سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

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سامية محمد مصطفى

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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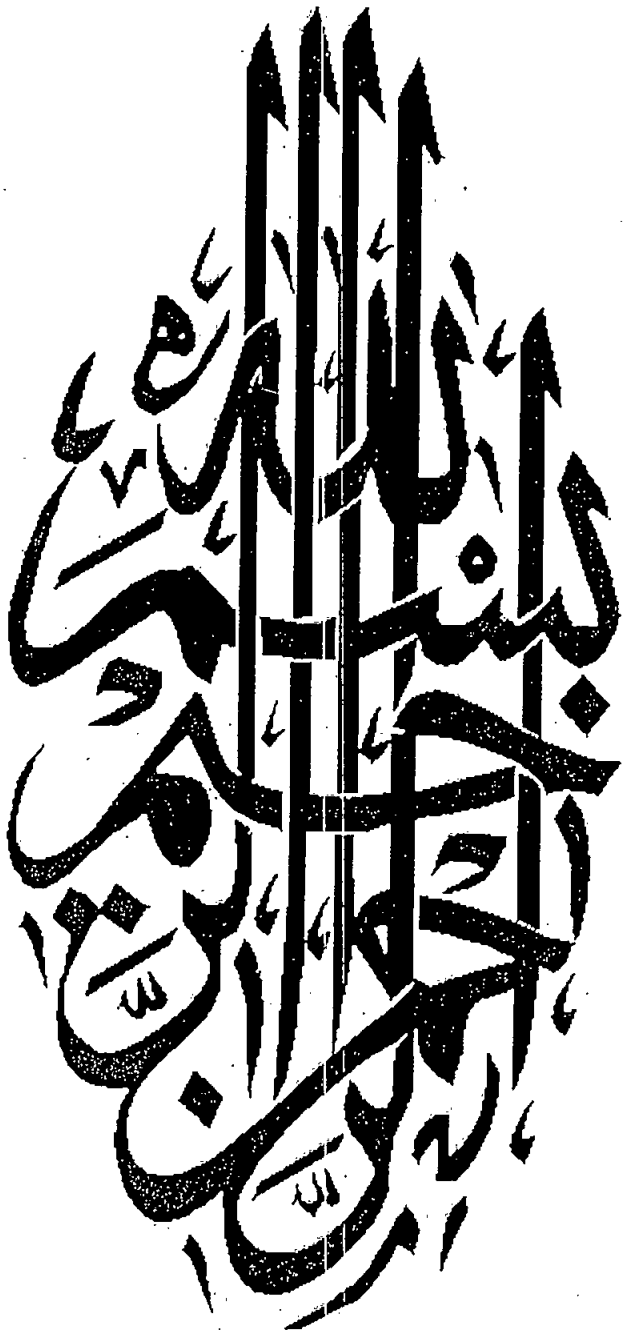

APPLICATION OF ORTHOGONAL FUNCTIONS TO CERTAIN INSTRUMENTAL METHODS OF PHARMACEUTICAL ANALYSIS

A Thesis Presented
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List of Abbreviations

A_{max}	Maximum absorbance.
a	Intercept.
A(1%,1cm)	Absorbance of 1% w/v solution at 1cm pathlength.
A(1cm)	Absorbance at 1cm pathlength.
b	Slope.
C.V.	Coefficient of Variation.
cm^{-1}	1/centimeter, unit of $\bar{\nu}$.
D_i	Derivative absorption curves [A vs. λ(nm)] of the i^{th} order derived instrumentally.
$D_i(\lambda)$	Derivative absorption curves [A vs. λ(nm)] of the i^{th} order derived mathematically using orthogonal polynomials.
$D_i(\log \lambda)$	Derivative absorption curves [A vs. $\log \lambda$] of the i^{th} order derived mathematically using orthogonal polynomials.
$D_i(\bar{\nu})$	Derivative absorption curves [A vs. $\bar{\nu}$ (cm^{-1})] of the i^{th} order derived mathematically using orthogonal polynomials.
i	Set of wavelengths.
j	j^{th} order.
N_j	Normalizing factor.
nm	Nanometer=10^{-9} meter, unit of λ.
P_i	Normalized orthogonal polynomial of the i^{th} order.
p_i	Orthogonal polynomial coefficient of the i^{th} order.
POP	Points orthogonal polynomials.
r	Correlation coefficient.
S_a	Standard deviation of intercept.

S_b	Standard deviation of slope.
S.D.	Standard Deviation.
vs.	Versus.
Δ	Difference.
λ	Wavelength (nm).
λ_m	Mean of a set of wavelengths.
$\overline{\nu}$	Wavenumber (cm^{-1}).
$\sum$	Sum.
$f(x)$	Function of (x).