INCREASING THE SOLUBILITY AND BIOAVAILABILITY OF A SLIGHTLY SOLUBLE DRUG USING MICROEMULSIONS

A thesis submitted in the partial fulfillment of the requirements for the PhD Degree of Pharmaceutical Sciences (Pharmaceutics)

by

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Dedication

I dedicate this thesis to my dear father, mother and siblings, and to the soul of my grandma.

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List of Abbreviations

Stratum Corneum	SC
Microemulsion	ME
Liquid Chromatography Mass Spectroscopy	LC / MS
Attenuated Total Reflectance Fourier Transform Infrared	ATR-FTIR
Confocal Laser Scanning Microscopy	CLSM
Total Ion Chromatogram	TIC
Single Ion Monitoring	SIM
Mono Ion Chromatogram	MIC
Mass to Charge ratio	m/z
Standard Deviation	S.D.
Limit of Detection	LOD
Limit of Quantitation	LOQ
Coefficient of Variation	C.V.
Retention Time	R_t
High Performance Liquid Chromatography	HPLC
Internal Reflective Element	IRE
Transepidermal Water Loss	TEWL
Nile Red	NR
Dermatopharmacokinetic	DPK
Differential Scanning Calorimetry	DSC
Nuclear Magnetic Resonance	NMR
Diffusion-ordered Spectroscopy	DOSY

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