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**RAPID METHODS FOR
ANALYSIS OF EDIBLE OILS
AND FATS BY FOURIER
TRANSFORM INFRARED
SPECTROSCOPY**

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TABLE OF CONTENTS

ACKNOWLEDGMENTS	i
LIST OF TABLES	viii
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xviii
CHAPTER	
I GENERAL INTRODUCTION	1
II LITERATURE REVIEW	5
Infrared Spectroscopy	5
Vibration of Molecules	9
Instrumentation	11
History of Interferometers	11
Michelson Interferometer	11
Fourier Transformation	13
Advantages of Fourier Transformed IR Spectroscopy	15
Sample Handling	16
Transmission Technique	17
Attenuated Total Reflectance (ATR)	19
Polyethylene Infrared Cards	21
Data Handling Techniques	23
Detection of Overlapped Bands	23
Smoothing and Interpolation	23
Baseline Correction	23
Peak Intensity Measurements	24
Spectral Stripping	24
Ratio Method	25
Quantitative Analysis	25
Beer-Lambert Law	26
Classical Least Squares (K – Matrix)	27
Inverse Least Squares (P – Matrix)	27
Partial Least Square (PLS)	28
Principal Component Regression (PCR)	29
Validation	29
Estimation of Errors	30
Some FTIR Spectroscopy Applications	31
FTIR Spectroscopy Applications for Food and Lipids	32
Edible Fats and Oils	35
Sources of Fats and Oils	36

Properties and Characteristics of Fats and Oils	38
Some Quality Parameters of Fats and Oils	38
Analytical and Quality Control	40
Moisture Content	42
Residual Soap in Oil	44
Hexane in Solvent Extracted Oil	45
Aflatoxins	47
Thiobarbituric Acid (TBA) Test	50
Gossypol in Cottonseed Oil	52
Sesamol in Sesame Seed Oil	53
Multivariate Calibrations	55
Authentication of Vegetable Oils Using FTIR Spectroscopy	55
Detection of Lard Adulteration	57
III DETERMINING MOISTURE CONTENT IN CRUDE PALM OIL BY FOURIER TRANSFORM INFRARED SPECTROSCOPY	60
Introduction	60
Materials and Methods	61
Samples and Sample Preparations	61
Analysis	62
AOCS Vacuum Oven Method	62
IUPAC Distillation Method	62
FTIR Spectroscopy Scanning	63
Validation	64
Results and Discussion	65
Moisture Content Obtained by AOCS Vacuum Oven and IUPAC Distillation Methods	65
Absorption Bands of Water	65
Conclusion	79
IV DETECTION OF SOAP RESIDUES IN REFINED VEGETABLE OILS BY FOURIER TRANSFORM INFRARED SPECTROSCOPY	80
Introduction	80
Materials and Methods	82
Samples and Chemicals	82
Chemical Analysis	82
Instrumental Analysis	82
Statistical Analysis	84
Validation	85
Results and Discussion	85
Chemical and FTIR Predicted Results	85
Spectra	88
Selection of the Optimal Frequency for Prediction	91
Statistical Analysis	93
Conclusion	101

V	DETERMINING HEXANE RESIDUE IN EDIBLE OILS BY FTIR SPECTROSCOPY WITH ATTENUATED TOTAL REFLECTANCE	102
	Introduction	102
	Materials and Methods	104
	Samples and Chemicals	104
	Spectra Acquisition	105
	Mathematical and Statistical Analysis	105
	Results and Discussion	106
	Development of Calibration Models	107
	Conclusion	118
VI	DETERMINATION OF AFLATOXINS IN GROUNDNUT AND GROUNDNUT CAKE USING FTIR SPECTROSCOPY WITH ATTENUATED TOTAL REFLECTANCE	119
	Introduction	119
	Materials and Methods	122
	Samples and Chemicals	122
	Extraction and Cleanup	122
	Thin Layer Chromatography (TLC)	123
	FTIR Method	125
	Spectra Acquisition	125
	Mathematical and Statistical Analysis	126
	Results and Discussion	126
	Development of Calibration Models	129
	Conclusion	143
VII	DETERMINING TBARS IN PALM OIL USING MULTIVARIATE CALIBRATION OF FOURIER TRANSFORM INFRARED SPECTRA	144
	Introduction	144
	Materials and Methods	146
	Materials	146
	Chemical Analysis	146
	Instrumental Analysis	146
	Statistical Multivariate Analysis	147
	Validation	148
	Results and Discussion	149
	Chemical Methods	149
	Spectra	150
	Optimal Frequency Region for Malonaldehyde Prediction	152
	Statistical Analysis	156
	Conclusion	162

VIII	DETERMINING SESAMOL IN SESAME SEED OIL BY FOURIER TRANSFORM INFRARED SPECTROSCOPY	163
	Introduction	163
	Materials and Methods	164
	Materials	164
	Samples	165
	Fourier Transform Infrared Spectra	165
	Results and Discussion	167
	Spectra	167
	Conclusion	175
IX	DETECTION OF PALM AND GROUNDNUT OILS AS ADULTERANTS IN SESAME OIL BY FOURIER TRANSFORM INFRARED SPECTROSCOPY	176
	Introduction	176
	Materials and Methods	177
	Materials	177
	Samples	178
	HPLC Analysis of TAG	178
	FTIR Spectra	179
	Results and Discussion	179
	FTIR Spectra	182
	Conclusion	189
X	DETECTION OF GOSSYPOL IN COTTONSEED OIL BY FOURIER TRANSFORM INFRARED SPECTROSCOPY	190
	Introduction	190
	Materials and Methods	192
	Materials	192
	Chemical Analysis	192
	Instrumental Analysis	193
	Statistical Analysis	193
	Validation	194
	Results and Discussion	194
	Chemical Method	194
	FTIR Spectra	195
	Development of Calibration Models	196
	Conclusion	203
XI	DETECTING LARD ADULTERATION OF BODY FATS OF CHICKEN, LAMB AND COW BY FOURIER TRANSFORM INFRARED SPECTROSCOPY	204
	Introduction	204
	Materials and Methods	206
	Sample Preparation	206
	Instrumentation/Spectral Acquisition	207

Results and Discussion	208
Lamb Body Fat (LBF)	208
Chicken Fat (CF)	222
Cow Body Fat (CBF)	232
Conclusion	240
XII CONCLUSIONS AND RECOMMENDATIONS	241
Summary	241
Conclusions and Recommendations	246
REFERENCES	248
APPENDICES	268

The objectives of this study were to develop fast, accurate, low cost, sensitive and environmentally friendly analytical methods for selected quality factors and minor components in edible oils and fats and their associated products using Fourier Transform Infrared (FTIR) spectroscopy. These analyses include soap residues in the chemically refined vegetable oils, quantifying hexane residues in the solvent extracted vegetable oils, detection of aflatoxins in groundnut and groundnut cake, the determination of malondialdehyde (MDA) as one of the thiobarbituric acid reactive substances (TBARS) in edible oils, the determination of minor components in edible oils such as sesamol and gossypol in sesame seed and cottonseed oils, respectively. In addition, the FTIR techniques were also be used to determine the adulteration of sesame seed oil with other vegetable oils and lard in body fats of chicken, lamb and cow.



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