

DRUG DELIVERY USING DEEP LEARNING ONRAMP

Submitted in partial fulfillment of the requirements for the award of
Master of Technology in Biotechnology

by

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DEPARTMENT OF BIOTECHNOLOGY

SCHOOL OF BIO AND CHEMICAL ENGINEERING

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

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BONAFIDE CERTIFICATE

This is to certify that this Internship Report is the bonafide work of **Raja Gowri S (Register No.43810003)** who carried out the project entitled "**Drug Delivery Using Deep Learning OnRamp**" under our supervision from April to May 2024.

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Submitted for Viva voice Examination held on 07/05/2024

INTERNAL EXAMINER

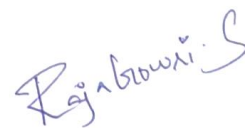
EXTERNAL EXAMINER

DECLARATION

I, **RAJA GOWRI S (43810003)** hereby declare that the Internship Report entitled “**Drug Delivery Using Deep Learning OnRamp**” done by me under the guidance of Dr. Prabhakar Singh and **Dr. V. Ramesh Kumar** at **Sathyabama Institute of Science and Technology** is submitted in partial fulfillment of the requirements for the award of Master of Technology in Biotechnology.

DATE: 07.05.2024

PLACE: Chennai.



SIGNATURE OF THE CANDIDATE

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ABSTRACT

The emerging technology of nanoneedle employ the nanoneedle for the penetration in cell membrane to investigate and manipulate biomedical procedures in the living cells. This study presents a simulated methodology on the basis of fuzzy logic for flow rate of drug delivery through a nanoneedle for drug delivery. The outflow rate is measured as 1.32 mL/min through MATLAB simulation. The given in this study specifies that the fuzzy logic deliver an effective modeling presentation by showing good agreement with the parametric measurements. Therefore, Fuzzy Logic is an alternate method to obtain outflow rate and other parameters for nanoneedles. This nanoneedle technology is revealed as a dominant and multipurpose technology. It can deal with many new customs to discover biomedical procedures with new bio-physical characteristics of the living cells.

Keywords: Matlab, Nanoneedle, Cell membrane, Drug delivery .

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