

St Xavier's College (Autonomous)

5, Mahapalika Marg, Mumbai-400001

# PREPARATION OF BIOMOLECULAR MACHINERY REQUIRED TO UNDERSTAND RIBOSOMAL RELEASE KINETICS OF $\alpha$ -SYNUCLEIN

A dissertation submitted to St Xavier's College- Autonomous

For the partial fulfillment of the degree of Master of Science in Biotechnology

Ву

Mitsu Raval

MSc. Biotechnology

2019-2020

Under the guidance of:

Dr. Debasis Das

Tata Institute of Fundamental Research,

Homi Bhabha Road, Navy Nagar, Colaba,

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#### POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY

St. Xavier's College (Autonomous)

5, Mahapalika Marg, Mumbai -400001

#### CERTIFICATE

This is to certify that Ms. Mitsu Raval, student of MSc (Biotechnology) -Semester IV, at the Post Graduate Department of Biotechnology, St. Xavier's College (Autonomous) has submitted the dissertation work titled "Preparation of biomolecular machinery required to understand ribosomal release kinetics of a-synuclein" for the partial fulfillment of the Master's degree in Science in Biotechnology, during the academic year 2019-2020.

Date: 23rd August 2020 Place: Mumbai

Dr. Karuna Gokarn

Head of the Department, PGDBT

POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY ST. XAVIER'S COLLEGE, MUMBAI-400 001.

## Institute Letter Head

### CERTIFICATE OF COMPLEITION

This is to certify that Ms. Mitsu Raval, student of MSc (Biotechnology), St. Xavier's College (Autonomous) has completed her training/ Research Project at the Das lab, Tata Institute of Fundamental Research, Mumbai during the academic year 2019-2020.

She has completed the dissertation work entitled "Preparation of biomolecular machinery required to understand ribosomal release kinetics of α-synuclein" for the partial fulfillment of MSc. (Biotechnology) degree. She has been familiarized with the following techniques during this project:

- a) Bacterial cell culture
- b) Protein purification
- c) Dialysis
- d) Sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS PAGE)
- e) Western blotting

This carefully written report represents the experiments and literature related to the same carried out by her during the period from 1st December 2019 to 31st March 2020.

I found Ms. Mitsu Raval to be a sincere and hardworking student. Her overall conduct was good.

PI/Supervisor: Dr. Debasis Das

Signature: Debaris Das Date: 24th August 2020

Seal of the institute