

# MOHAMED ELWATHIG SAEED MIRGHANI



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## المؤهل العلمي

- Food Chemistry & Biochemistry
- Master of Science in Chemistry
- Agricultural Biochemistry

## مسؤوليات التدريس

BIOCHEMISTRY	2011/2012 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017 2017/2018 2018/2019
BIOCHEMISTRY I	2006/2007 2007/2008 2008/2009 2009/2010 2010/2011 2011/2012
BIOTECHNOLOGY ENGINEERING LAB I	2011/2012 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017 2017/2018
BIOTECHNOLOGY ENGINEERING LAB II	2006/2007 2007/2008 2008/2009 2009/2010 2010/2011
BIOTECHNOLOGY ENGINEERING LAB IV	2018/2019
CHEMISTRY	2007/2008 2008/2009 2009/2010 2010/2011
CHEMISTRY & BIOCHEMISTRY OF NATURAL PRODUCTS	2005/2006 2006/2007
ETHICS AND TOYYIBAN CONCEPT IN HALAL PRODUCTS AND SERVICES	2019/2020 2020/2021
FATS AND OILS CHEMISTRY AND TECHNOLOGY	2006/2007
FINAL YEAR PROJECT II	2018/2019
FIQH 1 FOR HALAL INDUSTRY PRODUCT AND SERVICES	2020/2021
FIQH 1 FOR HALAL INDUSTRY PRODUCTS AND SERVICES	2019/2020
FOOD BIOTECHNOLOGY	2006/2007 2009/2010 2010/2011 2011/2012 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017 2017/2018 2018/2019
FOOD PROCESS ENGINEERING	2007/2008 2018/2019

FOOD QUALITY ASSESSMENT AND CONTROL	2008/2009 2009/2010 2010/2011 2011/2012 2012/2013 2013/2014 2015/2016 2018/2019
HALAL INDUSTRY AND ADVANCED TECHNIQUE ANALYSIS	2016/2017
HALAL INDUSTRY AND ADVANCED TECHNIQUES ANALYSIS	2013/2014 2014/2015 2015/2016
NATURAL PRODUCTS,NUTRACEUTICALS & FUNCT.FOODS	2007/2008 2008/2009
PROJECT I	2013/2014
PROJECT II	2011/2012
SEMINAR	2014/2015 2015/2016
SEMINAR I	2010/2011

## المشاريع البحثية

### Completed

<b>2016 - 2019</b>	Development of Rapid Low Cost Protocol for Halal Authentication of Gelatin Sources
<b>2016 - -1</b>	Development of Rapid Low Cost Protocol for Halal Authentication of Gelatin Sources
<b>2016 - 2019</b>	Production and Quality Parameters of Halal Local Ingredients and Natural Products
<b>2015 - 2019</b>	The Comprehensive Study on Al-Jallah Animals and Its Impact on Malaysian Aquaculture Industry
<b>2015 - 2018</b>	Characterization of Halal and Non-Halal Animal Bones As Raw Material for Gelatin and Gelatin Based Products
<b>2015 - 2017</b>	Development And Validation of a Method to Detect Polyaromatic Hydrocarbons in Locally Processed Foods
<b>2014 - 2016</b>	Moringa Oleifera: Oil Extraction, Characterization Studies and Biodiesel Production
<b>2013 - 2018</b>	Alternative of Halal and Nutritious Meat Balls and Sausages from Unripe Jackfruits and Banana Flowers
<b>2013 - 2018</b>	Alternative of Halal and Nutritious Meat Balls and Sausages from Unripe Jackfruits and Banana Flowers
<b>2012 - 2013</b>	Solid state composting process by fungal mixed culture from empty fruit bunches,pome and cake
<b>2012 - 2014</b>	Production and Characterization of Biodiesel from Jatropha Curcas Oil

- 2012 - 2016** Application of cDNA Microarray for Study of Halal vs Haram Fat Substances in HaCat Human Keratinocyte Cells
- 2011 - 2016** Microbiological Guidelines of Medium Najs (Filth) Contamination in Food and on Food Equipment in Halal Food Premises
- 2011 - 2015** Islamization, Ethics And Values In Science And Technology (KVC Project 2011)
- 2010 - 2016** Upscaling Pilot Plant to Process Moringa Oleifera Seeds for Production of Moringa Oil, Bio Flocculants & Feedstock by Patented IP Technology
- 2010 - 2013** Development of Process Conditions for The Production of Halal Animal Feed Improved Nutrients from Agro Industrial Wastes
- 2009 - 2012** Sludge Palm Oil Pre-Treatment Method for Biodiesel Production by Esterification and Transesterification Processes
- 2009 - 2012** Production of L-cysteine from Various Parts of Garlic Plant"
- 2009 - 2014** Extraction and Identification of Bioactive Compound from Lemongrass Essential Oil
- 2008 - 2011** Production of Halal Ingredients from Local Sources
- 2008 - 2015** Pigments Identification of Malaysian Marine Algae and Medical Herbs Using Spectroscopy Techniques
- 2007 - 2008** The Potential of Insects Oil and Protein
- 2007 - 2011** The Potential of Mango Kernel Oil and Protein
- 2007 - 2010** Immobilization of Chitosan onto the Surface of Carbon Nanotube CT for Removal of Heavy Metals
- 2006 - 2013** International Institute for Halal Research and Training (INHART)
- 2006 - 2012** Studies on Mangrove in Pulau Toba, Langkawi
- 2004 - 2007** Blood Level Serotonin of Tryptophan, Catecholamines and Estrogen and their Implications for Mood Changes During Pregnancy Ad Postpartum Period

#### **In Progress**

- 2016 - Present** Development of Rapid Low Cost Protocol for Halal Authentication of Gelatin Sources
- 2015 - Present** Development And Validation of a Method to Detect Polyaromatic Hydrocarbons in Locally Processed Foods
- 2015 - Present** The Comprehensive Study on Al-Jallalah Animals and Its Impact on Malaysian Aquaculture Industry
- 2013 - Present** MAQASID AL-SHARI'AH IN HOSPITALITY AND SERVICES
- 2006 - Present** Bio-Process and Molecular Engineering Research Unit (BPMERU)

<b>2006 - Present</b>	New Name: Bio-Process and Molecular Engineering Research Unit (BPMERU) Biomolecular Engineering Research Unit (BioMERU)
<b>2004 - Present</b>	Bio-Environmental Engineering Research Centre (BERC)
<b>2004 - Present</b>	Functional Food and Nutraceuticals Research Unit (FFNRU)
<b>Unknown - Present</b>	ASSESSMENT AND REHABILITATION OF SUNGAI PUSU BY BIO-NANOTECHNOLOGY APPROACH FOR WATER QUALITY IMPROVEMENT

## المنشورات

### Article

- 2020** [Gum Arabic more than emulsifier and food additive: a new experimental validation of anti-proliferative against colorectal colon cancer cell lines.](#) International Journal of Food, Nutrition and Public Health (IJFNPH) , 11 (1/2 Part 2) pp.83-95
- 2020** [Characterization of tetraethylene glycol-based deep eutectic solvents and their potential application for dissolving unsaturated fatty acids.](#) Journal of Molecular Liquids , 312 (https://doi.org/10.1016/j.molliq.2020.113284) pp.1-7
- 2020** [Active fractions of methanol crude obtained from acacia seyal gum and their anti-proliferative effects against human breast cancer cell lines.](#) Global Journal of Science Frontier Research: C Biological Science , 20 (3 version 1.0) pp.50-64
- 2020** [Biodiesel production from vegetable oil: a review.](#) Journal of Marine Biology and Environmental Sciences , 2 (1) pp.1-10
- 2020** [Evaluation of Guiera senegalenses on Prevention of Type 2 Diabetes Among Sudanese Adult Patients.](#) Journal of Physics: Conference Series (JPCS) , 1489 (012033) pp.1-11
- 2020** [Polyamidoamine dendrimers: favorable polymeric nanomaterials for lipase activation.](#) Materials Today Communications , 26 pp.101492
- 2020** [A grand avenue to integrate deep eutectic solvents into biomass processing.](#) Biomass and Bioenergy , 137 (June) pp.1-21
- 2020** [Potential food additive of Boswellia carterii essential oil encapsulated within gum Arabic: a particle size distribution and zeta potential analysis.](#) Food Research , 4 (Supplementary 2) pp.1-5
- 2019** [Production of citric acid from sugarcane molasses by Aspergillus niger using submerged fermentation.](#) Biological and Natural Resources Engineering Journal , 2 (1) pp.47-55
- 2019** [Microencapsulated frankincense essential oil: a potential remedy and prevention of mouth diseases.](#) Malaysian Journal of Medicine and Health Science , 15 (Supplement 8) pp.22-22

- 2019** [Induction of apoptosis and cell cycle arrest in two human cancer A549 and HT29 cells lines by Barhi date palm kernels extracts and three isolated cytotoxic compounds.](#) Preprint pp.1-37
- 2019** [Effects of time, temperature, and solvent ratio on the extraction of non-extractable polyphenols with anticancer activity of barhi date palm kernels extracts using response surface methodology.](#) Preprints pp.1-36
- 2019** [Halal & organic mouth-wash: frankincense essential oil & hydrosol Boswellia mouth-wash essential oil \(Bomeo\).](#) Malaysian Journal of Medicine and Health Sciences (MJMHS) , 15 (Supplement 8) pp.51
- 2019** [Natural deep eutectic solvent-assisted pectin extraction from pomelo peel using sonoreactor: experimental optimization approach.](#) Processes , 7 (7) pp.1-19
- 2019** [Active fractions of methanol crude obtained from Acacia seyal gum: Antioxidant capacity using FTIR analysis.](#) Borneo Journal of Pharmacy , 2 (2) pp.94-107
- 2018** [Study of antioxidant and anti-inflammatory crude methanol extract and fractions of Acacia seyal gum.](#) American Journal of Pharmacology and Pharmacotherapeutics , 5 (1:3) pp.1-11
- 2018** [Determination of antioxidant activity of gum Arabic: an exudation from two different locations.](#) ScienceAsia , 44 (3) pp.179-186
- 2018** [A review of gelatin source authentication methods.](#) Tropical Life Sciences Research , 29 (2) pp.213-227
- 2018** [Shedding light on lipase stability in natural deep eutectic solvents.](#) Chemical and Biochemical Engineering Quarterly , 32 (3) pp.359-370
- 2018** [Immobilisation of Candida rugosa lipase on aminated polyethylene/polypropylene microfibrinous sheet modified with oxirane group.](#) ASM Science Journal , 11 (3) pp.182-200
- 2018** [Challenges of extraction techniques of natural antioxidants and their potential application opportunities as anti-cancer agents.](#) Health Science Journal , 12 (5:596) pp.1-25
- 2018** [Effect of different levels of dietary cottonseed oil on broiler chicks production.](#) Biological and Natural Resources Engineering Journal (BNREJ) , 1 (1) pp.58-74
- 2018** [Gum arabic: an optimization of ultrasonic-assisted extraction of antioxidant activity.](#) Chemia , LXIII (63) (3) pp.95-116
- 2018** [Shedding light on lipase stability in natural deep eutectic solvents.](#) Chemical and Biochemical Engineering Quarterly , 32 (3) pp.359-370
- 2018** [Esterification of high free fatty acid jatropha curcas oil for biodiesel production = أسترة زيت الجatroفا كركاس علي الأحماضي الدهنية الحرة لإنتاج الوقود الحيوي.](#) Gezira Journal of Engineering & Applied Sciences , 13 (1) pp.40-50
- 2017** [Evaluation of catalytic effects of chymotrypsin and Cu<sup>2+</sup> for development of UV-spectroscopic method for gelatin-source differentiation.](#) International Journal of Food Science , 2017 pp.1-5
- 2017** [Production of biodiesel form Jatropha curcas seed oil.](#) Gezira Journal of Engineering & applied Sciences , 12 (1) pp.59-67

- 2017** [Nutrients depictions of Barhi date palm \(Phoenix dactylifera L.\) kernels 1.](#) International Food Research Journal , 24 (Suppl.) pp.S325-S334
- 2017** [Characterization, purification and identification of some Alkaloids in Datura stramonium.](#) International Food Research Journal , 24 (Suppl.) pp.S540-S543
- 2017** [Differentiation of fractionated components of lard from other animal fats using different analytical techniques.](#) Sains Malaysiana , 46 (2) pp.209-216
- 2017** [The application of multiphase DEM for the prediction of fat, oil and grease \(FOG\) deposition in sewer pipe lines.](#) Journal of Advanced Research in Fluid Mechanics and Thermal Sciences , 39 (1) pp.9-16
- 2017** [Total phenolic content and antioxidant capacity of basil \(Ocimum basilicum L.\) leaves from different locations.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.S378-S381
- 2017** [Evaluation of antioxidant capacity and physicochemical properties of Sudanese baobab \(Adansonia digitata\) seed-oil.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.441-445
- 2017** [Characterization of the Baobab fruit shells as adsorption material.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.S472-S474
- 2017** [Functionalization of carbon nanotubes using eutectic mixtures: a promising route for enhanced aqueous dispersibility and electrochemical activity.](#) Chemical Engineering Journal , 311 (1) pp.326-339
- 2017** [The Islamic ethics of mitochondria transplantation.](#) IIUM Engineering Journal , 18 (2) pp.42-46
- 2017** [The authentication of Halal dental materials using rapid Fourier Transform Infrared \(FTIR\) spectroscopy.](#) Advanced Science Letters , 23 (5) pp.4750-4752
- 2017** [Nutrients depictions of Barhi date palm \(Phoenix dactylifera L.\) kernels.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.S325-S334
- 2017** [Effect of solvent types on phenolics content and antioxidant activities of Acacia polyacantha gum.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.369-377
- 2017** [Antioxidant capacity and sugar content of honey from Blue Nile State, Sudan.](#) International Food Research Journal (IFRJ) , 24 pp.452-456
- 2017** [The use of analytical techniques for qualitative differentiation of lipids extracted from cheese samples and lard.](#) Food Agriculture and Environment , 15 (3 & 4) pp.20-25
- 2017** [Detection of formaldehyde in cheese using FTIR spectroscopy.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.S496-S500
- 2016** [Preparation and characterization of plasticized polylactic acid/starch blend.](#) Jurnal Teknologi , 78 (11-2) pp.7-12
- 2016** [Esterification of Jatropha curcas hydrolysate using powdered niobic acid catalyst.](#) Journal of the Taiwan Institute of Chemical Engineers , 63 (1) pp.243-249

- 2016** [Anti-cariogenic activities of some East African oleo gum resin crude extracts and essential oils.](#) International Food Research Journal , 23 (5) pp.2112-2116
- 2016** [Application of chromatographic and infra-red spectroscopic techniques for detection of adulterations in food lipids: a review.](#) Journal of Food Chemistry & Nanotechnology , 2 (1) pp.32-41
- 2015** [Identification and quantification of phenolic compounds in mangifera indica waterlily kernel and their free radical scavenging activity.](#) Journal of Advanced Agricultural Technologies , 2 (1) pp.1-7
- 2015** [Hydrolysis of Jatropha curcas oil for biodiesel synthesis using immobilized Candida cylindracea lipase.](#) Journal of Molecular Catalysis B: Enzymatic , 116 (2015) pp.95-100
- 2015** [Induction of apoptosis and oxidative stress in estrogen receptor-negative breast cancer, MDA-MB231 cells, by ethanolic mango seed extract.](#) BMC Complementary and Alternative Medicine , 15 (45) pp.1-7
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- 2015** [Recycling of organic wastes using locally isolated lignocellulolytic strains and sustainable technology.](#) Journal of Material Cycles and Waste Management , 17 (4) pp.769-780
- 2015** [Optimization of Moringa oleifera leaf extraction and investigation of anti-breast cancer activity with the leaf extract.](#) Engineering International , 3 (2) pp.97-103
- 2015** [Effect of process parameters on yield and conversion of jatropha biodiesel in a batch reactor.](#) Fundamentals of Renewable Energy and Applications , 5 (2) pp.1-5
- 2014** [Treatment of industrial low grade palm oil via esterification reaction using sonoreactor.](#) Journal of Industrial and Engineering Chemistry , 20 (4) pp.2066-2070
- 2014** [Approaches in the utilization of Jatropha curcas oil as feedstock for biodiesel synthesis: a review.](#) Advances in Environmental Biology , 8 (3) pp.626-632
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- 2014** [A positive aspect of man's conscious.](#) Science International Lahore , 26 (5) pp.2561-2562
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- 2014** [Application of response surface methodology for protein enrichment of cassava peel as animal feed by the white-rot fungus Panus tigrinus M609ROY.](#) Food Hydrocolloids , 42 pp.298-303

- 2014** [Mechanism of fat, oil and grease \(FOG\) deposit formation in sewer systems.](#) Advances in Environmental Biology , 8 (3) pp.815-820
- 2014** [Problems, control, and treatment of fat, oil, and grease \(FOG\): a review.](#) Journal of Oleo Science , 63 (8) pp.747-752
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- 2013** [Esterification of sludge palm oil using trifluoromethanesulfonic acid for preparation of biodiesel fuel.](#) Korean Journal of Chemical Engineering , 30 (6) pp.1229-1234
- 2013** [Assessment of cytotoxicity and toxicity for phosphonium-based deep eutectic solvents.](#) Chemosphere , 93 (2) pp.455-459
- 2013** [Are deep eutectic solvents benign or toxic?.](#) Chemosphere , 90 (7) pp.2193-2195
- 2013** [Fish gelatin and its applications in selected pharmaceutical aspects as alternative source to pork gelatin .](#) Journal of Food, Agriculture & Environment , 11 (1) pp.73-79
- 2013** [Qualitative to quantitative study for solid waste management.](#) World Applied Sciences Journal (21) pp.40-43
- 2012** [Unconventional method for monitoring of waste cooking oil transesterification.](#) Advanced Materials Research , 576 pp.357-361
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- 2012** [Anti-bacterial and cytotoxicity properties of the leaves extract of nahar \(Mesua Ferrea\) plant.](#) Advances in Natural and Applied Sciences , 6 (5) pp.583-587
- 2012** [Development of process conditions to optimize the extraction of bio-disinfectant from Neem Leaf \(Azadirachta Indica\).](#) Advances in Natural and Applied Sciences , 6 (5) pp.682-686
- 2012** [Bioactivity analysis of lemongrass \(Cymbopogon citratus\) essential oil.](#) International Food Research Journal , 19 (2) pp.569-575
- 2012** [Optimization of cassava peel medium to an enriched animal feed by the white rot fungi Panus tigrinus M609RQ .](#) International Food Research Journal , 19 (2) pp.427-432
- 2012** [Effect of operational parameters on solid state fermentation of cassava peel to an enriched animal feed.](#) Journal of Applied Sciences , 12 (11) pp.1166-1170
- 2012** [Why ethics in research are crucial? .](#) Advances in Natural and Applied Sciences , 6 (5) pp.660-663
- 2012** [Processing of date palm kernel \(DPK\) for production of nutritious drink.](#) Advances in Natural and Applied Sciences , 6 (5) pp.575-582
- 2012** [Treatment of acidic palm oil for fatty acid methyl esters production.](#) Chemical Papers , 66 (1) pp.39-46



- 2012** [Utilizing ultrasonic energy for reduction of free fatty acids in crude palm oil.](#) African Journal of Biotechnology , 11 (61) pp.12510-12517
- 2012** [Rapid authentication of leather and leather products.](#) Advances in Natural and Applied Sciences , 6 (5) pp.651-659
- 2011** [Statistical analysis for removal of Cadmium from aqueous solution at High pH.](#) Australian Journal of Basic and Applied Sciences , 5 (6) pp.440-446
- 2011** [Fats and oils: Halal perspective.](#) Halal Pages 2011/2012 pp.74-79
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- 2011** [Rapid method for the determination of moisture content in biodiesel using FTIR spectroscopy .](#) Journal Of The American Oil Chemists' Society
- 2011** [Valorization of cassava peels by the white rot fungus Panus tigrinus M609RQY.](#) Australian Journal of Basic and Applied Sciences , 5 (7) pp.808-816
- 2011** [Disinfection studies of Nahar \(Mesua ferrea\) seed kernel oil using pour plate method.](#) African Journal of Biotechnology , 10 (81) pp.18749-18754
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- 2011** [Reduction of high content of free fatty acid in sludge palm oil via acid catalyst for biodiesel production.](#) Fuel Processing Technology , 92 (5) pp.920-924
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- 2011** [Statistical analysis for removal of cadmium from aqueous solution at high pH.](#) Australian Journal of Basic and Applied Sciences , 5 (6) pp.440-446
- 2010** [Comparison studies of GSH isolation from several Malaysian local fruits by mechanical methods.](#) Research Journal of Chemistry and Environment , Spcial pp.299-302
- 2010** [Techniques for the detection of non-halal leather and leather products.](#) Halal Pages 2010/2011 pp.40-46
- 2010** [Sludge palm oil as a renewable raw material for biodiesel production by two-step processes.](#) Bioresource Technology , 101 (20) pp.7804-7811
- 2010** [Production of biodiesel from sludge palm oil by esterification process.](#) Journal of Energy and Power Engineering , 4 (1) pp.11-17
- 2010** [Immobilization of Chitosan onto Carbon Nanotubes for Lead Removal from Water.](#) Journal of Applied Sciences , 10 (21) pp.2705-2708
- 2009** [Kinetic adsorption of application of carbon nanotubes for lead Pb \(II\) removal from aqueous solution.](#) Journal of Environmental Sciences , 21 (4) pp.539-544
- 2009** [Halal food analysis: ensuring food and other consumer goods to be authentically halal.](#) Halal Pages 2009/2010 pp.44-49

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- 2009** [Kinetic adsorption of application of carbon nanotubes for Pb\(II\) removal from aqueous solution.](#) Journal of Environmental Sciences-China , 21 (4) pp.539-544
- 2009** [Biodiesel production from crude palm oil by transesterification process.](#) Journal of Applied Sciences , 9 (17) pp.3166-3170
- 2009** [Detarium microcarpum Guill & Perr fruit proximate chemical analysis and sensory characteristics of harcteristics of concentrated juice and jam .](#) African Journal of Biotechnology , 8 (17) pp.4217-4221
- 2009** [Antibacterial activity of mango kernel extracts.](#) Journal of Applied Sciences , 9 (17) pp.3013-3019
- 2009** [Extraction and characterization of gelatin from different marine fish species in Malaysia.](#) International Food Research Journal , 16 pp.381-389
- 2008** [A new method for the determination of toxic dye using FTIR spectroscopy.](#) IJUM Engineering Journal , 9 (2) pp.27-38
- 2006** [Physicochemical properties of argessi \(Chrozophora Brochiana\) kenaf \(Hibiscus Cannabinus\) and loofah \(Luffa Cylindrica\) seed oils.](#) Sudan Journal of Agriculture Research , 6 pp.53-60
- 2005** [Determining  \$\alpha\$ -tocopherol in refined bleached and deodorized palm olein using fourier transform infrared spectroscopy.](#) Food Chemistry , 90 pp.323-327
- 2005** [Analysis of potential lard adulteration in chocolate and chocolate products using fourier transform infrared spectroscopy.](#) Food Chemistry , 90 pp.815-819
- 2003** [Determination of lard in mixture of body fats of mutton and cow by fourier transform infrared spectroscopy.](#) Journal of Oleo Sciences , 52 (12) pp.633-638
- 2003** [A new method for determining of gossypol in cottonseed oil by FTIR spectroscop.](#) Journal Of The American Oil Chemists' Society , 80 (7) pp.625-628
- 2003** [Application of FTIR spectroscopy in determining sesamol in sesame seed oil.](#) Journal Of The American Oil Chemists' Society , 80 (1) pp.1-4
- 2003** [Determination of hexane residues in vegetable oils in FTIR spectroscopy.](#) Journal Of The American Oil Chemists' Society , 80 (7) pp.619-623
- 2002** [Rapid method for determining malondialdehyde as secondary oxidation product in palm olein system by Fourier transform infrared spectroscopy.](#) Phytochemical Analysis , 13 (4) pp.195-201
- 2002** [Fourier Transform Infrared \(FTIR\) spectroscopic determination of soap residues in the refined vegetable oils.](#) Journal Of The American Oil Chemists' Society , 79 (2) pp.111-116
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- 2001 [A new method for determining aflatoxins in groundnut and groundnut cake using FTIR spectroscopy with attenuated total reflectance technique.](#) Journal Of The American Oil Chemists' Society , 78 (10) pp.985-992
- 2001 [Detection of lard mixed with body fats of chicken, lamb and cow by fourier transform infrared spectroscopy.](#) Journal Of The American Oil Chemists' Society , 78 (7) pp.753-761
- 2000 [Rapid determinations of moisture content in crude palm oil by fourier transform infrared spectroscopy.](#) Journal Of The American Oil Chemists' Society , 77 (6) pp.631-637

#### **Conference or Workshop Item**

- 2020 [Halal industry opportunities in Africa.](#) In: **The 2nd Virtual International Halal Conference**
- 2020 [Statistical analysis investigation on vegetable oils stability during deep frying using selected quality parameters.](#) In: **5th International Conference on Mathematical Applications in Engineering 2019**
- 2019 [Formulation of fish oil nanoemulsions from fish-by-products.](#) In: **Melaka International Innovation Expo (MIX 2019) (4-6 September), Mudzaffar Hotel Melaka, Malaysia.**
- 2018 [Antioxidant capacity and characterization of gum arabic crude methanol extract and it is fractions by fourier transform infrared \(FTIR\) and Raman.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [Transesterification process of Moringa oleifera oil to biodiesel.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [Effect of plant ontogeny on yield and chemical constituents of essential oil in Sweet basil \(\*Ocimum basilicum\* L.\) grown in Sudan.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [Gum arabic: determination of solvent effect on the extraction of phenolic compounds and antioxidant activity using principle component analysis.](#) In: **4th International Conference on Chemical Engineering and Industrial Biotechnology (ICCEIB 2018)**
- 2018 [GC- MS analysis, phytochemical screening, antimicrobial and antioxidant activity of Sudanese annona squamosa seeds oil.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [Screening of boron adsorption potential of various date seed preparation methods.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [نقل الميتوكوندريا من منظور إسلامي = Transfer of mitochondria from an Islamic perspective.](#) In: **First International Conference of the Faculty of Shari'ah Sciences 2018**
- 2017 [Emerging sustainable technologies for transformation of gelatin and gelatin-based films.](#) In: **ASIA International Multidisciplinary Conference 2017 (AIMC 20170)**

- 2017 [Investigation of factors affecting development of browning during Maillard reaction of gelatin.](#) In: **ASIA International Multidisciplinary Conference 2017**
- 2017 [Rapid detection of gelatin in dental materials using attenuated total reflection fourier transform infrared spectroscopy \(ATRFTIR\).](#) In: **1st Physics and Technologies in Medicine and Dentistry Symposium, PTMDS 2017**
- 2017 [FTIR spectroscopy analysis of Halal and non-Halal gelatin as raw material derived from animal bones.](#) In: **International Postgraduate Symposium in Biotechnology (IPSB) 2017**
- 2017 [Immobilization of Candida rugosa lipase on grafted-PGMA polymer for industrial applications.](#) In: **ASIA International Multidisciplinary Conference 2017**
- 2016 [Phenolic contents and antioxidant activity of barhi date palm \(Phoenix dactylifera L.\) kernels extracts.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Natural silk of Pholcus phalangioides, a common home spider species for wound healing applications.](#) In: **International Conference for Innovation in Biomedical Engineering and Life Sciences, ICIBEL 2015**
- 2016 [Effect of functionalization of activated carbon on the efficacy of lipase in the production of biodiesel from Moringa oleifera oil.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Production of polymethyl methacrylate grafted biopolymer using potassium persulfate.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Differential gene expression in HaCaT skin keratinocyte cells treated with Halal and Non-halal fats and oil: a study using cDNA microarray.](#) In: **3rd International Halal Conference (INHAC 2016)**
- 2016 [A study on the characterization of baobab \(Adansonia digitate\) fruit seed oil.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Investigation of anticancer \(breast cancer\) activity of Moringa oleifera leaf extracts.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Identification of some alkaloids in datura stramonium \(Saikaran, Jimson weed\).](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Determination of free radical scavenging activities and total phenolic content of basil \(Ocimum basilicum L.\).](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [The Islamic ethics of mitochondria transplantation.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Preliminary study on the application of multiphase DEM for the prediction of fat,oil and grease \(FOG\) deposition in sewer pipe lines.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**

- 2015 [Controlling parameters for jatropha biodiesel production in a batch reactor.](#) In: **2015 10th Asian Control Conference (ASCC 2015)**
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