

AZURA BT. AMID



- INTERNATIONAL INSTITUTE FOR HALAL RESEARCH AND TRAINING
- IIUM Gombak Campus
- Email address: azuraamid@iium.edu.my

ACADEMIC QUALIFICATION

- Doctor of Philosophy of Science (Biotechnology)
- Master of Science (Plant Virology)
- Bachelor of Science with Education

TEACHING RESPONSIBILITIES

ARTIFICIAL TISSUE ENGINEERING	2013/2014
BIOLOGY	2008/2009
BIOTECHNOLOGY ENGINEERING LAB III	2013/2014 2014/2015
CELL AND MOLECULAR BIOLOGY	2007/2008 2008/2009 2013/2014
CELL AND TISSUE ENGINEERING	2008/2009
ENGIN. ASPECT OF ANIMAL & PLANT CELL CULTURE	2009/2010
ENZYME TECHNOLOGY	2009/2010
GENETIC ENGINEERING	2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 2010/2011 2011/2012 2013/2014 2014/2015
GENOMICS AND FUNCTIONAL GENOMICS	2009/2010 2010/2011 2011/2012 2013/2014
INTRODUCTION TO CELL AND TISSUE ENGINEERING	2005/2006 2006/2007 2007/2008 2008/2009
MOLECULAR BIOLOGY AND GENETIC ENGINEERING	2013/2014 2014/2015 2015/2016 2016/2017 2017/2018
PROTEIN ENGINEERING	2010/2011 2011/2012
RESEARCH METHODOLOGY	2019/2020 2020/2021
RESEARCH METHODOLOGY & SEMINAR IN BTE ENG (MIXED MODE)	2015/2016 2016/2017 2017/2018
RESEARCH METHODOLOGY & SEMINAR IN BTE ENG (RESEARCH MODE)	2015/2016 2016/2017 2017/2018
RESEARCH METHODOLOGY (ART)	2018/2019

RESEARCH METHODOLOGY (QUALITATIVE)	2019/2020
RESEARCH METHODOLOGY (QUANTITATIVE - MSC)	2013/2014 2018/2019
RESEARCH METHODOLOGY (QUANTITATIVE)	2013/2014 2019/2020
RESEARCH METHODOLOGY AND SEMINAR	2017/2018
RESEARCH METHODOLOGY IN BIOTECHNOLOGY ENGIN	2013/2014 2014/2015 2015/2016 2016/2017
SEMINAR	2006/2007 2008/2009

RESEARCH PROJECTS

In Progress

2020 - Present	Research Management Centre Edible Garden Makeover
2019 - Present	Characterization of blood plasma structure in surimi products and adulteration status through scientific and shariah approach.
2019 - Present	Development of nanocomposite hydrogel reinforced with nanocellulose of empty fruit bunch (EFB) incorporated with natural antimicrobial agent potential for wound healing dressing
2019 - Present	Resolving Nutrient Deficiencies among Children and Adolescents of the B40 Community in Selected Schools around Gombak, Malaysia.
2018 - Present	Potential Chemotherapeutic Properties of Essential Oils towards Human Non-Small Cell Lung Carcinoma Cell Lines (NCI-H1299)
2018 - Present	Development of Cream Cheese Using Bromelain: Halal Jakim Certification
2018 - Present	Collagen-Like Protein from Selected Bacteria as Alternative For Non-Halal Collagen
2018 - Present	Extraction Mechanism of Virgin Coconut oil from Solid Coconut Waste using Microwave-Assisted Extraction
2018 - Present	Development of Smartphone Application for Cancer Patient Daily Meals Intakes
2018 - Present	Developing a Model on Effective Promotion of Halal Concept to Increase Halal Awareness through Multi-Perspective Approaches for the Halal Food Industry
2018 - Present	Extraction Mechanism of Virgin Coconut oil from Solid Coconut Waste using Microwave-Assisted Extraction
2018 - Present	Non-Invasive Biochemical Personalized Stress Monitoring System Using Near-Infrared Spectroscopy

2018 - Present	Cream Cheese and Drinks Enhancement
2017 - Present	Study On The Effect Of Cloisite 30B On The Antimicrobial Activities And Tissue Regeneration Of Starch Based Wound Healing Materials
2016 - Present	Integration of Chemical Reaction-based Approaches and Biological System for Co2 Mitigation
2016 - Present	Upscaling Cream Cheese Production by 100L per day Cow Milk Using Bromelain as Rennet Alternative
2014 - Present	Characterization and Classification of Bioactive Compound in Natural Products by FTIR and Multivariate Data Analysis
2006 - Present	Bio-Process and Molecular Engineering Research Unit (BPMERU)
2006 - Present	New Name: Bio-Process and Molecular Engineering Research Unit (BPMERU) Biomolecular Engineering Research Unit (BioMERU)
Unknown - Present	Potential Chemotherapeutic Properties of Essential Oils towards Human Non-Small Cell Lung Carcinoma Cell Lines (NCI-H1299)
Unknown - Present	ESTABLISHING NURSERY AND SOCIAL ENTERPERISE FOR MALAYSIA RARE FRUIT TREES SEEDLING TO EMPOWER THE INDIGENOUS PEOPLE OF KAMPUNG SUNGAI DUA OLAK, PAHANG
Unknown - Present	EMPOWERING THE ORANG ASLI COMMUNITY AT KG SG. DUA OLAK VIA HANDS-ON TRAINING WITH KNOWLEDGE AND SKILLS ON RIVER RESTORATION AND CONSERVATION PRACTICES
Completed	
2017 - -1	Research and Development of Cream Cheese Using Bromelain (BromCheese)
2017 - 2020	Study On The Effect Of Cloisite 30B On The Antimicrobial Activities And Tissue Regeneration Of Starch Based Wound Healing Materials
2016 - 2019	Upscaling Cream Cheese Production by 100L per day Cow Milk Using Bromelain as Rennet Alternative
2016 - 2019	A Pilot Study on Science Policy for Green Energy:Microbial Fuel Cell Technology in Focus
2016 - 2016	Commercialisation of Recombinant Bromelain
2016 - 2019	Integration of Chemical Reaction-based Approaches and Biological System for Co2 Mitigation
2014 - 2018	Study of Growth Kinetics and Metabolites of Citrus Suhuiensis (Limau Madu) under Various Culture Conditions
2014 - 2015	In-Vivo Study on Recombinant Bromelain Formulation for Anti-Cancer Application
2014 - 2019	Characterization and Classification of Bioactive Compound in Natural Products by FTIR and Multivariate Data Analysis

- 2013 - 2016** Gene Expression Study of Cytotoxic Properties of Agarwood Branch Extract
- 2013 - 2016** Isolation, Purification and Characterization of Anti-Microbial Peptides of Low Molecular Weight from Non- and Immunized Super Meal Worm (*Zophobas morio Fabricus*)
- 2012 - 2016** Application of cDNA Microarray for Study of Halal vs Haram Fat Substances in HaCat Human Keratinocyte Cells
- 2012 - 2016** Identification, Purification and Characterization of Tetrathionate Hydrolase from *Thiobacillus Ferrooxidans*, an Enzyme Responsible for Enzymatic Devulcanization of Waste Rubber Products
- 2012 - 2015** Discovery of the Primary and Secondary Metabolites Flux Distribution During Cell Growth of *Ficus deltoidea* Cell Suspension Culture
- 2012 - 2013** Development of Anti-Cancer Tropical Cream from Recombinant Bromelain
- 2011 - 2014** Enhancement of CO₂ Mitigation of Cyanobacteria Potential for Biofuel Production
- 2011 - 2014** Inoculant Development and Studies of Health Beneficial Effects Gaharu
- 2011 - 2012** Extraction of Plant Material for Discovery Anti-Cancer Properties
- 2011 - 2014** RU 2011: Study of Growth and Secondary Metabolite Production by Herbal Plant Cell Cultures: Application of Flux Balance Analysis (FBA)
- 2011 - 2013** Growth Kinetics Study on MCF-7 Breast Cancer Cells Treated with Recombinant Bromelain
- 2011 - 2012** Optimization of Process Conditions for Extraction of Xanthine Oxidase Inhibitor from Potential Malaysian Medicinal Plant
- 2010 - 2013** Kinetic Studies of Recombinant Bromelain
- 2010 - 2013** Cloning and characterization of *Fusarium oxysporum* endoglucanase
- 2010 - 2011** Microarray analysis on stimulated MCF-7 cancer cells with active fractins isolated from tomato leaves extract for medical use
- 2010 - 2013** Investigative Study of Post-Electroporative Biomolecules as Potential Biomarker from Different Animal Cell Lines
- 2010 - 2014** Identification, Purification and Characterization of Industrially Useful Hydrolases from the wasteful skim latex of *Hevea Brasiliensis*
- 2010 - 2014** Pre-Commercialization of Recombinant Bromelain
- 2009 - 2010** Purification and Isolation of Anti Breast Cancer Compound from Tomato Leaves
- 2009 - 2012** Studies on Carotenoids from Local Sources for Food and Nutraceutical Applications
- 2009 - 2012** Studies on Effect(s) of Glutamine and/or Serum on CHO Cell Growth in Bioreactor Culture Focusing on the Insulin-like Growth Factor (IGF) Pathway

- 2009 - 2011** Functional Characterization , In-situ Localization and Cytotoxicity of Recombinant Bromelain Expressed in E.coli BL21A
- 2009 - 2012** Production of L-cysteine from Various Parts of Garlic Plant"
- 2009 - 2012** Study on the Mode of Action of Tomato Leaves Extract for its anti-Inflammatory Activity in Murine Macrophages RAW264.7 Cell
- 2009 - 2012** Halal Certification training for Main Kazakhstan
- 2009 - 2012** Global Metabolite Analysis of CHO Cells Cultured in T-Flasks and Bioreactor using Gas Chromatography-Mass Spectrometry
- 2008 - 2011** Production of Halal Ingredients from Local Sources
- 2008 - 2011** Molecular Modelling of enzyme Mechanism and Catalytic Activity of Phytases
- 2007 - 2010** Development of a Transformation System for Aquatic Plants (Nelumbo Nucifera or Saroja) for Production of Industrial Protein
- 2007 - 2010** Identification, Isolation, Purification and Characterization of Stunning and Slaughtering Related Protein in Chicken through Proteomic Study
- 2006 - 2009** Improve Product Quantity Of Aromatase Inhibitor From Nicotiana Tabacum By Metabolic Engineering Techniques
- 2006 - 2009** Purification and Identification of Antimicrobial Active Compound (Patatin- Like Protein) From Waste of Rubber Industry
- 2006 - 2009** Molecular Cloning, Sequencing, Purification And Characterization Of Stem Bromelain From Ananas Comosus.
- 2005 - 2008** Metabolic Engineering of Phytate Related Protein Through RNAi Method In Local Rice Varieties

PUBLICATIONS

Article

- 2020** [Statistical analysis of growth conditions of newly isolate bacillus sp producing L-asparaginase.](#) IIUM Engineering Journal , 21 (2) pp.67-79
- 2020** [Effects of ketogenic diet intervention on selected obese IIUM students during Ramadhan.](#) Food Research , 4 (Suppl. 1) pp.164-169
- 2020** [Carbon capture and storage with lipid production in integrated system of aqueous ammonia with marine mutant Synechococcus PCC 7002 IIUM01.](#) Biological And Natural Resources Engineering Journal , 3 (1) pp.14-27
- 2020** [Effects of carbon sources, plant growth regulators and inoculum size on Citrus suhuiensis cell suspension culture growth.](#) Malaysia Applied Biology Journal , 49 (1) pp.87-93

- 2020** [Heavy metal contamination in vegetables and its detection: a review.](#) Science Heritage Journal (GWS) , 4 (1) pp.1-5
- 2020** [Statistical analysis of growth conditions of newly isolate bacillus sp. producing L-Asparaginase.](#) IIUM Engineering Journal , 21 (2) pp.67-79
- 2020** [Method for purification of collagen: A systematic review.](#) Asia Pacific Journal of Molecular Biology & Biotechnology , 28 (3) pp.99-112
- 2020** [Preliminary study on formulation of pva-based face mask incorporated with sugarcane bagasse microfibrillated cellulose.](#) Biological And Natural Resources Engineering Journal , 3 (1) pp.7-13
- 2020** [Phytochemical analysis of ionic liquid-Graviola \(Annona muricata\) fruit extract and its acute toxicity on zebrafish early-life stages.](#) Asia-Pacific Journal of Molecular Biology and Biotechnology , 28 (2) pp.113-124
- 2019** [Development of media compositions of Lactobacillus plantarum for improvement of scavenging ability of Curcuma caesia.](#) Malaysian Applied Biology , 48 (5) pp.121-126
- 2019** [Antiproliferative activity of ionic liquid-graviola fruit extract against human breast cancer \(MCF-7\) cell lines using flow cytometry techniques.](#) Journal of Ethnopharmacology , 236 pp.466-473
- 2019** [Effect of curcumin dose, treatment duration and intervention type on tumor inhibition in animal models: a systematic literature review using meta-analysis techniques.](#) Biological and Natural Resources Engineering Journal , 2 (2) pp.1-12
- 2019** [A review on the identification and analysis of heavy metals in herbs using inductively coupled plasma mass spectrometry \(ICPMS\).](#) Environmental Contaminants Reviews , 2 (2) pp.1-5
- 2019** [Anti-proliferative activity of triterpenes isolated from Clinacanthus nutans on Hep-G2 liver cancer cells.](#) Asian Pacific Journal of Cancer Prevention , 20 (2) pp.563-567
- 2019** [Proteomics as tools for biomarkers discovery of adulteration in slaughtering procedures.](#) Science Heritage Journal (GWS) , 3 (1) pp.11-16
- 2018** [Biosynthesis of nanoparticles using recombinant bromelain.](#) Biological and Natural Resources Engineering Journal , 1 (1) pp.14-25
- 2018** [Anticancer activity of acetogenins from Annona muricata fruit.](#) International Medical Journal Malaysia , 17 (3) pp.103-112
- 2018** [Isolation and identification of bacteria-producing cellulose from tropical fruit for Halal capsule application.](#) International Journal on Advanced Science, Engineering and Information Technology , 8 (4-2) pp.1591-1596
- 2017** [Chemical structure of sulfated polysaccharides from brown seaweed \(Turbinaria turbinata\).](#) International Journal of Food Properties , 20 (7) pp.1457-1469
- 2017** [The effect of CO2 concentrations and the injection strategy on synechococcus sp. PCC7002 culture.](#) Asia Pacific Journal Molecular Biology and Biotechnology , 25 (1) pp.00-00

- 2017** [Effects of process conditions on the ultrasonic extraction of phenolics scavenger from *Curcuma caesia* rhizome.](#) International Food Research Journal (IFRJ) , 24 (Suppl) pp.422-427
- 2017** [A review of anticancer, antitumor, and antioxidant of *clinacanthus nutans*.](#) Asia Pacific Journal of Molecular Biology & Biotechnology , 25 (1) pp.61-68
- 2017** [Protease purification from *Bacillus amyloliquefaciens* B7 using Aqueous Two-Phase System \(ATPS\).](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.S292-S297
- 2017** [Optimization of plant growth regulators for *Citrus suhuiensis* callus induction.](#) Asia-Pacific Journal of Molecular Biology and Biotechnology , 25 (1) pp.1-7
- 2017** [Principal component analysis application on flavonoids characterization.](#) Advances in Science, Technology and Engineering Systems , 2 (3) pp.435-440
- 2017** [Algorithm for rapid identification of flavonoids classes.](#) International Food Research Journal , 24 pp.410-415
- 2017** [Cytokinetic study of uninfected agarwood branch ethanolic extract on breast cancer cells.](#) Asia Pacific Journal of Molecular Biology and Biotechnology , 25 (1) pp.1-7
- 2017** [Isolation and identification of halophilic bacteria producing halotolerant protease.](#) Galeri Warisan Sains , 1 (1) pp.07-09
- 2017** [Comparison of purification methods to purify recombinant bromelain from *Escherichia coli* BL21-A1 = Perbandingan kaedah penulenan rekombinan bromelain daripada *Escherichia coli* BL21-A1.](#) Malaysian Journal of Analytical Sciences , 21 (4) pp.958-971
- 2017** [Enzyme-aided extraction of sulfated polysaccharides from *Turbinaria turbinata* brown seaweed.](#) International Food Research Journal , 24 (4) pp.1660-1666
- 2016** [Cocoa pod husk, a new source of hydrolase enzymes for preparation of cross-linked enzyme aggregate.](#) SpringerPlus , 5 (57) pp.1-18
- 2016** [Cocoa pod husk: a new source of CLEA-lipase for preparation of low-cost biodiesel: An optimized process.](#) Journal of Biotechnology , 231 pp.95-105
- 2015** [Comparison of different cell disruption methods and cell extractant buffers for recombinant bromelain expressed in *E.coli* BL21-A1.](#) Jurnal Teknologi , 77 (24) pp.83-87
- 2015** [Phytoremediation and mathematical model for domestic wastewater by *Chlorella vulgaris*.](#) Advances in Environmental Biology , 9 (14) pp.139-144
- 2015** [Isolation of thermotolerant bacteria producing fibrinolytic enzyme.](#) Jurnal Teknologi , 77 (25) pp.83-87
- 2014** [Optimized preparation and characterization of CLEA-lipase from cocoa pod husk .](#) Journal of Biotechnology
- 2014** [Development and improvement of anti-gout property from aqueous-methanol extract of *morinda elliptica* using central composite design.](#) Advances in Environmental Biology , 8 (3) pp.734-743

- 2014** [Anti-cancer potential of agarwood distillate.](#) Journal of Pure and Applied Microbiology , 8 (Sp. ed) pp.871-874
- 2014** [Bromelain: an overview of industrial application and purification strategies.](#) Applied Microbiology and Biotechnology , 98 (14) pp.7283-7297
- 2014** [Total lipid of mutant synechococcus sp.PCC 7002 .](#) World Academy of Science, Engineering and Technology International Journal of Biological, Veterinary, Agricultural and Food Engineering , 8 (5) pp.456-459
- 2014** [Pretreatment and hydrolysis processes on synechococcus Pcc 7002 cells for glucose production.](#) Advances in Environmental Biology , 8 (3) pp.712-716
- 2014** [Effects of operating conditions in spray drying of recombinant bromelain.](#) Journal of Applied Science and Agriculture , 9 (20) pp.37-43
- 2014** [Pathway analysis of genes affected in MCF-7 breast cancer cells treated with recombinant bromelain.](#) Journal of Pure and Applied Microbiology , 8 (s.ed 1) pp.681-689
- 2014** [Screening of important autoinduction medium composition for high biomass production of E. coli expressing recombinant bromelain.](#) Journal of Pure and Applied Microbiology , 8 (SPEC. ISS. 1) pp.741-750
- 2014** [Optimization of spray drying process conditions for recombinant stem bromelain.](#) Advances in Environmental Biology , 8 (3) pp.696-703
- 2014** [Optimization on cell disruption of E. coli BL21-AI expressing recombinant bromelain.](#) Journal of Pure and Applied Microbiology , 8 (s.ed 1) pp.797-802
- 2014** [Gene expression analysis in MCF-7 breast cancer cells treated with recombinant bromelain.](#) Applied Biochemistry and Biotechnology , 173 (7) pp.1618-1639
- 2014** [Screening of anticancer activity from agarwood essential oil.](#) Pharmacognosy Research , 6 (3) pp.191-194
- 2014** [Cytotoxicity and inhibition of nitric oxide in lipopolysaccharide induced mammalian cell lines by aqueous extracts of brown seaweed.](#) Journal of Oleo Science , 63 (8) pp.787-794
- 2014** [Mutagenesis on cyanobacteria for high CO2 uptake: a review.](#) Journal of Pure and Applied Microbiology , 8 (Issue SPEC. ISS. 1) pp.761-768
- 2014** [Identification of microbes in inoculant for agarwood \(gaharu\) formation using molecular biological techniques.](#) Journal of Pure and Applied Microbiology , 8 (May (Special edition)) pp.769-776
- 2014** [Optimization of cultivation conditions to enhance the expression of recombinant VDAC2 from gallus gallus.](#) Journal of Pure and Applied Microbiology , 8 (s.ed 1) pp.751-759
- 2014** [Muscle Creatine Kinase \(M-CK\), Aldolase A and Voltage Dependent Anion Channel 2 \(VDAC2\) as Potential Biomarkers for Identification of Electrically Stimulated Chicken Muscle.](#) Journal of Pure and Applied Microbiology , 8 (s.ed 1) pp.707-718
- 2014** [Effects of glutamine and serum on IGF- dependent cho-K1 cell growth in T-Flask.](#) Advances in Environmental Biology , 8 (3 (Special Issue)) pp.831-837

- 2014** [Cytokinetics study on MCF-7 cells treated with commercial and recombinant bromelain.](#) Asian Pacific Journal of Cancer Prevention , 14 (11) pp.6709-6014
- 2014** [Cytotoxicity and inhibition of nitric oxide syntheses in LPS induced macrophage by water soluble fractions of brown seaweed.](#) Food Hydrocolloids , 42 pp.269-274
- 2013** [Understanding thermostability factors of Aspergillus niger PhyA phytase: a molecular dynamics study.](#) Protein Journal , 32 pp.309-316
- 2013** [Microarray and quantitative PCR analysis of gene expression profiles in response to treatment with tomato leaf extract in MCF-7 breast cancer cells.](#) Asian Pacific Journal of Cancer Prevention , 13 (12) pp.6319-6325
- 2013** [Enzymatic hydrolysis of plants and algae for extraction of bioactive compounds.](#) Food Review International , 29 pp.352-370
- 2013** [Metabolomics profiling of extracellular metabolites in CHO-K1 cells cultured in different types of growth media.](#) Cytotechnology , 65 (4) pp.577-586
- 2013** [Kinetic studies on recombinant stem bromelain.](#) Advances in Enzyme Research , 1 (3) pp.52-60
- 2013** [Study on callogenesis and growth kinetic of F. deltoidea Var. Trengganuensis cell suspension culture.](#) Journal of Pure and Applied Microbiology , 7 Spec pp.349-354
- 2013** [Statistical analysis of metal chelating activity of Centella asiatica and Erythroxyllum cuneatum using response surface methodology.](#) Biotechnology Research International pp.137851-1
- 2013** [Cloning and expression of Voltage-dependent Anion Channel 2 \(VDAC2\) from electrically stimulated chicken.](#) Journal of Pure and Applied Microbiology , 7 (Spec.) pp.43-52
- 2012** [The sensitive to freezing³ mutation of Arabidopsis thaliana is a cold-sensitive allele of homomeric acetyl-CoA carboxylase that results in cold-induced cuticle deficiencies.](#) Journal of Experimental Botany , 63 (14) pp.5289-5299
- 2012** [Purification of Xanthine Oxidase Inhibitor from Carica papaya leaves using Reversed Phase Flash Column Chromatography \(RPFCC\) - High Performance Thin Layer Chromatography \(HPTLC\).](#) Australian Journal of Basic and Applied Sciences , 6 (1) pp.117-122
- 2012** [Xanthine oxidase inhibitory activity from potential Malaysian medicinal plant as remedies for gout.](#) International Food Research Journal , 19 (1) pp.59-66
- 2012** [Differential Scanning Calorimetry as tool in observing thermal and storage stability of recombinant Bromelain.](#) International Food Research Journal , 19 (2) pp.727-731
- 2012** [Molecular dynamics study of the effect of calcium ions on the thermostability of Bacillus Amylolyquefaciens Phytase.](#) Australian Journal of Basic and Applied Sciences , 6 (1) pp.109-116
- 2012** [Bromelain production: Current trends and perspective.](#) Archives Des Sciences , 65 (11) pp.369-399
- 2012** [Recombinant bromelain production in Escherichia coli: process optimization in shake flask culture by response surface methodology.](#) AMB Express , 2 (12) pp.1-9

- 2012** [Identification of troponin I and actin, alpha cardiac muscle 1 as potential biomarkers for hearts of electrically stimulated chickens.](#) Proteome Science , 10 (1) pp.1-8
- 2012** [A rapid method for large sample number extraction of proteins from mammalian cells.](#) Regenerative Research , 1 (2) pp.49-55
- 2011** [Recovery of recombinant bromelain from Escherichia coli BL21-AI.](#) African Journal of Biotechnology , 10 (81) pp. 18829-18832
- 2011** [Halal lifestyle and cancer.](#) Halal Pages 2011/2012 pp.54-69
- 2011** [Detection of genetically modified rice: Collaborative validation study of a PCR based detection of genetically modified rice Oryza sativa commercially available in Saudi Arabia.](#) IJBS Journal of Biology , 70 (1) pp.11-17
- 2011** [Observation of antioxidant activity of leaves, callus and suspension culture of Justicia gendarusa .](#) African Journal of Biotechnology , 10 (81) pp.18653-18656
- 2011** [Predicting group of metabolites available in partially purified tomato leaves extract showing anticancer activity by high performance liquid chromatography \(HPLC\) and Fourier transform infrared \(FTIR\).](#) African Journal of Biotechnology , 10 (81) pp.18666-18673
- 2011** [Response surface optimization of the process conditions for anti-diabetic compounds from Cucumis Sativus.](#) African Journal of Biotechnology , 10 (81) pp.18788-18794
- 2011** [Expression, purification, and characterization of a recombinant stem bromelain from ananas comosus.](#) Process Biochemistry , 46 (12) pp.2232-2239
- 2011** [Over expression of Voltage Dependent Anion Channel 2 \(VDAC2\) in muscles of electrically stunned chickens.](#) IIUM Engineering Journal , 12 (4) pp.213-221
- 2011** [Determination of IGF-1-producing CHO-K1 growth phases using GCMS-based global metabolite analysis.](#) IIUM Engineering Journal , 12 (4) pp.89-98
- 2011** [Chinese hamster ovary \(CHO-K1\) cells expressed native insulin-like growth factor-1 \(IGF-1\) gene towards efficient mammalian cell culture host system .](#) African Journal of Biotechnology , 10 (81) pp.18716-18721
- 2010** [The factors affecting the extraction condition for neuroprotective activity of centella asiatica evaluated by metal chelating activity assay.](#) Journal of Applied Sciences , 10 (10) pp.837-842
- 2010** [Purification and Cytotoxicity Assay of TOMato \(Lycopersicum esculentum\) Leaves Methanol Extract as Potential Anticancer Agent.](#) Journal of Applied Sciences , 10 (24) pp.3283-3288
- 2010** [Distribution of phenolics in various Malaysian medicinal plants.](#) Journal of Applied Sciences , 10 (21) pp.2658-2662
- 2010** [Stunning and slaughtering in the meat industry.](#) Halal Pages 2010/2011 pp.40-46
- 2010** [Homology modelling and structural analysis of phyFAUIA1_H and Bacillus subtilis ASUIA243 phytases.](#) Research Journal of Chemistry and Environment , Specil (issue) pp.318-323

- 2010 [Amino acids substitution to improve PhyFAUIA1 phytase activity for animal feed production.](#) Research Journal of Chemistry and Environment , Special (Issue) pp.329-333
- 2009 [Halal meats and frozen foods: the halal abattoir, packaging, storage and handling.](#) Halal Pages 2009/2010 pp.18-25
- 2009 [A multifunctional acetyl-CoA carboxylase gene confers freezing tolerance in arabidopsis thaliana.](#) International Journal of Botany , 5 (2) pp.144-152
- 2009 [Optimization of the elicitation process on chrysanthemum indicum cell suspension culture producing xanthine oxidase inhibitor.](#) Journal of Applied Sciences , 9 (12) pp.2256-2263
- 2006 [PCR-based chromosome walking: the SFR 3 case.](#) Pakistan Journal of Biological Sciences , 9 (1) pp.164-169

Conference or Workshop Item

- 2020 [Review: a comparison of conditions for the extraction of vegetable and essential oils via microwave-assisted extraction.](#) In: **26th Regional Symposium on Chemical Engineering (RSCE 2019@ Kuala Lumpur)**
- 2020 [Empowering research mind and culture.](#) In: **Picoms Virtual Online Talk 2.0**
- 2020 [Talk on “Ayam sehat, kita sehat”.](#) In: **Halal Compliance in Chicken Slaughtering Course-Part 1 (Theory)**
- 2020 [Memposisi halal dalam agenda sejahtera.](#) In: **Dialog Sejahtera-Siri 17:Pembangunan Insan, Pendidikan, Institusi dan Transformasi**
- 2020 [Writing a winning a grant proposal.](#) In: **PICOM RMC Live session**
- 2019 [Effects of ketogenic diet intervention on selected obese IIUM students during Ramadhan.](#) In: **Global Halal Sphere Conference 2019 (GloHaS 2019)**
- 2018 [Electricity generation in Microbial Fuel Cell \(MFC\) by bacterium isolated from rice paddy field soil.](#) In: **1st International Conference on Civil and Environmental Engineering (CENVIRON 2017)**
- 2018 [Optimization of citrus suhuiensis suspension culture conditions using Response Surface Methodology \(RSM\).](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [Isolation and identification of bacteria-producing cellulose from tropical fruit for Halal capsule application.](#) In: **International Conference on Halal Innovation in Products and Services 2018 (i-CHIPS 2018)**
- 2018 [Ionic liquid microwave-assisted extraction of annona muricata fruit.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2018 [Isolation and screening of newly isolated bacteria producing nanocellulose from rotten banana skin and sugarcane bagasse.](#) In: **5th International Conference on Biotechnology Engineering (ICBioE 2018)**
- 2017 [Development of algorithm to characterize flavonoids classes.](#) In: **Proceedings - 14th IEEE Student Conference on Research and Development: Advancing Technology for Humanity, SCORed 2016**

- 2016 [Cytokinetic study of uninfected agarwood branch ethanolic extract on breast cancer cells.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Application of multivariate data analysis for rapid identification of flavonoids classes.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Influence of CO2 concentration on synechoccus growth and lipid.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Effects of process conditions on the ultrasonic extraction of phenolics scavenger from Curcuma caesia rhizome.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [A review-implementations of hyperspectral images technology for food safety and quality.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [Protease purification from Bacillus amyloliquefaciens B7 using aqueous two phase system .](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [The effects of plant growth regulators to Citrus suhuiensis callus induction.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2016 [A review on anticancer and biochemical properties of Clinacanthus nutans.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2015 [Functional characterization of recombinant bromelain.](#) In: **ASIAN Congress on Biotechnology 2015**
- 2015 [Isolation of thermotolerant bacteria producing fibrinolytic enzyme.](#) In: **International Conference on Advancement in Science and Technology (iCAST2010): The Science of Traditional Practices in Health and Disease**
- 2015 [Isolation and identification of halophilic bacteria producing halotolerant protease.](#) In: **International Conference on Advancement in Science and Technology (iCAST 2015) - 'Frontiers in Biotechnology'**
- 2015 [Comparison of cell disruption method for E. coli BL21-AI expressing recombinant bromelain.](#) In: **International Conference on Advancement in Science and Technology (iCAST 2015)**
- 2014 [Lipase and amylase extracted from cocoa-pod husk, byproduct from local cocoa farming industry.](#) In: **Conference on Tropical Resources and Sustainable Sciences 2014 (CTReSS 2014)**
- 2014 [Identification of aldolase C, actin related protein 2 homolog, and enolase 1 as potential biomarkers for electrically stunned chickens.](#) In: **International Halal Conference 2014 (INHAC 2014)**
- 2013 [Anticancer potential of agarwood distillate.](#) In: **3rd International Conference on Biotechnology Engineering (ICBioE 2013)**

- 2013 [Pathway analysis of genes affected in MCF-7 breast cancer cells treated with recombinant bromelain.](#) In: **3rd International Conference on Biotechnology Engineering 2013 (ICBioE 2013)**
- 2013 [Agarwood distillate: Safe for oral consumption.](#) In: **3rd International Conference on Biotechnology Engineering (ICBioE 2013)**
- 2013 [GCMS-based global metabolite analysis approach distinguishes CHO-K1 cells cultured in different levels of serum and glutamine.](#) In: **3rd International Conference on Biotechnology Engineering (ICBioE 2013)**
- 2013 [Identification of microbes in inoculants for agarwood \(gaharu\) formation using molecular biological techniques.](#) In: **3rd International Conference on Biotechnology Engineering (ICBioE 2013)**
- 2013 [Effects of glutamine and serum on IGF-I dependent CHO-K1 cell growth in T-flask.](#) In: **3rd International Conference on Biotechnology Engineering 2013 (ICBioE 2013)**
- 2013 [Development and improvement of anti-gout property from aqueous-methanol extract of morinda elliptica using central composite design.](#) In: **International Conference on Biotechnology Engineering (ICBioE 2013)**
- 2013 [Adsorption of cadmium from water by wasted biosolids.](#) In: **International Conference on Green Chemical Engineering & Technology (GCET 2013)**
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