSTITUTE
OF
MODERN SCIENCE



Affiliated to Maulana Abul Kalam Azad University of Technology, WB
Sonarpur Station Road, Karbala, P.O. - Narendrapur, P.S. - Sonarpur, Kolkata-700103

TO WHOM IT MAY CONCERN

This is to certify that the project entitled **"OPTIMIZATION OF PROCESS PARAMETERS THROUGH RESPONSE SURFACE METHODOLOGY [RSM] IN CASE OF BIOREMEDIATION OF PHENOL AND CATECHOL."** with reference to **Swami Vivekananda Institute of Modern Science**, Sonarpur, Kolkata-700103 is submitted by **Megha Karn** [2nd year, 2nd semester, registration no. 212641899210002 year 2021-22, roll no. 26499221002] under the Department of Biotechnology for the partial fulfilment of the degree of **M.Sc Biotechnology**, under **Maulana Abul Kalam Azad University of Technology, WB**, embodies the work has been done by her under our supervision.

Gargi Gupta

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Prof. Gargi Gupta
(Vice-Principal)
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Dr. Nilanjana Bhattacharyya Nath

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Prof.(Dr.) Nilanjana Bhattacharyya Nath
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Prof.(Dr.) Nilanjana Bhattacharyya Nath
(Head of the Department)
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Date:

Place: Kolkata





DEPARTMENT OF FOOD TECHNOLOGY & BIO-CHEMICAL ENGINEERING

F.No. SA/FTBE/190523

Date 19/05/2023

CERTIFICATE

This is to certify that the M.Sc. Thesis entitled “**OPTIMIZATION OF PROCESS PARAMETERS THROUGH RESPONSE SURFACE METHODOLOGY (RSM) IN CASE OF BIOREMEDIATION OF PHENOL AND CATECHOL**” has been submitted by **Ms.Megha Karn**, a student of final year M.Sc. in Biotechnology, Department of Biotechnology, Maulana Abul Kalam Azad University of Technology, west Bengal.

This project work is the outcome of the work carried out by her from January (02/01/2023) to April (28/04/2023) in the laboratory of Food Technology & Biochemical Engineering, Jadavpur University.

The thesis is result of original work done by her and I am satisfied with keenness and interest shown by her during the project execution.

She is a sincere student and suitable candidate for the degree of Master of Science in Biotechnology. I wish her all the best for her future career.

With regards,

Sunita Adhikari (Nee Pramanik)

[Dr. Sunita Adhikari (Nee Pramanik)]

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