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SYNTHESIS OF STRUCTURED LIPID AND IMPROVING ITS OXIDATIVE STABILITY USING POTENT ANTIOXIDANT EXTRACTED FROM OLIVE LEAVES

Thesis Submitted by

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To

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تحضير إحدى الليبيدات المعدلة وتحسين ثباتها ضد التأكسد بإستخدام إحدى مضادات الأكسدة المستخلصة من ورق الزيتون

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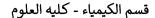
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أحمد إبراهيم محمد عبدالجواد

للحصول على درجة دكتوراه الفلسفة فى العلوم تخصص الكيمياء

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SPECIAL DEDICATION

This thesis is dedicated to my father and Mother

Who supported me with everything they have and for their faith in me and allowing me to be as ambitious as I want.

And

My brother Ibrahim and my sisters

for their support and encouragement

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List of Abbreviations

A.A. Antioxidant activity

ADL NovoCor ADL

ALA Alpha linolenic acid; C18:3 n-3

BPI The relative base peak ion chromatogram

CO Canola oil

DPPH 2,2-Diphenyl-1-picrylhydrazyl radical

FA Ferulic acid

FAGs Feruloylated acylglycerols

FCO Feruloylated canola oil

FFAs Free fatty acids Feruloylated structured lipids

FLS Feruloylated linseed oil

FPS Feruloylated palm stearin

FSLs Feruloylated structured lipids

LA Linoleic acid; C18:2 n-6

LCSFA Long chain saturated fatty acid

LCUFA Long chain unsaturated fatty acid

LS Linseed oil

N435 Novozyme435[®]

OA Oleic acid; C18:1 n-9

PA Palmitic acid; C16:0

PS Palm stearin

SFS Solvent free system reaction

TAGs Triacylglycerols

TLL Lipozyme TL 100L

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