



Colloidal Carriers for Transdermal Delivery

A thesis submitted by

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List of Abbreviations

Abbreviation Meaning

3D Three-dimensions

ANOVA Analysis of variance

BBD Box-Behnken design

CCD Central composite design

CLSM Confocal laser scanning microscopy

CS Chitosan

CUR Curcumin

CUR-CSNPs Curcumin loaded chitosan nanoparticles

CUR-UDNVs Curcumin loaded ultradeformable nanovesicles

CV% Coefficient of variation

DL% Drug loading

DLS Dynamic light scattering

DMSO Dimethylsulfoxide

DOD D-optimal design

DOE Design of experiments

EE% Entrapment efficiency

FITC Fluorescein isothiocyanate

HEPES Hydroxyethyl piperazineethanesulfonic acid

HPLC High performance liquid chromatography

IC₅₀ 50% inhibitory concentration

LMW Low molecular weight

LOD Limit of detection

LOQ Limit of quantitation

MTT 3-(4, 5-dimethylthiazol-2-yl) 2,5-diphenyltetrazolium bromide

NTA Nanoparticle tracking analysis

OFAT One-factor-at-a-time

PBS Phosphate buffered saline

PDI Polydispersity index

PS Particle size

RSM Response surface methodology

SD Standard deviation

SNEDDS Self nano-emulsifying drug delivery systems

TDDS Transdermal drug delivery systems

TEM Transmission electron microscope

TPP Tripolyphosphate

UV/Vis Ultraviolet/Visual

ZP Zeta potential

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