

ZALEHA BINTI KASSIM



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

ACADEMIC QUALIFICATION

- Aquatic Biology
- Bachelor of Science
- Diploma Sains dengan Pendidikan

TEACHING RESPONSIBILITIES

BIOLOGICAL OCEANOGRAPHY	2015/2016 2016/2017 2017/2018 2018/2019 2019/2020
ENVIRONMENTAL IMPACTS ASSESSMENT	2015/2016 2016/2017 2017/2018 2018/2019 2019/2020
Fisheries Legislation and Regulation	2019/2020
MARINE BIODIVERSITY AND CONSERVATION	2019/2020
OCEAN LAW AND POLICY	2014/2015 2015/2016 2016/2017 2017/2018 2018/2019 2019/2020
RESEARCH METHODOLOGY	2016/2017
SUSTAINABLE DEVELOPMENT: ISSUES, POLICIES AND PRACTICES	2020/2021

RESEARCH PROJECTS

In Progress

- 2020 - Present** The Development of a Smart Aquafarming System for Fish and Vegetables
- 2019 - Present** Assessing the spatial distribution of shallow-water coral lifeform and coral bleaching using consumer grade drone in relation to global warming.
- 2019 - Present** Hydrodynamic Modelling of CheroK Paloh estuarine-beach waters with respect to suspended sediment transport
- 2019 - Present** ECDYSIS MECHANISM AND BEHAVIOUR IN THE YOUNG STAGES OF ASIAN HORSESHOE CRAB (*Tachypleus gigas* and *Carcinoscopius rotundicauda*)
- 2019 - Present** Prototype for Smart Green Composting Machine (SMART COMP)

2019 - Present	Fish Culture for Sustainable Livelihood of Women, Orphans and the Needy
2018 - Present	Empowerment of fisherman-communities in Segari, Perak through participation in mangrove conservation and reforestation initiatives
2018 - Present	PROTOTYPE DEVELOPMENT OF MICROALGAE PASTE; F-ALGAE, FOR AQUACULTURE INDUSTRY
2018 - Present	Pembentukan Dua Pelan Pengurusan (a) Pulau Babi Besar dan (b) Gugusan Kepulauan Lima dan Mertang, Johor
2018 - Present	Inventory of Aquatic Invertebrates from Southwest of Tioman Island
2016 - Present	Bacteria Identification From Food Waste Composting
2015 - Present	Captive Breeding and Induced Fertilization of Malaysian Horseshoe crab (Tachypleus gigas) for Sea Ranching and Future Artificial Sanctuary
Unknown - Present	SMART ORGANIC BIO COMPOST (SOB) FOR SUSTAINABLE WASTE MANAGEMENT PRACTICE OF PERBADANAN KEMAJUAN PERTANIAN NEGERI PAHANG (PKPP)
Completed	
2018 - 2019	Pembentukan Dua Pelan Pengurusan (a) Pulau Babi Besar dan (b) Gugusan Kepulauan Lima dan Mertang, Johor
2018 - 2020	Empowerment of fisherman-communities in Segari, Perak through participation in mangrove conservation and reforestation initiatives
2018 - 2020	Inventory of Aquatic Invertebrates from Southwest of Tioman Island
2017 - 2018	Enhancement of Sustainable Eco-Tourism Programme Through Community Participation in Mangrove Forest Conservation Activities in Kong Kong and Medan Strait Johor
2017 - 2018	Prey-Predator Interaction of Nektons and Planktonic Organisms in the Coastal Wetland of Setiu
2017 - 2018	Coral Bleaching Monitoring using Drone Aerial Photo in Selected Areas in Tioman Islands, Pahang
2016 - 2018	Bacteria Identification From Food Waste Composting
2016 - 2017	Enhancement of Pond Bottom Soil with Bottom Life forms to Minimise Effect of Climate Change on Marine Aquaculture Farm
2016 - 2019	Copepod as Live Feed for Marine Larvae
2015 - 2018	Captive Breeding and Induced Fertilization of Malaysian Horseshoe crab (Tachypleus gigas) for Sea Ranching and Future Artificial Sanctuary
2015 - 2015	Zooplankton Dynamics and Trophic Structure in Seagrass and Other Nearshore Habitats in Peninsular Malaysia

- 2015 - 2016** Enhancing Mass Production of Marine Copepods as Live Feed Supply for the Marine Aquaculture in Malaysia
- 2015 - 2018** Feeding Mechanism in Adult Tropical Horseshoe Crab
- 2015 - 2016** The Effect of Monsoon on Fish Larval (Ichthyoplankton Stages) Assemblage Changes in Kuantan River

PUBLICATIONS

Article

- 2020** [Mapping mangrove distribution in Kong Kong Laut, Masai, Johor, using remote sensing.](#) Malayan Nature Journal , 72 (4) pp.545-550
- 2020** [Phytoplankton and zooplankton composition in mangroves of the Mendana Strait, Johor River, Johor, Malaysia.](#) Malayan Nature Journal , 72 (3) pp.349-356
- 2020** [A preliminary checklist of mangrove plants and associate species in Sungai Kong Kong, Selat Medana, Johor, Malaysia.](#) Journal of Biodiversity and Environmental Sciences (JBES) , 16 (3) pp.44-47
- 2020** [New report of Laophonte cornuta Philippi, 1840 \(Copepoda: Harpacticoida\) from the coral area, North of Tioman Island, South China Sea.](#) Malaysian Journal of Fundamental and Applied Science (MJFAS) , 16 (2) pp.232-235
- 2019** [Amphiascoides neglectus \(Copepoda: Harpacticoida\) as diet for aquarium corals cultured under laboratory condition.](#) Aquaculture, Aquarium, Conservation & Legislation - International Journal of the Bioflux Society (AAFL Bioflux) , 12 (4) pp.1125-1133
- 2019** [Fatty acid composition in cultured Amphiascoides neglectus \(Copepoda: Harpacticoida\).](#) Ecology and Sustainable Development , 2 (2) pp.25-32
- 2019** [New record of Miraciidae \(Copepoda: harpacticoida\) from Tioman waters.](#) International Journal of Recent Technology and Engineering (IJRTE) , 8 (15) pp.351-358
- 2019** [Low altitude drone aerial imagery for dugong sightings: A case study in Pulau Sibul, Johor.](#) Malayan Nature Journal , 71 (3) pp.305-310
- 2019** [Mapping mangrove degradation in Pahang river estuary, Pekan Pahang by using remote sensing.](#) Science Heritage Journal (GWS) , 3 (2) pp.1-5
- 2019** [New record of harpacticoid \(Copepoda:Harpacticoida\) from Tioman Archipelago, Pahang, Peninsular Malaysia.](#) Malayan Nature Journal , 71 (1) pp.3-15
- 2019** [Spermiogram of wild and captive Malaysian horseshoe crab \(Tachypleus gigas\) from Pantai Balok, Kuantan, Pahang, Malaysia =Spermiogram belangkap liar dan kurungan Malaysia \(Tachypleus gigas\) dari Pantai Balok, Kuantan, Pahang, Malaysia\).](#) Sains Malaysiana , 48 (2) pp.325-328
- 2019** [Accumulation of heavy metals in farmed lates calcarifer of a tropical coastal lagoon.](#) Oriental Journal of Chemistry , 35 (3) pp.1187-1194

- 2018** [Feeding mechanisms of adult tropical horseshoe crab, *Tachypleus gigas* toward Feeds' conditions.](#) ASM Science Journal , 11 (2) pp.76-85
- 2018** [Food intake, gut transit time and defecation pattern of Asian horseshoe crab, *Tachypleus gigas*.](#) ASM Science Journal , 11 (2) pp.56-66
- 2018** [Diet preferences of small fishes at Setiu Lagoon, Malaysia.](#) Ecology and Sustainable Development , 1 (1) pp.9-17
- 2018** [A taxonomic revision of the genus *Thalia* Blumenbach, 1798; *Weelia* Yount, 1954; *Brooksia* Metcalf, 1918 \(Salpida: Salpidae\) from East Coast of Peninsular Malaysia.](#) Zootaxa , 4422 (4) pp.451-477
- 2018** [Effect of mono and binary diets on growth and reproduction of cyclopoid copepod.](#) AACL Bioflux , 11 (5) pp.1658-1571
- 2018** [Report on five species of harpacticoid copepods from vegetative area of Sungai Pulai, Johor.](#) Malaysian Journal of Fundamental and Applied Sciences , 14 (2) pp.284-288
- 2018** [Diversity of bivalves in mangrove forest, Tok Bali Kelantan, Malaysia.](#) Science Heritage Journal / Galeri Warisan Sains (GWS) , 2 (2) pp.4-9
- 2018** [Seasonal variations of harpacticoid copepod and size-fractionated abundances in relation to environmental changes in Setiu Wetland.](#) Journal of Environmental Biology , 39 (5) pp.883-887
- 2018** [Comparison of horseshoe crabs \(*Tachypleus gigas*\) morphometry between different populations using allometric analysis.](#) AACL Bioflux, , 11 (1) pp.143-157
- 2018** [Chitosan isolated from horseshoe crab *tachypleus gigas* from the Malay Peninsula.](#) Oriental Journal of Chemistry , 34 (2) pp.928-933
- 2017** [Population growth of green mussel, *perna viridis* linnaeus from southern part of the Malacca straits.](#) Malaysian Applied Biology Journal , 46 (2) pp.149-152
- 2017** [Feeding ecology and food preferences of Cherok Paloh, Pahang horseshoe crab, *tachypleus gigas*.](#) Malaysian Journal of Fundamental and Applied Sciences , 13 (3) pp.198-202
- 2017** [Fishery aspect of horseshoe Crab \[*Tachypleus gigas* \(Müller, 1785\)\] in the Peninsular Malaysia: exploitation status.](#) Universal Journal of Applied Science , 5 (2) pp.11-15
- 2016** [Trend of meiobenthos density and composition in Karah Island, South China Sea \(Corak Kepadatan dan Komposisi Meiobentos di Pulau Karah, Laut China Selatan\).](#) Sains Malaysiana , 45 (7) pp.1019-1024
- 2016** [Effects of culture condition towards fatty acids in a harpacticoid copepod; *Amphiascoides neglectus* \(Lang, 1965\).](#) Journal of Aquaculture Research & Development , 7 (6 (Supp)) pp.44
- 2016** [Colonisation of meiofauna: selectivity of substrates.](#) Journal of Applied Environmental and Biological Sciences , 6 (12) pp.133-137
- 2015** [Meiobenthic community in vegetative areas at Sungai Pulai estuary, Johor, Malaysia.](#) Malayan Nature Journal , 67 (1) pp.1-14

- 2015 [Review on invitro amebocyte culture – a lesson learned from past.](#) Jurnal Teknologi , 77 (25) pp.171-176
- 2015 [Spatial distribution trend of plankton in Sungai Pulai Estuary, the straits of Johor, Malaysia.](#) Sains Malaysiana , 44 (9) pp.1257-1262
- 2015 [Review on in-vitro amebocyte culture–a lesson learned from past .](#) Jurnal Teknologi , 77 (25) pp.171-176
- 2014 [Fatty acid profiling of benthic harpacticoid \(Pararobertsonia sp.\) exposed to environmental stresses.](#) Malaysian Applied Biology , 43 (1) pp.31-39
- 2013 [Complete life cycle of a pennellid Peniculus minuticaudae Shiino, 1956 \(Copepoda: Siphonostomatoida\) infecting cultured threadsail filefish, Stephanolepis cirrifer.](#) Parasite , 20 (42) pp.1-16
- 2012 [Culture of harpacticoid copepods: understanding the reproduction and effect of environmental factors .](#) INTECH OPEN ACCESS BOOK pp.343-357
- 2012 [TAL - a source of bacterial endotoxin detector in liquid biological samples.](#) International Food Research Journal , 19 (2) pp.423-425
- 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 Carcinoscopus rotundicauda collected from the Pahang nesting grounds.](#) Sains Malaysiana , 41 (7) pp.855-861
- 2011 [Hydrology of the horseshoe crab nesting grounds at Pahang Coast, Malaysia.](#) Oriental Journal of Chemistry , 27 (4) pp.1475-1483

Conference or Workshop Item

- 2019 [Managing by zoning in the marine park islands in Mersing, Johor.](#) In: **Seminar Taman Laut & Pengurusan Sumber 4.0 2019**
- 2019 [Efficiency of carbon dioxide uptake by different concentration of a marine microalgae, chlorella vulgaris under laboratory condition.](#) In: **Malaysia International Biology Symposium 2019**
- 2019 [Managing by zoning in the marine park islands in Mersing, Johor.](#) In: **Seminar Taman Laut Dan Pengurusan Sumber 4.0 Tahun 2019**
- 2018 [Composition of Harpacticoida \(Crustacea: Copepoda\) and effect of rand reclamation activity in seagrass area of Sungai Pulai, Malaysia.](#) In: **Seminar Ekologi Malaysia 2018**
- 2018 [Coral bleaching monitoring using drone aerial photo in selected areas in Tioman Island, Pahang.](#) In: **Seminar Penyelidikan 2018 Jabatan Taman Laut Malaysia**
- 2018 [Composition of Harpacticoida \(Crustacea: Copepoda\) during land reclamation activity in seagrass area of Sungai Pulai, Malaysia.](#) In: **Research and Education Network on Coastal Ecosystems in Southeast Asia (CCore-RENSEA: 2016-2018)**

- 2018 [Horseshoe crab as fishery commodity in Malaysia: present and future conservation strategies.](#) In: **International Conference on Marine Science and Aquaculture (ICOMSA) 2018**
- 2017 [Mass production strategy of Copepods for live feed industry.](#) In: **3rd National Conference on Knowledge Transfer, 2016**
- 2017 [Fatty acid composition in a cultured marine harpacticoid, *Amphiascoides neglectus*.](#) In: **3rd National Conference on Knowledge Transfer (NCKT'16)**
- 2017 [Report on five species of harpacticoid copepods from vegetative area of Sungai Pulai Johor.](#) In: **ASIA International Multidisciplinary Conference 2017**
- 2016 [Integrated approach to revive unproductive brackish water aquaculture farm: A case study.](#) In: **Pangkor Dialogue International Conference on Sustainable and Inclusive Governance 2016: Building Resilience for Inclusive and Sustainable Future**

Book

- 2020 [Mukut Lair of the dragon's horn of Southern Tioman.](#) Department of Fisheries Malaysia, Ministry of Agriculture and Food Industry . ISBN 978-967-0633-81-7
- 2018 [Coastal ecology of Pahang water \(South China Sea\).](#) IIUM Press . ISBN 978-967-418-704-0
- 2018 [Coastal ecology of Pahang water \(South China Sea\).](#) IIUM Press . ISBN 978-967-418-704-0

Book Section

- 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
- 2014 [Sustainable technique for selected live feed culture.](#) In: **Sustainable aquaculture techniques** InTech . ISBN 978-953-51-1224-2 , pp.105-133
- 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 [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 [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 [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