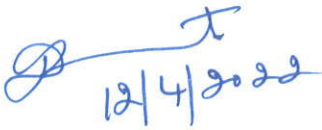


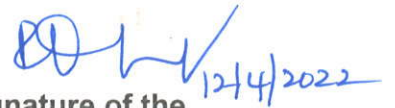
CERTIFICATE

This is to certify that the thesis entitled "**Drug Release Analysis and Anticancer Potential of *Tabebuia pallida* Silver Nanoparticles Loaded Liposomes against Molt-3 Cells – *in vitro***" submitted to Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for the award of the degree of **Doctor of Philosophy in Biochemistry**, is a record of original research work done by **Priyanka J**, during the period of her study in the Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, under my supervision and guidance and the thesis has not formed the basis for the award of any Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University or Institute.



12/4/2022

Signature of the
Head of the Department



12/4/2022

Signature of the
Supervisor



12/4/22

Signature of the Dean

DECLARATION

I hereby declare that the matter embodied in this thesis entitled, "**Drug Release Analysis and Anticancer Potential of *Tabebuia pallida* Silver Nanoparticles Loaded Liposomes against Molt-3 Cells – *in vitro***", is the result of investigations carried out by me in the Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, under the supervision and guidance of **Dr. R. Nirmaladevi**, M.Sc., M.Phil., Ph.D., Assistant Professor (S.G.), Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore and that it has not been submitted for the award of any Degree / Diploma / Associateship / Fellowship etc., of any other University or Institute.



Signature of the Supervisor



Signature of the Candidate

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ABBREVIATIONS

ROS	- Reactive Oxygen Species
RNS	- Reactive Nitrogen Species
FT-IR	- Fourier Transform Infra-Red
DPPH	- (2, 2-diphenyl-2-picryl hydrazyl hydrate)
ABTS	- 2,2'-azino-bis (3-ethylbenzothiazoline-6-sulphonic acid)
PBS	- Phosphate Buffered Saline
EDTA	- Ethylene Diamine Tetraacetic Acid
ALL	- Acute Lymphoblastic Leukemia
Molt-3	- Acute T lymphoblastic leukemic cell line
PBL	- Peripheral Blood Lymphocytes
MTT	- 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide
SRB	- SulphoRodamine B
TCA	- TriChloro Acetic acid
FITC	- Fluorescein Isothiocyanate
FCC	- Face Centered Cubic Crystalline Structure
AgNP	- Silver Nanoparticles
DLS	- Dynamic Light Scattering
FESEM	- Field Emission Scanning Electron Microscope
EDAX	- Energy Dispersive X-ray Analysis
DMSO	- Dimethyl Sulfoxide
NCCS	- National Centre for Cell Science
ANOVA	- Analysis of Variance
UV-Vis	- Ultraviolet Visible
XRD	- X-Ray Diffraction