






# DR. ROSWATI MD AMIN

Lecturer  
Faculty of Science & Marine Environment  
Universiti Malaysia Terengganu

 roswati\_ma@umt.edu.my

 +609 668 3887 / +6019 7348739

 +609 668 3193

## QUALIFICATIONS

- Doctor of Philosophy (Marine Ecology), Umeå University, Sweden
- Bachelor of Science (Marine Biology), KUSTEM, Terengganu, Malaysia

## FIELD OF RESEARCH

- Plankton Ecology
- Phytoplankton & Zooplankton Physiology
- Primary & Secondary productivity

## RESEARCH INTEREST

My research interests concern zooplankton physiology mainly copepods in marine ecosystem involving a combination of experimental lab work and field studies. Much of my current work focuses on spatial and temporal variation of phytoplankton and zooplankton distribution in coastal water of Peninsular Malaysia. Another major interest is to evaluate the current issue regarding microplastic on zooplankton in the field and using copepods to elucidate their physiological responses (reproductive success, fecal pellet production, ingestion and respiration rate) and understand its relation to different concentration of microplastic (synthetic and biodegradable) in the lab.

## RESEARCH PROJECTS

- Composition and distribution of plankton in Straits of Malacca and Southern South China Sea
- Egg and feces production, hatching success and respiration rate of planktonic copepods
- Ingestion of microplastics in zooplankton
- Planktonic respiration and primary production

## PROFFESIONAL MEMBERSHIP

- Japan Society for the Promotion of Science (JSPS)
- Estuarine, Coastal and Shelf Science Association (ECSA)

## GRANTS

Project : Community structure, feeding ecology and population growth of coexisting gastropods in the lagoon of Setiu Wetland, Terengganu

Position : Co- Researcher

Grant Name : FRGS

Status : Completed

Amount : RM100 200

Project : Identification of phytoplankton cell size using spectral absorption signatures and pigment fingerprints to discriminate the major phytoplankton groups.

Position : Co- Researcher

Grant Name : FRGS

Status : Completed

Amount : RM71 000

Project : Determination of carbon exchange in marine water ecosystem based on fractionated planktonic respiratory and productivity activity

Position : Leader

Grant Name : FRGS

Status : Completed

Amount : RM85,200

Project : Straits of Malacca: Spatial distributions and communities of plankton size structure in coastal water RM20,000 (TAPE-RIG, UMT)

Position : Leader

Grant Name : TAPE-RG UMT

Status : In-progress

Amount : RM20,000

Project : Elucidating indigested material from crustacean isopods gastrointestinal tract using trophic transfer framework. RM50,000 (RIG, UMT)

Position : Co-Researcher

Grant Name : RIG UMT

Status : In-progress

Amount : RM50,000

Project : MARE: Marine Coastal and Delta Sustainability for Southeast Asia.  
Position : Co-Researcher  
Grant Name : Erasmus  
Status : In-progress  
Amount : Eur 80,000

## PUBLICATIONS

### Journal Article

Amelia, Tan Suet May., Siti Noorhuda Fatihah Sukri, Annisa Nursabrina Jaapar, [Roswati Md Amin](#), Kesaven Bhubalan (2020) Uptake and egestion of polyhydroxyalkanoate microbeads in the marine copepod *Nitokra lacustris pacifica*. *Journal of Sustainability Science and Management*, 15(4), 45–53

[Roswati Md Amin](#), Erqa Shazira Sohaimi, Sabiqah Tuan Anuar, Zainudin Bachok, (2020) Microplastic ingestion by zooplankton in Terengganu coastal waters, southern South China Sea, *Marine Pollution Bulletin*, Vol 150 110616

Md Suffian Idris, Hing Lee Siang, [Roswati Md Amin](#), (2020) Data on sea surface biophysical parameters during different monsoon seasons. *Data in Brief*, Vol 28, 104982

Sharumathiu Govindasamy, Muhammad Syafiq Ishak, Amirul Al-Ashraf Abdullah, [Roswati Md Amin](#), Kesaven Bhubalan (2019) Dataset on controlled production of polyhydroxyalkanoate-based microbead using double emulsion solvent evaporation technique. *Data in Brief*, Vol 23 103675

Ambok Bolong A.b, Mukrim M.S, [Rowati Md Amin](#), Azra M.N, Azmie G, Ikhwanuddin M, (2016), Histological Profile and Fatty Acid Composition in Hepatopancreas of Blue Swimming Crab, *Portunus pelagicus* (Linnaeus, 1758) at Different Ovarian Maturation Stages, *Turkish Journal of Fisheries and Aquatic Sciences*, Vol 16 : 251- 258

Ambok-Bolong Abol-Munafi, Nordiana Pilus, [Roswati Md Amin](#), Mohamad N. Azra, Mhd Ikhwanuddin, (2016), Digestive enzyme profiles from foregut contents of blue swimming crab, *Portunus pelagicus* from Straits of Johor, Malaysia, *Journal of the Association of Arab Universities for Basic and Applied Sciences*

[Roswati Md Amin](#), Ulf Bamstedt, Nejstgaard C Jens, Di Capua Iole, (2012), Partition of planktonic respiratory carbon requirements during a phytoplankton spring bloom, *Marine Ecology Progress Series*, Vol 451 : 15-29

[Roswati Md Amin](#), Marja Koski, Ulf Bamstedt, Charles Vidoudez, (2011), Strain related physiological and behavioral effects of *Skeletonema marinoi* on three common planktonic copepods, *Marine Biology*, Vol 158 : 1965-1980

Zaleha Kassim, [Roswati Md Amin](#), Nozomu Iwasaki, (2006), Distribution of some species of harpacticoid copepods in east coast of Peninsular Malaysia, *Coastal Marine Science*, Vol 30(1) : 140-145

## [Proceedings]

Mudiman Nurul Amera, [Md Amin Roswati](#), Abd Rahman Mohd Faisal, Idris Md Suffian, Noor Hazwani Mohd Azmi. (Nov 2015). Distribution of *Synechococcus* And *Prochlorococcus* in Southeastern Coast of Peninsular Malaysia. Paper presented at International Seminar on the Straits of Malacca and the South China Sea, Universiti Malaysia Terengganu, Malaysia

[Md Amin Roswati](#), Mudiman Nurul Amera, Abd Rahman Mohd Faisal, Idris Md Suffian (August 2014) Plankton Composition and Abundance in Terengganu coastal water. Paper presented at Seoul International Conference on Biological Engineering & Natural Science, Seoul, South Korea

[Md Amin Roswati](#) , Bamstedt Ulf, Carsten Paul, Samchyshyna Larysa, Lindehoff Elin, Pohner Georg. (March 2013) Reproduction and succession of *Eurytemora affinis* is unaffected during a diatom-dominated spring bloom. Paper presented at International Conference on Life Science & Biological Engineering, Tokyo, Japan,

## Other Outputs

[Thesis, manuscript, books, reports, etc.]

[Roswati Md Amin](#), (2011), Copepods in Skeletonema-dominated food web, Umea University, Umeå

[Roswati Md Amin](#), Abd Rahman M.F, Mudiman N.S, Idris S (2016), Plankton Composition and Abundance in Brunei Bay During Northeast Monsoon in Scientific Expedition to Brunei Bay

Md Suffian Idris, Noor Hazwani Mohd Azmi, [Roswati Md Amin](#) (2020). Distribution of phytoplankton class size in the souther South China Sea and the Straits of Malacca. in South China Sea Scientific Studies in Malaysian Waters: Estuarine, Coastal Offshore. 203pp.

## SUPERVISION

[Level, Thesis Title, Year, Status (on-going/completed), supervision role (Main SV or co-SV)]

### Master Degree

Thesis Title : Determination of carbon balance between planktonic respiratory and productivity activity in marine ecosystem

Student Name : Nurul Asmera Mudiman

Role : Main Supervisor

Status : Completed (2017)

Thesis Title : Distribution, abundance and composition of plankton in East Coast of Peninsular Malaysia and Brunei Bay

Student Name : Muhammad Faisal Abd. Rahman

Role : Main Supervisor

Status : Completed (2018)

Thesis Title : Microplastic ingestion by zooplankton in Terengganu coastal water  
Student Name : Zakaria Daoud Taha Almashaqba  
Role : Main-supervisor  
Status : On-going

Thesis Title : Phytoplankton community in Straits of Malacca and Southern South China Sea  
Student Name : Erqa Shazira Sohaimi  
Role : Main-supervisor  
Status : On-going

Thesis Title : Microbeads effects on reproduction and development function of *Nitokra lacustris*  
Student Name : Annisa Nursabrina Jaapar  
Role : Main-supervisor  
Status : On-going

## COURSE TAUGHT

- Planktonology
- Oceanography Biology
- Aquatic Botani
- Marine Ecology
- Marine Primary Producer

## LINKS

- Researchgate [https://www.researchgate.net/profile/Roswati\\_Md\\_Amin](https://www.researchgate.net/profile/Roswati_Md_Amin)
- Facebook <https://www.facebook.com/rose.wati>
- Scopus Author ID 37111030200
- Google Scholar [https://scholar.google.com/citations?user=x-S\\_bawAAAAJ&hl=nl](https://scholar.google.com/citations?user=x-S_bawAAAAJ&hl=nl)