

Dr. Nurulnadia Mohd Yusoff

Lecturer

Faculty of Science and Marine Environment Universiti Malaysia Terengganu



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QUALIFICATIONS

- > Doctor of Philosophy (Aquatic Toxicology), Kagoshima University
- Master of Science (Marine Geochemistry), International Islamic University Malaysia
- Bachelor of Science (Marine Science), Universiti Malaysia Terengganu

FIELD OF RESEARCH

- > Aquatic Toxicology (Endocrine disrupting chemicals)
- Environmental pollution (metals, PAH)
- Biomarker of stress

RESEARCH INTEREST

Toxicology approach has been used to investigate the effects of contaminants (e.g endocrine disruptor, metals) on living organisms. The studies normally focus on in vivo observation. Besides toxicity test, the level of contaminants also measured from field collection to get the actual values from natural environment. Biomarker of contaminant is another topic of interest in order to correlate to the effects in organism. Recently research has focused on the concentration of metals in fish and sediment. The stress level was measured in their tissue to justify the relationship between metal accumulations to the stress indicator. This research has provided an interesting insight as stress indicator showed specific effect on certain tissues.

RESEARCH PROJECTS

- Metals accumulation in mariculture fish and sediment
- Lipid peroxidation as oxidative stress in fish
- Sediment toxicity test of fish embryo, chironomid
- > Development of toxicity test using climbing perch, Anabas testedineus

EXPERT LINKAGES

- > Kagoshima University
- International Islamic University Malaysia
- Fisheries Research Institute Batu Maung
- > National Hydraulic Research Institute Malaysia

PROFFESIONAL MEMBERSHIP

Persatuan Kimia Analisis Malaysia (Analis)

<u>GRANTS</u>

Project	:	Derivation of predicted no effect concentration (PNEC) using species sensitivity distribution (SSD) technique for risk assessment of endocrine disrupting compounds in tropical coastal ecosystem (2021 – 2023)
Position	:	Co-researcher
Grant Name	:	Talent and Publication Enhancement research Grant (TAPE-RG)
Status	:	Active
Amount	:	RM20,000
Project	:	Ecotoxicology studies on industrial effluent (2019 – 2020)
Position	:	Project leader
Grant Name	:	Industry – UMT Matching Grant
Status	:	Completed
Amount	:	RM32,200
Project	:	Occurrence and bioaccumulation of endocrine disrupting chemicals (EDCs) in Terengganu Rivers as indicator of fisheries and environmental health condition (2017 – 2020)
Position	:	Project leader
Grant Name	:	Fundamental Research Grant Scheme (FRGS)
Status	:	Completed
Amount	:	RM83,300

Project: Determination of stress response in cage culture fish from Terengganu and
Kelantan as bioindicator of metal pollution (2015 – 2017)Position: Project leaderGrant: Research Acculturation Grant Scheme (RAGS)Name:Status: CompletedAmount: RM32,000

AWARDS

- Silver Medal (Minggu Penyelidikan & Inovasi 2020)
- Bronze Medal (Apprentice Innovation & Research Exhibition 2020)

PUBLICATIONS

Journal Article

- Nurulnadia MY, Nik-Nurasyikin NMA, Ling KH, Zahid BM, Adiana G & Nurlemsha BI (2021) Metal concentrations in fresh and salt-dried anchovy, *Encrasicholina devisi*, and estimation of target hazard quotient for consumers in Kuala Terengganu. *Regional Studies in Marine Science*, Vol. 41 : 101595.
- 2. Nurulnadia MY, Noradila AB & Adiana G (2020) Turbidity effects of suspended bauxite in embryonic stage of climbing perch (*Anabas testudineus*) post fertilization. *The Egyptian Journal of Aquatic Research*, Vol. 46(2) : 181-186
- Minhat FI, Shaari H, Razak NSA, Satyanarayana B, Saelan WNW, Yusoff NM & Husain ML (2020) Evaluating performance of foraminifera stress index as tropical-water monitoring tool in Strait of Malacca. *Ecological Indicators*, Vol. 111: 106032
- Baharom MZ, Yusoff NM, Khalik WMAWM, Ariffin MM, Karim J & Sharifuddin SS (2020) Extraction of 4-octylphenol and 4-nonylphenol in river water using solid-phase extraction and high-performance liquid chromatography. *Malaysian Journal of Analytical Sciences*, Vol. 24(1) : 146-158
- 5. TKA TNA, **Nurulnadia MY**, Zaleha K, Ahmad A, Pradit S & Ong MC (**2019**) Accumulation of heavy metals in farmed *Lates calcarifer* of a Tropical Coastal Lagoon. *Oriental Journal of Chemistry*, Vol. 35(3) : 1187
- Ariffin MM, Adiana G, Bidai J, Hing LS, Nurulnadia MY, Ong MC, Shaari H & Pradit S (2019) Data on dissolved metals in Terengganu waters of South China Sea during pre-, post-, and Northeast Monsoon season. Data in brief, Vol. 27 : 104806
- 7. Al-Awlaqi NA, Shazili NAM & **Yusoff NM (2019)** The combined effect of zinc and pH on growth rate and chlorophyll content of brown seaweed, *Padina boryana*. *Malaysian Journal of Analytical Sciences*, Vol. 23(6) : 1018-1029
- Al-Awlaqi NA, Shazili NAM & Nurulnadia MY (2019) Spatial and seasonal variation of metal accumulation in brown seaweed, *Padina* spp. on the South China Sea coast of Terengganu, Peninsular Malaysia. *Aquaculture, Aquarium, Conservation & Legislation*, Vol. 12(5): 1592-1605
- 9. Nik-nurasyikin NMA, **Nurulnadia MY**, Sofi AHM & Jaafar SN (**2018**) Metals accumulation in cultured tiger grouper, *Epinephelus fuscoguttatus* with estimated weekly in take levels from

East Coast of Peninsular Malaysia. *Journal of Sustainability Science and Management*, Vol. 13(5): 47-56

- 10. **Yusoff NM**, Jaafar SN, Shazili NAM, Azmi NNNM & Hassan MSA (**2018**) Assessment of metals concentration in tilapia (*Oreochromis* sp.) and estimation of daily intake by Malaysian. *Malaysian Journal of Analytical Sciences*, Vol. 22(4) : 594-604
- 11. Yusoff NM, Koyama J & Uno S (2017) Bioaccumulation of sedimentary endocrine disrupting chemicals (EDCs) by the benthic fish, *Pleuronectes yokohamae*. *Malaysian Journal of Analytical Sciences*, Vol. 21(3): 535-543
- 12. Nurulnadia MY, Koyama J, Uno S & Amano H (2016) Biomagnification of endocrine disrupting chemicals (EDCs) by *Pleuronectes yokohamae*: Does *P. yokohamae* accumulate dietary EDCs? *Chemosphere*, Vol. 144 : 185-192
- 13. **Nurulnadia MY**, Koyama J, Uno S, Kito A, Kokushi E, Bacolod ET, Ito K & Chuman Y (**2014**) Accumulation of endocrine disrupting chemicals (EDCs) in the polychaete, *Paraprionospio* sp. from the Yodo River mouth, Osaka Bay, Japan. *Environmental Monitoring & Assessment*, Vol. 186(3): 1453-1463
- 14. Nurulnadia MY, Koyama J, Uno S, Kokushi E, Bacolod ET, Ito K & Chuman Y (2013) Bioaccumulation of Dietary Endocrine Disrupting Chemicals (EDCs) by the Polychaete, Perinereis nuntia. Bulletin of Environmental Contamination & Toxicology, Vol. 91(4): 372-376
- 15. Kamaruzzaman Y, Nurulnadia MY, Noor Azhar MS, Ong MC & Shahbudin S (2011) Vertical Variation of Lead, Copper and Manganese in Core Sediments Collected from Tanjung Lumpur Mangrove Forest, Pahang, Malaysia. Sains Malaysiana, Vol. 40(8): 827-830
- 16. Kamaruzzaman Y, **Nurulnadia MY**, Noor Azhar MS, Ong MC & Shahbudin S (2011) Heavy Metal Concentration in the Surface Sediment of Tanjung Lumpur Mangrove Forest, Kuantan, Malaysia. *Sains Malaysiana*, Vol. 40(2) : 89-92

Conference Publication

- Nurulnadia MY, Noradila AB (2019) 32nd Turbidity bauxite effects on Anabas testudineus embryos. *Symposium of Malaysia Analytical Sciences* (SKAM32). August 14 – 16. Port Dickson, Malaysia.
- 2. Nurulnadia MY, Abdullah NSA, Abdullah AA, Baharom MZ (2017) Sediment Toxicity of Tumpat and Setiu, Malaysia to climbing perch embryo. *19th International Symposium on Pollutant Responses in Marine Organisms* (PRIMO 19). June 30 July 3. Matsuyama University, Japan.

Other Outputs

- 1. Nurulnadia binti Mohd Yusoff (2014). *Endocrine Disrupting Chemicals (EDCs) Bioaccumulation through Food Chain and their Effects on Fish*. PhD Thesis, Faculty of Fisheries. Kagoshima University.
- 2. Nurulnadia binti Mohd Yusoff (2010). *Geochemical and Surface Sediment Characteristic of Tanjung Lumpur Mangrove, Kuantan, Pahang, Malaysia*. Master Thesis, Faculty of Maritime Studies and Marine Science, International Islamic University Malaysia.
- 3. Nurulnadia binti Mohd Yusoff (2007). Spatial Heterogeneity of Physical and Chemical Variables in the Sediment of Setiu Wetland during Monsoon and Non-monsoon Season. Undergraduate thesis, Bachelor of Science (Marine Science), Universiti Malaysia Terengganu.

SUPERVISION

Doctor of Philosophy Degree

	Thesis Title	:	Field and laboratory studies on the bioaccumulation of metals in brown seaweed (<i>Padina</i> spp.) from the Terengganu Coast
	Student Name	:	Nabeela Ali Nasser Al-Awlaqi
	Role	:	Co-supervisor
	Status	:	Graduated
Mas	ster Degree		
	Thesis Title	:	Metals accumulation in commercial fishes of main landed jetty in Peninsular Malaysia
	Student Name	:	Intan Nurlemsha binti Baharom
	Role	:	Main supervisor
	Status	:	On-going
	Thesis Title	:	Endocrine disrupting chemicals (EDCs) in major rivers of Terengganu
	Student Name	:	Mohamad Zahid bin Baharom
	Role	:	Main supervisor
	Status	:	On-going
	Thesis Title	:	Bioaccumulation of metals in <i>Lates calcarifer</i> from Kelantan and Terengganu
	Student Name	:	Nik Nurasyikin binti Nik Mohmmad Azmi
	Role	:	Main supervisor
	Status	:	On-going
	Thesis Title	:	Assessment of oxidative stress in <i>Lates calcarifer</i> from aquaculture farms by combined application of chemical and biochemical biomarkers
	Student Name	:	Mohamad Sofi bin Abu Hassan
	Role	:	Co-supervisor
	Status	:	Graduated
	Thesis Title	:	Level of Metallic Elements in Economically Important Fish Species of Setiu Coastal Water, Terengganu
	Student Name	:	Muhammad Izzat bin Kamaruzaman
	Role	:	Co-supervisor
	Status	:	Graduated

COURSE TAUGHT

- Environmental Toxicology (MMS4000), (Undergraduate), UMT
- Environmental Science (MMS3000), (Undergraduate), UMT
- Final Year Project Coordinator (MMS4998, MMS4999), (Undergraduate), UMT
- Industrial Coordinator (MMS4992A), (Undergraduate), UMT
- Aquatic Methods and Instrumentation (MMS3201), (Undergraduate), UMT
- Aquatic Methods and Instrumentation for Marine Biology (MMB3003), (Undergraduate), UMT
- Chemical Oceanography (MMS3200), (Undergraduate), UMT

<u>LINKS</u>

- Researchgate : https://www.researchgate.net/profile/Nurulnadia_My
- LinkedIn : <u>https://my.linkedin.com/in/mohd-yusoff-nurulnadia-5b7801135</u>
- Google Scholar : <u>https://scholar.google.com/citations?user=L2ApdnQAAAAJ&hl=en</u>
- ORCID: 0000-0002-6553-2249

JOURNAL REVIEWER

- Environmental Science and Pollution Research, Web of Science (2020)
- > Asia Pacific of Molecular Biology and Biotechnology, Scopus (2020)
- UMT Jur, non-index (2020)
- Journal of Sustainability Science and Management, Web of Science (2019)
- Malaysia Journal of Analytical Sciences, Scopus (2019)
- Water, Air, & Soil Pollution, Thompson Reuters (2019)
- IOP Conference Series, non-index (2019)
- International Journal of Environmental Research and Public Health, Web of Science (2018)
- > Journal of Sustainability Science and Management, Web of Science (2017)
- > Marine Pollution Bulletin, Thompson Reuters (2016)