



A  
Project Report on

**TRANSDERMAL INSULIN DRUG DELIVERY  
EMPHASIZING ON MICRONEEDLE DELIVERY SYSTEM**

Submitted by

**DEBARGHYA KARFORMA**

*University Regn. No. – 031161*

*Roll No. - 18901919015*

Under the guidance of  
**Mr. Saroj Singhmura**  
Assistant Professor


In partial fulfilment of the Requirement for the Degree of  
**Bachelor of Pharmacy**

Submitted to  
**Maulana Abul Kalam Azad University of Technology  
West Bengal**

**Dr. B. C. Roy College of Pharmacy and Allied Health Sciences  
Durgapur 713206**

**Academic Year: 2022 – 2023**



  
Prof. (Dr.) Samir Kumar Samanta  
M. Pharm., Ph.D (J.U.)  
Principal  
Dr. B. C. Roy College of Pharmacy & AHS  
Durgapur, West Bengal-713206

## DECLARATION

I hereby declare that the Project entitled "Transdermal Insulin Delivery Emphasizing on Mechanical Force Triggered System" in partial fulfilment of the requirement for the award of Bachelor of Pharmacy submitted to Maulana Abul Kalam Azad University of Technology, West Bengal, is an authentic record of bona fide work carried out by me under the guidance of MR SAROJ SINGHMURA, Assistant Professor, Dr. B.C Roy College of Pharmacy & A.H.S.

The matter embodied in this Project has not been submitted for the award of any other degree or diploma to any University / Institution.

Signature: Debarghya Karforma


Name of Candidate: Debarghya Karforma

University Roll No: 18901919015

Date: 15/05/22

Place: Durgapur



  
Prof. (Dr.) Samir Kumar Samanita  
M. Pharm., Ph.D (J.U.)  
Principal  
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Durgapur, West Bengal-713206

# CERTIFICATE

This is to certify that the Project entitled "Transdermal Insulin Delivery Emphasizing on Mechanical force triggered system" by Debarghya Karforma in partial fulfilment for the BACHELOR OF PHARMACY under MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY is a record of the original research work under our supervision and up to our satisfaction. To our knowledge, neither his thesis nor any part of it has been submitted for any other academic award anywhere before. The report is forwarded to Controller of Examination MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY for assessment.

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Signature of Supervisor

Name of Supervisor: MR SAROJ SINGHMURA

Date: 15/05/23

Place: Durgapur

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Signature

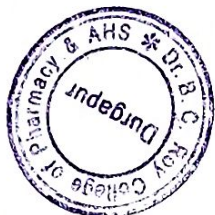
PROF (DR.) SAMIR KUMAR SAMANTA (PRINCIPAL)

Date:

Place:

\_\_\_\_\_  
Signature

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Dr. C. M. Hossain 18/5/23  
Professor & Former Head  
Department of Pharmaceutical Technology  
Maulana Abul Kalam Azad University  
of Technology, West Bengal  
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