

# AHMED JALAL KHAN CHOWDHURY



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## ACADEMIC QUALIFICATION

- Ph.D in Aquaculture Biotechnology
- Master in Fish Biology
- Bachelor of Art in Fisheries

## TEACHING RESPONSIBILITIES

AQUACULTURE	2008/2009 2009/2010 2010/2011 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017
BIODIVERSITY	2004/2005 2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 2010/2011 2011/2012 2012/2013 2013/2014 2014/2015 2015/2016
BIOTECHNOLOGY, LAW AND ETHICS	2004/2005 2005/2006 2006/2007 2007/2008 2009/2010
ECOLOGICAL AQUACULTURE	2018/2019 2019/2020 2020/2021
ENVIRONMENTAL IMPACTS ASSESSMENT	2015/2016 2016/2017 2018/2019 2019/2020 2020/2021
ENVIRONMENTAL LAWS AND POLICIES	2004/2005 2006/2007
ENVIRONMENTAL MICROBIOLOGY	2005/2006 2006/2007 2008/2009 2009/2010 2011/2012
ENVIRONMENTAL SCIENCE	2014/2015 2016/2017 2017/2018 2018/2019 2019/2020 2020/2021
Ecological Aquaculture	2017/2018
INTRODUCTORY MICROBIOLOGY	2003/2004 2004/2005 2007/2008 2008/2009
INTRODUCTORY TO MICROBIOLOGY	2002/2003
MARINE BIOLOGY	2007/2008 2008/2009 2009/2010 2010/2011
NUTRITION AND FEEDING	2016/2017
PROJECT SEMINAR	2018/2019 2019/2020
RESEARCH METHODOLOGY	2004/2005 2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 2010/2011
WASTE MANAGEMENT	2009/2010

## RESEARCH PROJECTS

### In Progress

<b>2018 - Present</b>	DNA Barcoding and Molecular Phylogenetics of Sharks in Malaysia
<b>2018 - Present</b>	Environmental DNA Metabarcoding of Fishes in Balok River Kuantan, Pahang
<b>2016 - Present</b>	Fisheries Conservation Towards Sustainable Development In Tropical Environment
<b>2016 - Present</b>	Conservation of Malaysian horseshoe crabs-A step for sustainable fishery practice
<b>2015 - Present</b>	Captive Breeding and Induced Fertilization of Malaysian Horseshoe crab (Tachypleus gigas) for Sea Ranching and Future Artificial Sanctuary
<b>2015 - Present</b>	Bacterial-Assisted Composting (BAC) of Food Waste
<b>2013 - Present</b>	Production of Non-Thermally Processed Alternative Ingredients for Halal Food Products
<b>2004 - Present</b>	Functional Food and Nutraceuticals Research Unit (FFNRU)
<b>Unknown - Present</b>	Environmental Determinants Influencing Fish Community Structure and Seasonal Diversity IN TROPICAL ESTUARY, KUALA PAHANG, MALAYSIA
<b>Unknown - Present</b>	INVENTORY ON THE SPECIES COMPOSITION AND EXISTING METAL CONCENTRATION IN KUANTAN RIVER
<b>Unknown - Present</b>	INVENTORY ON THE SPECIES COMPOSITION AND EXISTING METAL CONCENTRATION IN KUANTAN RIVER

### Completed

<b>2016 - 2018</b>	Stereospermum Fimbriatum (Chicha) - Prospects of Antimicrobial Agent for Skin Infection
<b>2016 - 2018</b>	Species Diversity and Seasonal Distribution of Fishes and Water Quality in Tropical River, Pahang, Malaysia
<b>2016 - 2017</b>	Conservation of Malaysian horseshoe crabs-A step for sustainable fishery practice
<b>2016 - 2018</b>	Fisheries Conservation Towards Sustainable Development In Tropical Environment
<b>2016 - 2018</b>	Species Inventory and Genetic Diversity of Fishes in Kuantan River Basin
<b>2015 - 2018</b>	Captive Breeding and Induced Fertilization of Malaysian Horseshoe crab (Tachypleus gigas) for Sea Ranching and Future Artificial Sanctuary
<b>2015 - 2017</b>	Bacterial-Assisted Composting (BAC) of Food Waste
<b>2015 - 2016</b>	The Effect of Monsoon on Fish Larval (Ichthyoplankton Stages) Assemblage Changes in Kuantan River

- 2014 - 2017** Pilot Study on the River Rehabilitation of Sg. Pusu
- 2014 - 2016** DNA Barcoding of Selected Commercial Fishes in Pahang River
- 2014 - 2018** Microbial Diversity of Pekan Peat Swamp Forest Soil and their Functional Potential Through Cultivation and Metagenomic Approach
- 2014 - 2018** Indoor Air Quality in Urban Child Care Institution (Nurseries & Kindergarten): The Characterization of Particulate Matter (PM) and Its Relation to Airborne Enteric Microorganisms
- 2013 - 2016** Screening of Mangrove Actinomycetes and Their Antimicrobial Potentials
- 2013 - 2015** Genetic Variation and DNA Barcoding of Endangered Fishes in Pahang River
- 2013 - 2015** Development of Adsorbent Materials from Selected Local Fruit Waste
- 2013 - 2016** Study on the Contamination of Najs Mutawassitah in Fish and Water of Kuantan River
- 2013 - 2018** Production of Non-Thermally Processed Alternative Ingredients for Halal Food Products
- 2012 - 2014** Growth and Survival of Malaysian Sport Fish *Tor tambroides* Fry by Applying Phototropic Bacteria as Feed Supplement.
- 2012 - 2015** Heavy metal and Antibiotic Resistance of the Bacterial Flora in Sediments of Coastal Water of Pahang, Malaysia
- 2012 - 2016** Modelling of longitudinal changes in bacterial community structure towards physico chemical and environmental factors along the Pahang river
- 2011 - 2014** (RU2011) Isolation, diversity, and antimicrobial screening of actinomycetes isolated from mangrove sediments in Tanjung Lumpur, Pahang
- 2011 - 2012** KVC Book Project 2011- Sustainable Utilization of Malaysian Agrowaste
- 2011 - 2013** (RU2011) Isolation, diversity, and antimicrobial screening of actinomycetes isolated from mangrove sediments in Tanjung Lumpur, Pahang
- 2011 - 2012** Diversity and Distribution of Plankton Communities in Kuantan, Pahang
- 2010 - 2011** Extraction and Characterization of Chitin and Chitosan Contents from Local Squid(s) and Tilapia Fish Scales
- 2010 - 2013** Chemoenzymatic Conversion of w-fatty acids extracted from Malaysian Giant Snakehead and catfish
- 2010 - 2013** Sigma subunit-Dependent adaptation of physiology and metabolic functions in burkholderia for effective bioremediation process
- 2010 - 2012** DNA Barcoding Of Horse Shoe Crab, *Carcinoscopius Rotundicauda* And *Tachypleus Gigas* From Coastal Water Malaysia
- 2010 - -1** Extraction and Characterization of Chitin and Chitosan Contents from Local Squid(s) and Tilapia Fish Scales

- 2009 - 2010** Bioaccumulation of heavy metal in Mangrove Crabs and Mollusks of Penor and Kuantan river, Pahang
- 2009 - 2010** Environmental Impact of Antibiotic Resistance Transposed from Genetically Modified Organism to soil Bacteria
- 2009 - 2010** Studies on Water Quality and Fish Communities in the Kuantan Estuary Pahang Malaysia
- 2008 - 2010**  $\omega$ -fatty Acid Profiles of Mudskippers from Malaysian Mangrove and Intertidal Zones
- 2008 - 2011** Distribution of Heavy Metals and Their Pollution Effects on Fishes, Green Mussels and Sediments of Coastal Water Pahang, Langkawi Malaysia and Gulf of Oman
- 2008 - 2009** The Diversity and Distribution of Fishes in Pahang Estuary
- 2007 - 2010** Geochemical and Sedimentological Characteristics Studies of Pahang Estuary, Malaysia
- 2007 - 2010** Assessment of Heavy Metals concentration in Marine Commercial fishes of Pahang Estuary
- 2007 - 2010** Sediment Accretion and Sediment Characteristics of Pahang Estuarine Mangrove
- 2007 - 2010** Study on Microbial Ecology of the Coastal Water Langkawi
- 2006 - 2012** Studies on Mangrove in Pulau Toba, Langkawi
- 2005 - 2007** Physico-Chemical Characteristics and Sediment Environment of the Coastal Water, Pulau Tuba and its Nearby Islands, Langkawi
- Unknown - 2019** INVENTORY ON THE SPECIES COMPOSITION AND EXISTING METAL CONCENTRATION IN KUANTAN RIVER
- Unknown - 2020** Environmental Determinants Influencing Fish Community Structure and Seasonal Diversity IN TROPICAL ESTUARY, KUALA PAHANG, MALAYSIA

## PUBLICATIONS

### Article

- 2020** [Screening of biodegradation potential for n-alkanes and polycyclic aromatic hydrocarbon among isolates from the north-western tip of Pahang.](#) Desalination and Water Treatment , 191 pp.207-212
- 2020** [Environmental forensic study: tracing of pollution sources using environmetric technique in Balok and Tunggak Rivers near Gebeng industrial area, Kuantan, Pahang, Malaysia.](#) Desalination and Water Treatment , 191 pp.118-125
- 2020** [Screening of biodegradation potential for n-alkanes and polycyclic aromatic hydrocarbon among isolates from the north-western tip of Pahang.](#) Desalination and Water Treatment , 191 pp.207-212

- 2020** [Membrane retention potential of \*Tachypleus gigas\* during early embryogenesis.](#) Desalination and Water Treatment , 187 pp.17-23
- 2020** [Endophytic bacteria of \*Anisophyllea disticha\* \(Raja Berangkat\) from tropical lake environment in Malaysia.](#) Desalination and Water Treatment , 188 pp.282-287
- 2020** [Isolation of heavy metal resistance bacteria from lake sediment of IIUM, Kuantan.](#) Desalination and Water Treatment , 188 pp.431-435
- 2020** [Reproductive seasonality and environmental effects in green turtle \(\*Chelonia mydas\*\) nesting at Penang Island, Malaysia.](#) Journal of the Marine Biological Association of the United Kingdom , 100 (4) pp.645-650
- 2020** [Rare actinomycetes from Kuantan mangrove forest sediment.](#) Journal Clean WAS , 4 (2) pp.64-68
- 2020** [Acute-lethal toxicity test on juvenile \*Oreochromis niloticus\* exposed to Piper betle extract under static exposure.](#) Ecofeminism and Climate Change pp.1-9
- 2019** [Biological activities and extraction technologies of \*Pheonix dactylifera\*: a review..](#) The Natural Products Journal , 9 (1) pp.3-13
- 2019** [Assessment of bacteria and water quality parameters in cage cultured \*Pangasius hypophthalmus\* in Temerloh, Pahang River, Malaysia.](#) Nature, Environment and Pollution Technology (NEPT) , 18 (5 Special Issue) pp.1479-1486
- 2019** [Horseshoe crab bio-ecological data from Balok, East Coast Peninsular Malaysia.](#) Data in Brief , 22 pp.458-463
- 2019** [Evaluation of green solution potentials of unripe banana \(\*musasapientum\*\) peel biomass.](#) Acta Scientifica Malaysia (ASM) , 3 (1) pp.9-16
- 2019** [Building a case for the conservation of Malaysian horseshoe crabs.](#) Fishmail , 27 ((May -December)) pp.15-18
- 2019** [Effect of lime-bone ratio on compressive strength and void fraction of recycled green ecological concrete.](#) Nature Environment and Pollution Technology , 18 (5 (Special Issue)) pp.1579-1583
- 2019** [Research on integrated technology of desulphurization, denitration and waste heat recovery of coke oven flue gas.](#) Nature Environment and Pollution Technology , 18 (5 (Special Issue)) pp.1621-1625
- 2019** [Treatment of Taman Beringin landfill leachate using the column technique.](#) Desalination and Water Treatment , 149 pp.370-387
- 2019** [Sewage monitoring system based on artificial intelligence.](#) Nature Environment and Pollution Technology , 18 (5 (Special Issue)) pp.1601-1607
- 2019** [Study on calculation method of ecological environment flow rate of water conservancy and hydropower project in coal mining area.](#) Nature Environment and Pollution Technology , 18 (5 (Special Issue)) pp.1555-1560
- 2019** [Citizen science frontiers horseshoe crab population regain at their spawning beach in East Peninsular Malaysia.](#) Journal of Environmental Management , 232 pp.1012-1020

- 2019** [Temperature influence on emergence success and swimming speed for In-situ nesting for \*Chelonia mydas\* in Penang Island, Malaysia.](#) Emergence success of In-situ nests , 30 (3) pp.111-128
- 2019** [Effects of shore sedimentation to \*tachypleus gigas\* \(Müller, 1785\) spawning activity from Malaysian waters.](#) Journal of Sustainability Science and Management , 14 (1) pp.41-60
- 2019** [Introduction environment, development and sustainability.](#) Revista Internacional de Contaminacion Ambiental , 35 pp.7-9
- 2019** [Ecology, ecosystem & conservation biology.](#) Journal of Environmental Biology , 40 (3) pp.407-408
- 2019** [Green turtle nesting activity in Penang Island from 2010 to 2016.](#) Journal of Sustainability Science and Management , 14 (5) pp.26-42
- 2018** [Bacterial population study in oil-contaminated and uncontaminated soils.](#) Journal Clean WAS (JCleanWAS) , 2 (2) pp.6-9
- 2018** [Heavy metals and antibiotic resistance bacteria in marine sediment of Pahang coastal water.](#) Journal CleanWAS , 2 (1) pp.20-22
- 2018** [Diversity and community composition of fishes in the Pusu River Gombak, Malaysia.](#) Journal of Coastal Research , Special Issue 82 Fall pp.150-155
- 2018** [Islamic ethics of waste management towards sustainable environmental health.](#) The International Medical Journal Malaysia , 17 (Special Issue 1) pp.193-197
- 2018** [Macrobenthic diversity and community composition in the Pahang Estuary, Malaysia.](#) Journal of Coastal Research , Special Issue 82 Fall pp.206-211
- 2018** [Diversity, antimicrobial capabilities, and biosynthetic potential of mangrove actinomycetes from coastal waters in Pahang, Malaysia.](#) Journal of Coastal Research , Special Issue 82 Fall pp.174-179
- 2018** [Fish scales as a bioindicator of potential marine pollutants and carcinogens in Asian sea bass and red tilapia within the coastal waters of Pahang, Malaysia.](#) Journal of Coastal Research , Special Issue 82 Fall pp.120-125
- 2018** [Time series data intelligent clustering algorithm for landslide displacement prediction.](#) Journal of Intelligent & Fuzzy Systems , 35 (4) pp.4131-4140
- 2018** [The discovery of physical properties of food waste in composting process..](#) International Journal of Engineering & Technology , 7 (2.29) pp.460-468
- 2018** [Urban road traffic flow control under incidental congestion as a function of accident duration.](#) Open Physics , 16 (1) pp.1085-1093
- 2018** [Distribution, abundance, and clutch size of hawksbill turtle nests in Melaka, Malaysia.](#) Malaysian Applied Biology , 47 (3) pp.29-38
- 2018** [Importance of sand particle size and temperature for nesting success of green turtles in Penang Island, Malaysia.](#) Chelonian Conservation and Biology , 17 (1) pp.116-122
- 2018** [The ethical significance of antibiotic resistance towards aquaculture practices.](#) International Medical Journal Malaysia , 17 (Special Issue 2) pp.295-301

- 2018** [Multi-target tracking algorithm in intelligent transportation based on wireless sensor network.](#) Open Physics , 16 (1) pp.1000-1008
- 2018** [Assessing nesting status of green turtles, Chelonia Mydas in Perak, Malaysia.](#) Tropical Life Sciences Research , 29 (1) pp.155-171
- 2018** [Ethical issues on using invertebrates in environmental and biomedical practices – a case study on living fossil horseshoe crab.](#) International Medical Journal Malaysia , 17 (Special Issue 2) pp.281-285
- 2017** [Evaluation of graphical and multivariate statistical methods for classification and evaluation of groundwater in Alathur block, Perambalur District, India.](#) Applied Ecology and Environmental Research , 15 (3) pp.105-116
- 2017** [Splitting the eggs methods: Comparison of egg survivorship between styrofoam and open area nests for Penang Island and turtle conservation.](#) Malaysian Applied Biology , 46 (2) pp.77-86
- 2017** [Splitting the eggs methods: Comparison of egg survivorship between styrofoam and open area nests for Penang Island turtle conservation.](#) Malaysian Applied Biology Journal , 46 (2) pp.77-86
- 2017** [Effect of differential feed on the molting success and survival of horseshoe crab trilobite \( tachypleus gigas \).](#) Malaysian applied biology , 46 (1) pp.21-25
- 2017** [Bio-monitoring selected heavy metal concentration in Nerita sp. collected from Tanjung lumpur mangrove forest..](#) Environment and Ecosystem science , 1 (1) pp.4-7
- 2017** [Study on physicochemical parameters and distribution of phytoplankton in Kuantan estuary, Pahang.](#) Environment and Ecosystem Science , 1 (1) pp.8-12
- 2017** [α-glucosidase inhibitors isolated from Mimosa pudica L..](#) Natural Product Research , 33 (10) pp.1495-1499
- 2017** [Environmental characteristics of clay and claybased minerals.](#) Geology, Ecology, and Landscapes , 1 (3) pp.155-161
- 2017** [PCB biodegradation using bacteria isolated from landfill leachate.](#) Science Heritage Journal , 1 (2) pp.7-10
- 2017** [Between the bioactive extracts of edible mushrooms and pharmacologically important nanoparticles: Need for the investigation of a synergistic combination - A mini review.](#) Asian Journal of Pharmaceutical and Clinical Research , 10 (3) pp.13-24
- 2017** [Evolution of human from primates - A review on religio-scientific discourse.](#) Malayan Nature Journal , 69 pp.357-368
- 2017** [Comparative study on spoilage and pathogenic bacteria in selected commercial marine and freshwater fishes.](#) International Food Research Journal (IFRJ) , 24 (Suppl.) pp.S298-S304
- 2016** [Flooding impact on distribution of pathogenic bacteria in Pahang River.](#) The International Medical Journal of Malaysia , 15 (Supplement Issue) pp.11-11
- 2016** [Review on antibacterial biocomposites of structural laminated veneer lumber.](#) Saudi Journal of Biological Sciences , 23 (1) pp.S142-S147

- 2016** [Can canola meal and soybean meal be used as major dietary protein sources for kuruma shrimp, \*Marsupenaeus japonicus\*?](#) Aquaculture , 452 pp.194-199
- 2016** [Morphological variations of plicofollis species \(Siluriformes: Ariidae\) in peninsular Malaysia: An insight into truss network approach.](#) Sains Malaysiana , 45 (1) pp.1-7
- 2016** [Impact of improper land use changes on flash flood and river system: a case of Sg Pusu.](#) ARPN Journal of Engineering and Applied Sciences , 11 (8) pp.5372-5379
- 2016** [Biosorption of Pb and Cu from aqueous solution using banana peel powder.](#) Desalination and Water Treatment , 57 (1) pp.303-314
- 2016** [Selective isolation and antagonistic activity of actinomycetes from mangrove forest of Pahang, Malaysia.](#) Frontiers in Life Science , Vol. 9 (1) pp.24-31
- 2016** [Biotechnological potential of Kuantan mangrove actinomycete, \*Micromonospora\* K3-13.](#) The International Medical Journal Malaysia , 15 (Supplement Issue) pp.108-108
- 2016** [Universal reliance on LAL/TAL in bacterial endotoxin detection in drugs and parenteral – an ecological and economic perspective.](#) International Medical Journal of Malaysia , 15 (Supplement) pp.36
- 2016** [Persistence of chloramphenicol in the fish flesh patin \(\*Pangasius hypothalamus\*\) and tilapia \(\*Oreochromis niloticus\*\).](#) International Medical Journal of Malaysia , 15 (supplement) pp.110
- 2015** [Synthesis, spectroscopic and chromatographic studies of sunflower oil biodiesel using optimized base catalyzed methanolysis.](#) Saudi Journal of Biological Sciences , 22 (3) pp.332-339
- 2015** [Effect of azo dye on ammonium oxidation process and ammonia-oxidizing bacteria \(AOB\) in soil.](#) RSC Advances , 5 (44) pp.34812-34820
- 2015** [Pure cultivation and morphological studies of four chaetoceros taxa from the Coastal Waters of Pahang, Malaysia.](#) Sains Malaysiana , 44 (7) pp.947-955
- 2015** [Growth Profile and Fatty Acid Accumulation of Four Chaetoceros Taxa Isolated from Coastal Water of Pahang, Malaysia.](#) Sains Malaysiana , 44 (8) pp.1077-1084
- 2015** [Selective isolation of Actinomycetes from mangrove sediment of Tanjung Lumpur, Kuantan, Malaysia.](#) Malaysian Journal of Microbiology , 11 (2) pp.144-155
- 2015** [Spatial distribution trend of plankton in Sungai Pulai Estuary, the straits of Johor, Malaysia.](#) Sains Malaysiana , 44 (9) pp.1257-1262
- 2015** [DNA barcoding and genetic variation in caged pangasiids in Pahang River Basin.](#) Jurnal Teknologi , 77 (25) pp.31-36
- 2015** [Diversity and antimicrobial activity of mangrove soil actinomycetes isolated from Tanjung Lumpur, Kuantan.](#) Jurnal Teknologi , 77 (25) pp.37-43
- 2015** [Food partitioning among fishes in Pahang River-estuary, Malaysia.](#) Jurnal Teknologi , 77 (25) pp.63-69
- 2015** [Antibiotic resistant bacteria from sediment of coastal water of Pahang, Malaysia.](#) Jurnal Teknologi , 77 (24) pp.65-70



- 2015** [Spatial and temporal distribution of bacterial communities and heavy metals \(CR, CD AND PB\) composition in sediments along Pahang river, Malaysia.](#) Jurnal Teknologi , 77 (24) pp.71-76
- 2015** [Impact of chitosan composites and chitosan nanoparticle composites on various drug delivery systems: a review.](#) Journal of Food and Drug Analysis , 23 (4) pp.619-629
- 2014** [Water Quality and Plankton Composition of Amblypharyngodon mola Monoculture Fish Pond in Bangladesh.](#) International Journal of Emerging Trends in Science and Technology , 1 (7) pp.1005-1014
- 2014** [Studies on bactericidal efficacy of pumpkin \(Cucurbita moschata Duchesne\) peel.](#) Journal of Coastal Life Medicine , 2 (2) pp.146-153
- 2014** [Antimicrobial activity of bBanana \(Musa paradisiaca L.\) peels against food borne pathogenic microbes.](#) Journal of Pure and Applied Microbiology , 8 (5) pp.3627-3639
- 2014** [Population parameters of Rastrelliger kanagurta \(Cuvier, 1816\) in the Marudu Bay, Sabah, Malaysia.](#) Iranian Journal of Fisheries Sciences , 13 (2) pp.262-275
- 2014** [Carotenoid contents in anoxygenic phototrophic purple bacteria, Marichromatium Sp. and Rhodopseudomonas Sp. of tropical environment, Malaysia .](#) Oriental Journal of Chemistry , 30 (2) pp.607-613
- 2014** [Particle formation and micronization using non-conventional techniques- review.](#) Chemical Engineering and Processing: Process Intensification , 86 (2014) pp.47-52
- 2014** [Antimicrobial activity of banana \(Musa paradisiaca L.\) peels against food borne pathogenic microbes.](#) Journal of Pure and Applied Microbiology , 8 (5) pp.3627-3639
- 2013** [Cultivable marine bacterial isolates from a sponge Hyattella cribriformis.](#) Journal of Biological Sciences , 13 (1) pp.26-32
- 2013** [Distribution and abundance of gelatinous zooplankton along Tamil Nadu coastal waters.](#) Journal of Biological Sciences , 13 (1) pp.18-25
- 2013** [Macrobenthic diversity in horseshoe crab nesting ground-Balok Station, Pahang, Malaysia.](#) Oriental Journal of Chemistry , 29 (4) pp.1311-1318
- 2013** [Bioaccumulation of selected metals in fresh water haruan fish \(channa striatus\) collected from Pahang River Basin, Malaysia.](#) Oriental Journal of Chemistry , 29 (4) pp.1553-1558
- 2013** [The potential role of Red Tilapia \(Oreochromis niloticus\) scales: allergic reaction test in mice.](#) Journal of Applied Pharmaceutical Science , 3 (10) pp.45-50
- 2013** [Genetic diversity of horseshoe crab \(Tachypleus gigas\) in Malaysia revealed using microsatellite markers.](#) Asian Journal of Animal and Veterinary Advances , 8 (1) pp.63-72
- 2013** [Growth and total carotenoid, chlorophyll a and chlorophyll b of tropical microalgae \(Isochrysis sp.\) in laboratory cultured conditions.](#) Journal of Biological Sciences , 13 (1) pp.10-17

- 2013** [Limnological parameters affecting monthly abundance of Chironomid larvae in a fish pond and their role in the diet of catfish, \*Clarias batrachus\*.](#) Journal of Biological Sciences , 13 (1) pp.1-9
- 2013** [Method development and validation of nitrofurans metabolites in shrimp by liquid chromatographic mass spectrometric system.](#) Journal of Biological Sciences , 13 (1) pp.33-37
- 2012** [Isolation and screening of lactic acid bacteria, \*Lactococcus lactis\* from \*Clarias gariepinus\* \(African catfish\) with potential use as probiotic in aquaculture.](#) African Journal of Biotechnology , 11 (29) pp.7494-7499
- 2012** [TAL - a source of bacterial endotoxin detector in liquid biological samples.](#) International Food Research Journal , 19 (2) pp.423-425
- 2012** [Massive mortality associated with \*Streptococcus agalactiae\* Infection in Cage-cultured Red Hybrid Tilapia \*Oreochromis niloticus\* in Como River, Kenyir Lake, Malaysia.](#) Journal of Biological Sciences , 12 (8) pp.438-442
- 2012** [Bioaccumulation of heavy metals \(Cd, Pb, Cu and Zn\) in \*Scylla serrata\* \(Forsskal 1775\) collected from Sungai Penor, Pahang, Malaysia.](#) Pertanika Journal of Tropical Agricultural Science , 35 (1) pp.183-190
- 2012** [Sediment profiling of the nesting grounds of horseshoe crabs at East Peninsular Malaysia.](#) International Journal of Biology , 4 (2) pp.159-165
- 2012** [Spawning and nesting behaviour of \*Tachypleus gigas\* along the East coast of Peninsular Malaysia.](#) International Journal of Biology , 4 (2) pp.102-111
- 2012** [Feeding ecology and food preferences of \*Carcinoscorpius rotundicauda\* collected from the Pahang nesting grounds.](#) Sains Malaysiana , 41 (7) pp.855-861
- 2012** [What is the best proportion of fish meal and soybean meal for better growth and survival of \*Macrobrachium rosenbergii\* post Larvae? .](#) Asian Journal of Animal Sciences , 6 (4) pp. 203-208
- 2012** [Studies on water quality and pathogenic bacteria in coastal water Langkawi, Malaysia.](#) Journal of Environmental Biology , 33 (4) pp.831-835
- 2012** [The distribution of selected metals in the surface sediment of Langkawi Coast, Malaysia.](#) Oriental Journal of Chemistry , 28 (2) pp.725-732
- 2012** [Diversity and distribution of fishes in tropical estuary Kuantan, Pahang, Malaysia .](#) Pakistan Journal of Biological Sciences , 15 (12) pp.576-582
- 2011** [Distribution and diversity of corals on artificial reefs at Pasir Akar and Teluk Kalong, Redang Island, Malaysia.](#) Journal of Applied Sciences , 11 (2) pp.379-383
- 2011** [Perception of Halalan and Toyyeban for fish and fisheries products.](#) Halal Pages 2011/2012 pp.30-34
- 2011** [Effect of salinity on the egg hatching and early larvae of horseshoe crab \*Tachypleus gigas\* \(muller, 1785\) in laboratory culture.](#) Journal of Applied Sciences , 11 (14) pp.2620-2626
- 2011** [Efficiency of Universal Barcode Gene \(Coxi\) on morphologically cryptic mugilidae fishes delineation.](#) Trends in Applied Sciences Research , 6 (9) pp.1028-1036

- 2011** [Bioaccumulation of selected metals in the blood cockle \(\*Anadara granosa\*\) from Langkawi Island, Malaysia.](#) *Oriental Journal of Chemistry* , 27 (3) pp.979-984
- 2011** [Spatial variation and community composition of phytoplankton along the Pahang estuary, Malaysia.](#) *Asian Journal of Biological Sciences* , 4 (5) pp.468-476
- 2011** [Molecular phylogeny of horseshoe crab.](#) *Asian Journal of Biotechnology* , 3 (3) pp.302-309
- 2011** [Effects of blood extraction on the mortality of Malaysian horseshoe crabs \(\*Tachypleus gigas\*\).](#) *Marine and Freshwater Behaviour and Physiology* , 44 (5) pp.321-327
- 2011** [Bioaccumulation of some metals by Green mussel \*Perna viridis\* \(Linnaeus 1758\) from Pekan, Pahang, Malaysia.](#) *International Journal of Biological Chemistry* , 5 (1) pp.54-60
- 2011** [Spatial concentrations of Lead and Copper in bottom sediments of Langkawi coastal area, Malaysia.](#) *Research Journal of Environmental Sciences* , 5 (2) pp.179-186
- 2011** [Artificial seagrass: a habitat for marine fishes.](#) *Journal of Fisheries and Aquatic Science* , 6 (1) pp.85-92
- 2011** [Hydrology of the horseshoe crab nesting grounds at Pahang Coast, Malaysia.](#) *Oriental Journal of Chemistry* , 27 (4) pp.1475-1483
- 2011** [Removal of nitrate and phosphate from municipal wastewater sludge by \*Chlorella Vulgaris\*, \*Spirulina Platensis\* and \*Scenedesmus Quadricauda\*.](#) *IJUM Engineering Journal* , 12 (4) pp.125-132
- 2011** [Concentrations of lead copper and zinc in the bottom sediments of Tuba island waters of Langkawi, Malaysia.](#) *Oriental Journal of Chemistry* , 27 (2) pp.505-510
- 2011** [Heavy metal accumulation in commercially important fishes of south west Malaysian coast .](#) *Research Journal of Environmental Sciences* , 5 (6) pp.595-602
- 2011** [Heavy metal concentration in the surface sediment of Tanjung Lumpur mangrove forest, Kuantan, Pahang, Malaysia.](#) *Sains Malaysiana* , 40 (2) pp.89-92
- 2010** [Spatial distribution of organic carbon contents of Langkawi island coastal waters, Malaysia.](#) *Oriental Journal of Chemistry* , 26 (3) pp.851 -855
- 2010** [DNA barcoding of \*Stolephorus indicus\*, \*Stolephorus commersonii\* and \*Terapon jarbua\* of Parangipettai Coastal Waters.](#) *Biotechnology* , 9 (3) pp.373-377
- 2010** [DNA barcoding of \*Lates calcarifer\* \(Bloch, 1970\).](#) *Research Journal of Biological Sciences* , 5 (6) pp.414-419
- 2010** [Mechanism in the clot formation of horseshoe crab blood during bacterial endotoxin invasion.](#) *Journal of Applied Sciences* , 10 (17) pp.1930-1936
- 2010** [Bacterial communities in Kuantan estuary of Pahang, Malaysia.](#) *Journal of Applied Sciences* , 10 (8) pp.652-657
- 2010** [Determination of some heavy metal concentrations in razor clam \(\*Solen brevis\*\) from Tanjung Lumpur Coastal waters, Pahang, Malaysia.](#) *Pakistan Journal of Biological Sciences* , 13 (24) pp.1208-1213

- 2010** [Distribution of Chromium, Manganese and Cobalt in the Bottom Sediment of Pahang River-Estuary, Pahang, Malaysia.](#) Journal of Applied Sciences , 10 (23) pp.3122-3126
- 2010** [Accumulation of metals in the gills of tilapia fingerlings \(Oreochromis niloticus\) from in vitro toxicology study.](#) Journal of Fisheries and Aquatic Science , 5 (6) pp.503-509
- 2010** [Total phenolic content and primary antioxidant activity of methanolic and ethanolic extracts of aromatic plants' leaves.](#) International Food Research Journal , 17 pp.1077-1084
- 2010** [Antibiotic resistance microbes in tropical mangrove sediments, East Coast Peninsular, Malaysia.](#) African Journal of Microbiology Research , 4 (8) pp.640-645
- 2010** [The temporal variation of organic carbon during the pre-monsoon and post-monsoon seasons in Pahang river estuary, Pahang, Malaysia.](#) Oriental Journal of Chemistry , 26 (4) pp.1309-1313
- 2009** [Optimization of decolorization of methylene blue by lignin peroxidase enzyme produced from sewage sludge with Phanerochaete chrysosporium.](#) Journal of Hazardous Materials , 162 (2-3) pp.708-715
- 2009** [Optimization of lignin peroxidase production and stability by Phanerochaete chrysosporium using sewage-treatment-plant sludge as substrate in a stirred-tank bioreactor.](#) Journal of Industrial Microbiology & Biotechnology , 36 (5) pp.757-764
- 2009** [Bacterial pollution in Molluscs Arch Clam, Orbicularia orbiculata and Blood Cockle, Anadara granosa of Pahang estuary, Malaysia.](#) Journal of Biological Sciences , 9 (8) pp.841-850
- 2009** [Studies on physico-chemical characteristics and sediment environment along the coastal waters Pulau Tuba, Langkawi Malaysia.](#) Aquatic Ecosystem Health and Management (AEHMS) , 12 (4) pp.350-357
- 2009** [Storage stability of fish oil from Langkawi Island, Malaysia.](#) Food Science and Technology Research , 15 (6) pp.591-598
- 2009** [Geochemical proxy of sediment cores from Terengganu coastal water, Malaysia.](#) Oriental Journal of Chemistry , 25 (1) pp.9-14
- 2009** [Accumulation of lead and copper in Rhizophora apiculata from Setiu mangrove forest, Terengganu, Malaysia.](#) Journal of Environmental Biology , 30 (5 Supp) pp.821-824
- 2009** [Variability of organic carbon content in bottom sediment of Pahang River Estuary, Pahang, Malaysia.](#) Journal of Applied Sciences , 9 (24) pp.4253-4257

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

- 2019** [The implementation of Asean GAqP in overcoming Al-Jallalah related issues; with the focus on shariah-compliant and sustainability elements.](#) In: **International Symposium on Research in Innovation and Sustainability (Isoris) 2019**
- 2017** [Bacteria communities in cage cultured Pangasius hypophthalmus in Pahang river, Malaysia.](#) In: **10th Symposium on Diseases in Asian Aquaculture (DAA10)**

- 2016 [Antibacterial property of crude extract from stem-bark and leaves of \*Rhizophora apiculata\* against selected bacterial fish pathogens.](#) In: **Medical Research Symposium & Pacific Partnership in conjunction with Kuantan Research Day 2016**
- 2016 [Common diseases of \*pangasius hypophthalmus\* farmed in Temerloh, Pahang, Malaysia.](#) In: **2nd International Conference on Oceanography and Sustainable Marine Production (ICOSMaP 2016)**
- 2016 [Heavy metals resistance bacteria in marine sediment of Pahang coastal water.](#) In: **2nd International Conference on Oceanography and Sustainable Marine Production (ICOSMaP 2016)**
- 2016 [Antimicrobial activities of actinomycetes isolated from Malaysian tropical mangrove forest of Kuantan, Pahang.](#) In: **5th International Conference on Environment, Energy and Biotechnology 2016**
- 2016 [Quantification of pollution loads for the rehabilitation of Pusu River.](#) In: **International Conference on Engineering Technology (ICET 2016)**
- 2016 [Effect of sand mining on water quality index of Sg.Pusu.](#) In: **4th International Conference on Innovations in Chemical, Agricultural and Environmental Engineering (ICICAE'2016)**
- 2016 [Effect of recent flood on ichthyoplankton and juvenile fish assemblage changes in Kuantan river revealed through DNA barcoding.](#) In: **4th International Conference on Biotechnology Engineering 2016 (ICBioE 2016)**
- 2015 [Morphological discriminations of arius species \(siluriformes: ariidae\) in Peninsular Malaysia using Truss network approach.](#) In: **International Fisheries Symposium (IFS 2015)**
- 2015 [Morphological discrimination between wild and captive populations of climbing perch, \*Anabas testudineus\* using a truss network.](#) In: **International Fisheries Symposium (IFS 2015)**
- 2015 [Diversity and antimicrobial activities of mangrove actinomycetes isolated from Tanjung Lumpur, Kuantan.](#) In: **5th International Conference of Advancement in Science And Technology (iCAST 2015)**
- 2015 [Antibiotic resistant bacteria from sediment of coastal water of Pahang, Malaysia.](#) In: **International Conference on Advancement in Science and Technology (iCAST 2015)**
- 2015 [DNA barcoding of selected endangered and commercial fishes of Pahang river.](#) In: **International Conference of Clean Water, Air & Soil (CleanWAS 2015)**
- 2015 [DNA barcoding of selected endangered species of Pahang river.](#) In: **International Fisheries Symposium (IFS 2015)**
- 2015 [DNA barcoding of pomfret in Peninsular Malaysia.](#) In: **International Fisheries Symposium (IFS 2015)**
- 2015 [Smart system for real time optimization of solid waste management in Malaysia.](#) In: **2015 International Conference of Clean Water, Air & Soil**

- 2014 [Selective isolation of actinomycetes from mangrove forest of Pahang, Malaysia.](#) In: **International Conference on Agriculture, Biology and Environmental Sciences (ICABES-14)**
- 2014 [Isolation and identification of microsatellite loci from climbing perch, \*Anabas testudineus\*.](#) In: **Asian Fish Biodiversity Conference 2014 (AFBC 2014)**
- 2014 [A new hope to control foodborne diseases and pollution: potential antimicrobial activity of banana \(\*Musa paradisiaca\*\) peels against food borne pathogenic microbes.](#) In: **International Research, Invention and Innovation Exhibition 2014 (IRIIE2014)**
- 2014 [Antibiotic resistant bacteria from sediment of coastal water of Pahang Malaysia.](#) In: **International Conference on Agriculture, Biology and Environmental Sciences (ICABES-14)**
- 2014 [Potential antimicrobial activity of banana \(\*Musa paradisiaca\*\) peels against food borne pathogenic microbes.](#) In: **International Conference on Natural Products 2014**
- 2014 [Review on the status and future prospects of heavy metal pollution in Malaysian coastal waters.](#) In: **Estuaries and Coastal protected areas**
- 2014 [DNA barcoding of Arius species \(Siluriformes: Ariidae\) found in Peninsular Malaysia waters, using mitochondrial Cytochrome oxidase subunit I gene..](#) In: **Asian Fish Biodiversity Conference 2014 (AFBC 2014)**
- 2013 [Selective isolation of rare actinomycetes from mangrove sediment of Tanjung Lumpur, Kuantan.](#) In: **International Congress of the Malaysian Society for Microbiology 2013**
- 2013 [Biofuel potential within chaetoceros species \(bacillartophyceae\) from coastal water of Pahang, Malaysia.](#) In: **International Conference on Oceanography and Sustainable Marine Production: A Challenge of Managing Marine Resources in a Changing Climate**
- 2012 [Seeds and peels - from by-products to potentially commercial antioxidants towards industrial biotechnology.](#) In: **Malaysia Technology Expo 2012 (MTE 2012)**
- 2012 [Synthesis of fatty acid from locally isolated marine algae, \*Chaetocerosaffinis\*.](#) In: **Malaysian Science and technology Congress (MSTC 2012)**
- 2011 [Endo sensor bacterial endotoxin detector in liquid biological samples.](#) In: **2nd International Conference on Biotechnology Engineering (ICBioE 2011)**
- 2011 [Study on toxic chemicals in Kuantan \(Pahang\) River during pre and post monsoon season.](#) In: **The 24th Regional Symposium of Malaysia Analytical Sciences**
- 2011 [Minimizing impacts of climate change on coastal aquatic resources through the integrated mariculture.](#) In: **National Symposium on Climate Change Adaptation (CCA)**
- 2011 [Macrobenthic community at nesting grounds of horseshoe crabs \(\*Tachypleus gigas\* and \*Carcinoscorpius rotundicauda\*\) at Pahang Coast, Malaysia.](#) In: **10th International Annual Symposium (UMTAS 2011)**

- 2011 [Fruit seeds and peels – from byproducts to potentially commercial antioxidants.](#) In: **IIUM Research, Invention and Innovation Exhibition 2011**
- 2010 [Bioprospecting and economical source of chitin and chitosan: the sword shrimp udang minyak \(\*Parapenaeopsis hardwickii\*\) Malaysia.](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [Spirulina - a potential feed additive for the development of proteolytic enzymes and growth of the tropical sport fish Malaysian Mahseer \(\*KELAH, Tor tambroides\*\) FRY.](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [Antibacterial activities of \*Musa Acuminata\* L. peel.](#) In: **3rd International Conference on Advancement in Science and Technology (iCAST) 2010**
- 2010 [Human pathogenic bacteria in sea fish - siakap \(\*SEA PERCH, lates calcarifer\*\) and ikan merah \(\*RED SNAPPER, Lutjanus sanguineus\*\).](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [Determination of concentration of Zn, Cu, Cd and Pb in \*Scylla serrata\* \(Forsskal 1775\) from Sungai Penor, Kuantan .](#) In: **9th International Annual Symposium on Sustainability and Management (UMTAS)**
- 2010 [Bioaccumulation of Heavy Metals by Green mussel \*Perna viridis\* \(Linnaeus ,1758\) from Pekan, Pahang, Malaysia.](#) In: **3rd International Conference on Southeast Asian Natural Resources and Environmental Management (SANREM 2010)**
- 2010 [Molecular phylogeny of horseshoe crab using mitochondrial \*Cox1\* gene as a benchmark sequence.](#) In: **4th International Conference on Postgraduate Education (ICPE 4).**
- 2010 [Human pathogenic bacteria in marine fishes:\(sea perch, \*lates calcarifer\*\) and \(red snapper, \*lutjanus sanguineus\*\) .](#) In: **International Conference on Aquatic Microbiology, (Status, Challenges, and Oppurtunities) - AMSCO 2010**
- 2010 [Antioxidant study of methanolic and ethanolic extracts of Malaysian aromatic plants' leaves: towards industrial biotechnology.](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [Isolation and screening of lactic acid bacteria \(LAB\) from non-broiler chicken \(\*Gallus gallus\*\) for potential probiotic.](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [Isolation and characterization of lactic acid bacteria from \*clarias macrocephalus\* \(African Catfish\) for potential probiotic purposes.](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2009 [Impact of coastal development on mangrove distribution in Kuantan, Pahang.](#) In: **JSPS-VCC Core University Program International Seminar on Wetland and Sustainability**
- 2009 [Accumulation of selected heavy metals \(Cu, Pb, and Zn\) in muscle, stomach and gill of some marine commercial fishes of Pahang coastal water, Malaysia.](#) In: **International Conference on Marine Ecosystem 2009 (INCOMES 2009)**
- 2008 [Distribution and diversity of macroinvertebrates in Tasek Bera, Pahang.](#) In: **19th Intersarsity Biochemistry Seminar**

- 2008 [Distribution and genetic diversity of frog species in Tasek Bera, Pahang.](#) In: **19th Intervarsity Biochemistry Seminar**
- 2006 [Liquid State Bioconversion of Palm Oil Mill Effluent for Cellulase Production: Statistical Optimization of Process Conditions.](#) In: **1st International Conference on Natural Resources Engineering & Technology**
- 2006 [Statistical optimization of aeration and agitation for sewage treatment plant sludge treatment in stirred tank bioreactor.](#) In: **International Conference on Environment 2006**
- 2005 [Optimum process conditions for effective bioconversion of sewage treatment plant sludge by pure bacterial culture.](#) In: **MTERM International Conference**

#### Book

- 2018 [Coastal ecology of Pahang water \(South China Sea\).](#) IIUM Press . ISBN 978-967-418-704-0
- 2017 [Frontiers in science and technology.](#) IIUM Press, International Islamic University Malaysia . ISBN 978-967-418-446-9
- 2011 [The living fossil \(horseshoe crab\) .](#) IIUM Press . ISBN 9789674180423
- 2011 [Sustainable utilization of Malaysian agrowaste.](#) IIUM Press . ISBN 9789674180089

#### Book Section

- 2020 [DNA barcoding of ichthyoplankton and juvenile fishes of a tropical river in Malaysia.](#) In: **DNA barcoding and molecular phylogeny** Springer . ISBN 978-3-030-50074-0 , pp.237-251
- 2016 [Revised phylogeny of extant xiphosurans \(Horseshoe Crabs\).](#) In: **DNA Barcoding in Marine Perspectives: Assessment and Conservation of Biodiversity** Springer International Publishing . ISBN 978-3-319-41838-4 , pp.113-130
- 2016 [Revised phylogeny of extant xiphosurans \(Horseshoe Crabs\).](#) In: **DNA Barcoding in Marine Perspectives: Assessment and Conservation of Biodiversity** Springer International Publishing . ISBN 978-3-319-41838-4 , pp.113-130
- 2012 [Emergence of antibiotic resistant bacteria from coastal environment - a review.](#) In: **Antibiotic resistance bacteria: a continuous challenge in the new millennium** InTech . ISBN 9789535104728 , pp.143-158
- 2011 [Fish diseases in small indigenous freshwater fishes of Bangladesh.](#) In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.263-275
- 2011 [Environmental impact on the coastal aquaculture in Bangladesh: a review.](#) In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.276-294
- 2011 [Site selection and nesting behaviour of horseshoe crabs with special reference to \*Limulus polyphemus\*.](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.19-25
- 2011 [Hydrology of horseshoe crab nesting ground at Pahang coast-Part 1 .](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.35-45



- 2011 [Hydrology of horseshoe crab nesting ground at Pahang coast-Part 2](#). In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.47-55
- 2011 [Macrobenthic diversity at the horseshoe crab nesting ground, Balok station, Pahang, Malaysia - Part 1](#). In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.69-82
- 2011 [Feeding ecology of Mangrove horseshoe crab \*Carcinoscorpius rotundicauda\*](#) . In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.213-223
- 2011 [Emerging interest on DNA barcoding technology and its application for high-tech biodiversity studies using COI gene as a reference sequence](#) . In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.225-235
- 2011 [Macrobenthic diversity at the horseshoe crab nesting ground, Balok station, Pahang, Malaysia-Part 2](#) . In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.83-94
- 2011 [Bioethics and biotechnology: A holistic approach in Islamic perspectives](#) . In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.1-15
- 2011 [Can DNA barcode accurately delineate living fossil \(Horseshoe crab\)and its different developmental stages?](#). In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.237-249
- 2011 [Macrobenthic diversity at the horsehoe crab nesting ground, Pekan station, Pahang, Malaysia - Part 2](#). In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.109-125
- 2011 [Revision on the molecular phylogeny of horseshoe crabs - Part 1](#) . In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.251-266
- 2011 [In-vitro study on the effect of salinity on the hatching success of Malaysian Horseshoe crab eggs](#). In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.137-146
- 2011 [Revision on the molecular phylogeny of horseshoe crabs - Part 2](#). In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.267-274
- 2011 [Effects of salinity on the early growth of \*Tachypleus gigas\* larvae - an in vitro study](#). In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.147-154
- 2011 [Genetic diversity of \*tachypleus gigas\* population from West coast of Peninsular Malaysia](#) . In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.275-285
- 2011 [Sediment characteristics of horseshoe crabs nesting ground at Balok station, Pahang, Malaysia](#). In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.155-164
- 2011 [Does continental drift influence in the genetic variability among the horseshoe crab population?](#) . In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.287-296

- 2011 [Sediment profiling of the estuarine nesting ground of horseshoe crabs at East peninsular Malaysia.](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.165-174
- 2011 [Evolution of horseshoe crabs – paleontological and Molecular viewpoint.](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.297-306
- 2011 [Metal concentration in horseshoe crab nesting ground along Pahang coast, Malaysia .](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.193-202
- 2011 [Factors involving in the clot formation of horseshoe crab blood .](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.307-316
- 2011 [Methods for bacterial endotoxin quantification in reference to horseshoe crab blood studies .](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.317-324
- 2011 [Global distribution and taxonomy of extant horseshoe crabs.](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 9789674180423 , pp.1-9
- 2011 [Endo sensor \(TAL\) production from Malaysian Horseshoe crab blood .](#) In: **The living fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.325-332
- 2011 [Molecular approach of macroinvertebrates in tropical wetland, Lake Bera, Malaysia: Towards the assessment of ecosystem health .](#) In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.113-125
- 2011 [Characterization of Tachypleus Amebocyte Lysate \(TAL\).](#) In: **The Living Fossil (Horseshoe crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.333-342
- 2011 [Tachypleus gigas mortality due biomedical bleeding process.](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.351-358
- 2011 [Biotechnology potential tropical mangrove plant with special emphasis on Avicennia alba in Tanjung Lumpur, Pahang Malaysia .](#) In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.154-167
- 2011 [Conservation measures on horseshoe crab population – a global view .](#) In: **The Living Fossil (Horseshoe Crab)** IIUM Press . ISBN 978-967-418-042-3 , pp.359-367
- 2011 [Bioadsorption of heavy metals from synthetic waste water by tropical rambutan seed .](#) In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.208-222
- 2011 [Future prospects of marine fish farming in Indonesia.](#) In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 9789674181970 , pp.33-40
- 2011 [Chitin and chitosan from fresh water fish tilapia \(Oreochromis niloticus\) scale .](#) In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.223-235

- 2011 [Chitin and chitosan from potential shrimps and crabs of Malaysia](#) . In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.236-243
- 2011 [Extraction of chitin and chitosan from Malaysian cephalopods "Sotong mengaban" \(Sepioteuthis lessoniana\) and "Sotong jarum" \(Loligo vulgaris\)](#) . In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.244-257
- 2011 [Fruit kernels, peels and seeds - from by-products to commercial antioxidants](#). In: **Sustainable utilization of Malaysian agrowaste** IIUM Press . ISBN 9789674180089 , pp.1-20
- 2011 [Agrowaste towards sustainable by-products: Malaysian perspectives](#). In: **Sustainable utilization of Malaysian agrowaste** IIUM Press . ISBN 9789674180089 , pp.21-60
- 2011 [Antibacterial activities of green and ripens banana peel \(Musa, AA cv. Sucrier\) in Malaysia](#) . In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.284-297
- 2011 [Agglutinin and antibacterial activities in oyster, Chama pacifica plasma](#) . In: **Biotechnologies towards sustainable development in Malaysia** IIUM Press . ISBN 9789674182007 , pp.298-304
- 2011 [Brazil: a future leader of the aquaculture sector](#). In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.129-133
- 2011 [Aquaculture in Spain: a special emphasis on shellfish aquaculture](#). In: **Aquaculture and the environment: present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.141-145
- 2011 [Culture of Macrobrachium rosenbergii using soy bean meal in hatchery reared conditions](#) . In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.146-153
- 2011 [Status of Hilsa \(Tenualosa ilisha\) fishery in Bangladesh](#). In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.154-177
- 2011 [Community based aquaculture in Bangladesh: Impacts of seasonal floodplain aquaculture on the livelihood of beneficiaries \(dummy\)](#). In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.178-204
- 2011 [Phytoplankton communities in aquaculture potential Penor river Pahang Malaysia](#). In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.225-238
- 2011 [Food safety in shrimp aquaculture industries of Bangladesh: towards microbiology and biochemical approach](#) . In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.238-249
- 2011 [Microbial communities and water quality of aquaculture potential Penor River, Pahang, Malaysia](#) . In: **Aquaculture and the environment: Present status and future challenges** IIUM Press . ISBN 978-967-418-197-0 , pp.250-262

- 2009** [Studies of Physio-chemical characteristics and sediment environment along the coastal waters Pulau Tuba, Langkawi.](#) In: **Proceedings of the Seminar on Research Findings 2008** IIUM Press . ISBN 9789833855780 , pp.463-473
- 2006** [Biodiversity and marine biotechnology: a new era for the development of biotechnology industry.](#) In: **Management and status of resources in protected areas of Peninsular Malaysia, series 1** Department of Wildlife and National Parks Peninsular Malaysia . ISBN 9834301006 , pp.67-74