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## QUALIFICATIONS

- Doctor of Philosophy (Marine Pollution), Université de Bretagne-Sud, France
- Master of Science (Marine Geochemistry), Kolej Universiti Sains & Teknologi Malaysia
- Bachelor of Science (Marine Science), Kolej Universiti Sains & Teknologi Malaysia

## FIELD OF RESEARCH

- Heavy metals Pollution in Sediment and Biota
- Sedimentological Analysis
- Sedimentation Rate Analysis

## RESEARCH INTEREST

My research focus on the heavy metals content in sediment samples which can act as geo-marker for pollution studies. I also studied the sediment characteristic and the relationship between particle size and the heavy metals concentration. Apart from the sediment samples, my research also include on biota samples of fishes, crustaceans, bivalves, mollusks and plants such as seaweed and sea grass. From this biota samples, the suitability of using these organisms as bio-indicator can be identified which best reflect the environmental quality. Risk assessment towards human health by consuming these organisms can be estimated.

Currently, together with the researchers in Ocean Pollution and Ecotoxicology (OPEC) Research Group and other researchers from other universities and organization, we are actively gather all data from Malaysian marine aquatic environment to be stored in GIS database. With this database, these data can easily referred by other researchers for their studies.

## RESEARCH PROJECTS

- Geochemistry and sedimentological characteristic in the major Terengganu estuary, Malaysia.
- Trace metal and radionuclide determination in the major estuarine mangrove ecosystem in Terengganu, Malaysia.
- Determination of heavy metal in Fish of Mengabang Telipot river surrounding Universiti Malaysia Terengganu.
- Geochemical and sedimentological characteristic studies of Pahang estuary, Malaysia.
- The determination of sediment accretion and geochemistry aspect in Kuantan river estuary, Pahang.
- Assessment of heavy metals concentration in marine commercial fishes of Strait of Malacca coastal waters.
- Study on the distribution and pollution status of some heavy metals in surface sediment of Tuba Island coastal area, Langkawi.
- Sediment accretion and sediment characteristics of Pahang estuarine mangrove.
- Mapping and heavy metals distribution in the sediment of Bay of Quiberon and Gulf of Morbihan, Brittany, France.
- Assessment of the environmental significance of trace metals in Muar River based on ecological and human health risk approach.
- Distribution of metallic trace element concentration in surficial sediments of Mengabang Telipot enclosed lagoon.
- Sediment quality of Perai and Pinang Rivers, Penang.
- Environmental monitoring of heavy metals status and potential health risk assessment in the sediment and organisms of the Laut Setiu, Terengganu.
- Heavy metals pollution in sediments of Penang Rivers (Pinang, Perai, Juru, Jejawi and Kerian Rivers).
- Evaluation of the status of heavy metals pollution of surficial sediment of Malacca Straits.
- Assessment of heavy metals in shark samples landed at selected LKIM Complex.
- Bioaccumulation of heavy metals in Seabass cultured in Setiu Wetland.
- Seasonal variation of metallic elements concentration in bottom sediments of Sungai Merang, Terengganu, Malaysia.
- Assessment of heavy metals in green mussel (*Perna viridis*) from Johor waters.
- Heavy metals concentration in major islands off Terengganu waters

## EXPERT LINKAGES

- University of South Brittany, France
- University of Western Brittany, France
- University of Hong Kong
- Hong Kong Education University
- National University of Singapore
- Intitut Pertanian Bogor, Indonesia
- Institut Teknologi Sepuluh Nopember – ITS
- Airlangga University, Indonesia
- Universitas Hasanuddin, Indonesia
- Brawijaya University, Indonesia
- Raja Ali Haji Maritime University, Indonesia
- Halu Oleo University, Indonesia
- Udayana University - Bali
- Prince of Songkhla University, Thailand
- Khon Kaen University, Thailand
- Ramkhamhaeng University, Thailand
- Chulalongkorn University, Thailand
- Mahidol University, Thailand
- South China Sea Institute of Oceanology, China
- Ho Chi Minh City University of Technology, Vietnam
- Institute of Marine Environment and Resources (IMER), Vietnam
- Institute of Oceanography, Vietnam
- President Ramon Magsaysay State University, Phillipines
- MAPUA University, Phillipines
- Negros Oriental State University, Phillipines
- Caraga State University, Phillipines
- International Islamic University Malaysia
- Universiti Putra Malaysia
- Universiti Kebangsaan Malaysia
- Universiti Malaysia Sarawak
- Universiti Teknologi PETRONAS
- Universiti Malaysia Selangor
- Jabatan Mineral dan Geosains
- Pusat Hidrografi Nasional
- SEAFDEC Malaysia
- NUCLEAR Malaysia

## PROFFESIONAL MEMBERSHIP

- Institute of Chemistry, Malaysia
- ANALIS Malaysia
- Asia Oceania Geosciences Society
- European Geosciences Union

## GRANTS

Project : Sediment Quality of Perai and Pinang rivers, Penang  
Position : Project Leader  
Grant Name : Tabung Penyelidik Muda (GoT)  
Status : Completed  
Amount : RM10,000.00

Project : Distribution of Metallic Trace Element Concentration in Surficial Sediments of Mengabang Telipot Enclosed Lagoon, Terengganu  
Position : Project Leader  
Grant Name : Geran Galakan Penyelidikan  
Status : Completed  
Amount : RM10,000.00

Project : Assessment of the Environmental Significance of Trace Metals in Muar River Based on Ecological and Human Health Risk Approach  
Position : Project Leader  
Grant Name : Fundamental Research Grant Scheme (FRGS)  
Status : Completed  
Amount : RM113,000.00

Project : Environmental Monitoring of Heavy Metals Status and Potential Human Health Risk Assessment in the Sediment and Organisms of the Laut Setiu, Terengganu  
Position : Project Leader  
Grant Name : NIC Research Grant Scheme (NRGS)  
Status : Completed  
Amount : RM79,000.00

Project : Provenance and Distribution of Suspended Particulate Matter by Geochemical Fingerprint Analysis : Implications for Coral Reef Health in the Islands of Terengganu

Position : Associate Researcher

Grant Name : NIC Research Grant Scheme (NRGS)

Status : Completed

Amount : RM40,000.00

Project : Influence of Monsoon System on Dissolve Metals Bioavailability and Toxicity at Pulau Tioman, Pahang : In Case of Complexation of Fe(III) and Cu(II) by Natural Organic Ligands

Position : Associate Researcher

Grant Name : Fundamental Research Grant Scheme (FRGS)

Status : Active

Amount : RM121,300.00

Project : Straits of Malacca Cruise : Heavy Metals Content in Coastal Vicinity Sediment off Malacca Straits

Position : Project Leader

Grant Name : Talent and Publication Enhancement Research Grant (TAPE)

Status : Active

Amount : RM20,00.00

Project : Total Mercury and Methy-Mercury Determination in Economically Important Marine Fishes from Malaysian Waters: A Human Health Risk Assessment Approaches

Position : Project Leader

Grant Name : Fundamental Research Grant Scheme (FRGS)

Status : Active

Amount : RM124,00.00

Project : Derivation of Predicted No Effect Concentration (PNEC) using Species Sensitivity Distribution (SSD) Technique for Risk Assessment of Endocrine Disrupting Compounds (EDCs) in Tropical Coastal Ecosystem

Position : Associate Researcher

Grant Name : Talent and Publication Enhancement Research Grant (TAPE)

Status : Active

Amount : RM20,00.00

Project : The Fate of Salps in a Changing Ocean: Emerging Environmental Consequences for the Indian Ocean Sector of the Southern Ocean  
Position : Associate Researcher  
Grant Name : Sultan Mizan Antarctic Research Foundation - Smart Partnership Initiative  
Status : Active  
Amount : RM150,00.00

## AWARDS

- Keynote Speaker in 2020 International Forum of Geoscience and Oceanography (IFGO). 24–26 April 2020
- Excellent Service Award, UMT, University, 2016.
- Keynote Speaker in IPN Conference 2016 Hatyai, Thailand. 22–23 April 2016
- Young Investigator Award @ 28th Regional Symposium of Malaysian Analytical Sciences (SKAM–28). 17–20 August 2015. Ipoh, Perak

## PUBLICATIONS

### Journal Article

1. Kamaruzzaman BY, Ong MC & Willison KYS (2004) Taburan Kepekatan Kobalt, Kuprum, Zink dan Plumbum di Dalam Sedimen Dasar Muara Sungai Terengganu, Malaysia. *Sains Malaysiana*, Vol. 33(2), 147–156.
2. Kamaruzzaman BY, Ong MC & Willison KYS (2004) Trace Metal Concentration in the Surface Sediments of Paka Mangrove Forest, Terengganu, Malaysia. *Malaysian Journal of Science*, Vol. 23(2), 55–60.
3. Kamaruzzaman BY, Ong MC & Willison KYS (2005) Taburan Kepekatan Unsur Kimia di Dalam Teras Sedimen di Hutan Paya Bakau Paka, Terengganu, Malaysia. *Malaysian Journal of Analytical Sciences*, Vol. 9(1), 111–115.
4. Kamaruzzaman BY, Willison KYS & Ong MC (2005) The Determination of Sedimentation Rate Using  $^{230}\text{Th}_{\text{excess}}$  and  $^{230}\text{Th}_{\text{excess}}/^{232}\text{Th}$  Ratio Methods in Paka Mangrove Forest, Terengganu, Malaysia. *Malaysian Journal of Analytical Sciences*, Vol. 9(1), 106–110.
5. Kamaruzzaman BY, Ong MC & Willison KYS (2005) Taburan Menegak Karbon Organik di dalam Hutan Paya Bakau Pahang, Malaysia. *Journal of Bioscience*, Vol. 16(2), 117–123.
6. Kamaruzzaman BY, Ong MC & Willison KYS (2005) The Distribution of Cobalt, Copper, Lead and Zinc in the Surface Sediment of Rompin Mangrove Forest, Pahang, Malaysia. *Oriental Journal of Chemistry*, Vol. 21(3), 395–400.
7. Kamaruzzaman BY, Mohd. Effendy AW, Willison KYS, Hasrizal BS & Ong MC (2006) Determination of Sedimentation Rate in Terengganu Coastal Water, East-Coast of Peninsular Malaysia. *Ultra Chemistry*, Vol. 2 (1), 1–6.

8. Kamaruzzaman BY, Willison KYS & Ong MC (2006) The Concentration of Mn, Cu, Zn and Pb in Sediments of Paka Estuary, Terengganu. *Pertanika Journal of Science and Technology*, Vol. 14(1&2), 53–61.
9. Ong MC, Kamaruzzaman BY, Noor Azhar MS & Rosnan Y (2006) Distribution and Normalization of Lead, Copper and Zinc in Terengganu Mangrove Surface Sediment, Malaysia. *Journal of Sustainability Science and Management*, Vol. 1(1), 74–84.
10. Hasrizal S, Kamaruzzaman BY, Jamil T, Ong MC & Willison KYS (2006) Taburan Elemen Cu, Mn dan Zn di dalam Sedimen Dasar Sungai Hutan Paya Laut Larut Matang, Taiping, Perak. *Malaysian Journal of Analytical Science*, Vol. 10(2), 211–216.
11. Kamaruzzaman BY, Jamil BT, Hasrizal S, Willison KYS & Ong MC (2006) Interpretasi Kemasukkan Sumber Antropogenik bagi Elemen–Elemen Kimia di dalam Sediment Dasar Sungai Terengganu dengan Menggunakan Al dan Li Sebagai Elemen Rujukan. *Malaysian Journal of Analytical Sciences*, Vol. 10(2), 269–274.
12. Kamaruzzaman BY, Ong MC & Khali AH (2007) Mercury Concentration of Four Dominant Species in the Bebar Peat Swampy Forest River, Malaysia. *Pakistan Journal of Biological Sciences*, Vol. 10(7), 1103–1107.
13. Kamaruzzaman BY, Antonina A, Airiza Z, Syalindran S & Ong MC (2007) The Geochemical Profile of Mn, Co, Cu and Fe in Kerteh Mangrove Forest, Terengganu. *Malaysian Journal of Analytical Sciences*, Vol. 11 (2), 336–339.
14. Kamaruzzaman BY, Zaleha K, Ong MC & Willison KYS (2007) Copper and Zinc in Three Dominant Brackish Water Fish Species from Paka Estuary, Terengganu, Malaysia. *Malaysian Journal of Science*, Vol. 26(2), 64–70.
15. Kamaruzzaman BY & Ong MC (2007) Spatial Distribution of Organic Carbon in Estuarine Mangrove Forests in Terengganu, Malaysia. *Chemical Research Communications*, Vol. 21, 34–37.
16. Kamaruzzaman BY, Ong MC & Ridzwan H & Jalal KCA (2008) Seasonal Bed Sediment Characteristic of the Kuala Sepetang River, Taiping, Perak. *Sains Malaysiana*, Vol. 37(2), 143–147.
17. Kamaruzzaman BY, Ong MC, Noor Azhar MS, Shahbudin S & Jalal KCA (2008) Geochemistry of Sediment in the Major Estuarine Mangrove Forest Of Terengganu Region, Malaysia. *American Journal of Applied Science*, Vol. 5(12), 1707–1712.
18. Kamaruzzaman BY & Ong MC (2008) The Distribution of Some Geochemical Elements in the Surface Sediment of Kerteh Mangrove Forest, Terengganu, Malaysia. *Sains Malaysiana*, Vol. 37(2), 337–340.
19. Kamaruzzaman BY & Ong MC (2008) Recent Sedimentation Rate and Sediment Age Determination of Kemaman–Chukai Mangrove Forest, Terengganu, Malaysia. *American Journal of Agriculture & Biological Sciences*, Vol. 3(3), 522–525.
20. Kamaruzzaman BY, Ong, MC & Jalal KCA (2008) Levels of Copper, Zinc and lead in Fishes of Mengabang Telipot River, Terengganu, Malaysia. *Journal of Biological Sciences*, Vol. 8(7), 1181–1186.
21. Kamaruzzaman BY, Ong MC, Zaleha K & Shahbudin S (2008) Levels of heavy Metals (Cu, Cd, Pb and Zn) in Green–lipped Mussel *Perna veridis* (L.) from Muar River Estuary, Johore, Malaysia. *Pakistan Journal of Biological Science*, Vol. 11(18), 2249–2253.

22. Kamaruzzaman BY, Ong MC, Willison KYS, Ridzwan H & Ahmed Jalal KCA (2008) Horizontal Variability of Organic Carbon in Kerteh Mangrove Forests, Malaysia. *Journal of Bioscience*, Vol. 19 (1), 17–22.
23. Kamaruzzaman BY, Shazili NAM, Willison KYS, Ong MC, Norhizam HAG & Shahbudin S (2008) A Role of the Northeast Monsoon Seasons in the Dilution of Cu and Pb Concentration in Sediments off Pahang, South China Sea. *Malaysia Marine Ecosystem: The Studies of Johor Darul Takzim East Coast*, Vol. 2, 31–39.
24. Kamaruzzaman BY & Ong MC (2009) The Sediment Geochemical Proxy of Some Chemical Elements in Sediments of Kemaman River Estuary, Terengganu, Malaysia. *Sains Malaysiana*, Vol. 38(5), 631–636.
25. Ong MC, Kamaruzzaman BY & Joseph B (2009) Geochemical Studies of Setiu Lagoon, Terengganu, Malaysia. *Malaysian Journal of Science*, Vol. 28(2), 217–222.
26. Kamaruzzaman BY, Hasrizal S, Mohd Nizam BI, Ong MC, Jalal KCA & Shahbudin S (2009) Geochemical proxy of sediment cores from Terengganu coastal, East–Coast of Peninsular Malaysia. *Oriental Journal of Chemistry*, Vol. 25(1), 9–14.
27. Hasrizal S, Kamaruzzaman BY, Sakri I & Ong MC (2009) Seasonal Distribution of Organic Carbon in the Surface Sediments of the Terengganu Nearshore Coastal Area. *American Journal of Environmental Sciences*, Vol. 5(1), 111–115.
28. Ong MC & Kamaruzzaman BY (2009) An Assessment of Metal (Pb and Cu) Contamination in Bottom Sediment from South China Sea Coastal Waters, Malaysia. *American Journal of Applied Sciences*, Vol. 6(7), 1418–1423.
29. Kamaruzzaman BY, Ong MC, Jalal KCA, Shabuddin S & Mohd Nor O (2009) Accumulation of Lead and Copper in Rhizophora Apiculata from Setiu Mangrove Forest, Terengganu, Malaysia. *Journal of Environmental Biology*, Vol. 30(5), 821–824.
30. Kamaruzzaman BY, Siti Waznah A, Ong MC, Shahbudin S & Jalal KCA (2009) Variability of Organic Carbon Content in Bottom Sediment of Pahang River Estuary, Pahang, Malaysia. *Journal of Applied Sciences*, Vol. 9(24), 4253–4257.
31. Kamaruzzaman BY, Ong MC & Rina SZ (2010) Concentration of Zn, Cu and Pb in Some Selected Marine Fishes of the Pahang Coastal Waters, Malaysia. *American Journal of Applied Science*, Vol. 7(3), 309–314.
32. Kamaruzzaman BY, Ong MC, Rina SZ & Joseph B (2010) Levels of Some Heavy Metals in Fishes from Pahang River Estuary, Pahang, Malaysia. *Journal of Biological Sciences*, Vol. 10(2), 157–161.
33. Kamaruzzaman BY, Siti Waznah A, Ong MC & Joseph B (2010) Spatial Distribution of Lead and Copper in the Bottom Sediment of Pahang River Estuary, Pahang, Malaysia. *Sains Malaysiana*, Vol. 39(4), 543–547.
34. Zaleha K, Kamaruzzaman BY, Akbar John B & Ong MC (2010) Cd, Cu and Pb Concentration Levels in Horseshoe Crab Nesting Grounds of Pahang Coast, Malaysia. *Journal of Biological Sciences*, Vol. 10(8), 790–794.
35. Siti Waznah A, Kamaruzzaman BY, Ong MC & Rina SZ (2010) Spatial and Temporal Bottom Sediment Characteristic of Pahang River Estuary, Pahang, Malaysia. *Oriental Journal of Chemistry*, Vol. 26(1), 39–44.



36. Kamaruzzaman BY, Siti Waznah A, Mohd Zahir MS, Ong MC, Shahbudin S, Jalal KCA, Rina Sharlinda Z, Shuhada AT, Akbar John B, Joseph B, Al-Balwani SM & Goddard JS (2010) Distribution of Chromium, Manganese and Cobalt in the Bottom Sediment of Pahang River Estuary, Pahang, Malaysia. *Journal of Applied Sciences*, Vol. 10(23), 3122–3126.
37. Kamaruzzaman BY & Ong MC (2010) The Determination of  $^{210}\text{Pb}$  in the Sediments: Sedimentation rates from Terengganu Coastal Waters, Malaysia. *Current World Environment*, Vol. 5(1): 543–547.
38. Kamaruzzaman BY, Shuhada NT, Akbar B, Shahbudin S, Jalal KCA, Ong MC, Al-Barwani SM & Goddard JS (2011) Spatial Concentration of Lead and Copper in Bottom Sediments of Langkawi Coastal Area, Malaysia. *Research Journal of Environmental Sciences*, Vol. 5(2), 179–186.
39. Kamaruzzaman BY, Willison KYS & Ong MC (2011) Determination of Estuarine Sedimentation Rates using  $^{230}\text{Th}_{\text{excess}}$  and  $^{230}\text{Th}_{\text{excess}}/^{232}\text{Th}$  Ratio in the Paka Estuary, Malaysia. *Trends in Applied Sciences Research*, Vol. 6(1), 102–107.
40. Kamaruzzaman BY, Nurulnadia MY, Noor Azhar MS, Ong MC, Shahbudin S, Jalal KCA & Joseph B (2011) Heavy Metal Concentration in the Surface Sediment of Tanjung Lumpur Mangrove Forest, Kuantan, Pahang, Malaysia. *Sains Malaysiana*, Vol. 40(2), 89–92.
41. Ong MC, Menier D, Shazili NAM & Dupont V (2012) Geochemistry of Metallic Trace Elements in Surficial Sediments of the Gulf of Morbihan, Brittany, France. *Journal of Applied Sciences*, Vol. 12(21), 2215–2224.
42. Ong MC, Kamaruzzaman BY & Noor Azhar MS (2012) Sediment Characteristic Studies in the Surface Sediment from Kemaman Mangrove Forest, Terengganu, Malaysia. *Oriental Journal of Chemistry*, Vol. 28(4), 1639–1644.
43. Ong MC, Shazili NAM, Menier D, Effendy AWM (2013) Levels of Trace Elements in Tissue of *Ostrea edulis* and *Crassostrea gigas* from Quiberon Bay, Brittany, France. *Journal of Fisheries and Aquatic Science*, Vol. 8(2), 378–387.
44. Ong MC, Menier D, Shazili NAM, Kamaruzzaman BY (2013) Geochemical Characteristic of Heavy Metals Concentration in Sediments of Quiberon Bay Waters, South Brittany, France. *Oriental Journal of Chemistry*, Vol. 29(1), 39–45.
45. Nor Antonina A, Shazili NAM, Kamaruzzaman BY, Ong MC, Rosnan Y, Sharifah FN (2013) Geochemistry of the Rare Earth Elements (REE) Distribution in Terengganu Coastal Waters : A Study Case from Redang Island Marine Sediment. *Open Journal of Marine Science*, Vol. 3(3), 154–159.
46. Ong MC, Yong JC, Khoo XY, Tan YF & Joseph B (2014) Selected Heavy Metals and Polycyclic Aromatic Hydrocarbon in Commercial Fishes Caught from UMT Enclosed Lagoon. *Advances in Environmental Biology*, 8(14), 91–98.
47. Ong MC, Joseph B, Shazili NAM, Ghazali A & Mohamad MN (2015) Heavy Metals Concentration in Surficial Sediments of Bidong Island, South China Sea off the East Coast of Peninsular Malaysia. *Asian Journal of Earth Science*, 8(3), 74–82.

48. Ong MC, Tan YF, Khoo XY & Yong JC (2015) Heavy Metals and Polycyclic Aromatic Hydrocarbon (PAHs) Concentration in Mud Crab (*Scylla serrata*) from UMT Mangrove, Terengganu, Malaysia. *Advances in Environmental Biology*, 9(21), 66–73.
49. Ong MC, Chai WY, Gan SL & Joseph B (2015) Concentration of Heavy Metals in Green-Lipped Mussel (*Perna veridis*) from Muar Estuary, Johor. *Advances in Environmental Biology*, 9(21), 74–80.
50. Ong MC, Fok FM, Sultan K, & Joseph B (2016) Distribution of Heavy Metals and Rare Earth Elements in the Surface Sediments of Penang River Estuary, Malaysia. *Open Journal of Marine Science*, 6(1), 79–92.
51. Fok FM, Ong MC & Lim CL (2016) Determination of Total Organic Carbon Concentration in Surficial Sediments of Sungai Juru and Sungai Tengah, Penang, Malaysia. *Middle-East Journal of Scientific Research*, 24(4), 1470-1476.
52. Ong MC, Wan Jamil WMI & Joseph B (2016) Vertical Profile of Heavy Metals Concentration in Core Sediments of Sungai Muar, Johore, Malaysia. *Middle-East Journal of Scientific Research*, 24(4), 1457-1464.
53. Ong MC, Fok FM & Yong JC (2016) Determination of Total Organic Carbon Concentration in Surficial Sediments of Sungai Pinang, Penang, Malaysia. *Malaysian Journal of Analytical Sciences*, 20(6), 1318-1328.
54. Ong MC & Gan SL (2016) Heavy Metals Concentration in Four Landed Elasmobranchs from Kuala Terengganu Waters, Malaysia. *International Journal of Applied Chemistry*, 12(4), 761-772.
55. Ong MC, Kamaruzaman MI, Siti Noorhidayah A & Joseph B (2016) Trace Metals in Highly Commercial Fishes Caught Along Coastal Water of Setiu, Terengganu, Malaysia. *International Journal of Applied Chemistry*, 12(4), 773-784.
56. Ong MC & Amalina I (2016) Determination of Selected Metallic Element in Marsh Clam, *Polymesoda expansa*, Collected from Tanjung Lumpur Mangrove Forest, Kuantan, Pahang. *Borneo Journal of Marine Science & Aquaculture*, 1(1), 65–70.
57. Ong MC & Gan SL (2017) Assessment of Metallic Trace Elements in the Muscles and Fins of Four Landed Elasmobranchs from Kuala Terengganu Waters, Malaysia. *Marine Pollution Bulletin*, 124(2), 1001–1005.
58. Ong MC, Kamaruzaman MI, Yong JC, Kamaruzzaman BY & Joseph B (2017) Metals Contamination Using *Polymesoda expansa* (Marsh Clam) as Bio-indicator in Kelantan River, Malaysia. *Malaysian Journal of Analytical Sciences*, 21(3), 597–604.
59. Kamaruzzaman BY, Miskon F, Fikriah F, Rahman MM, Ong MC, Shaari H (2017) Rare Earth Elements Behaviour at West Coast of Peninsular Malaysia Rocky Shore Ecosystem Using *Saccostrea cucullata* as Bioindicator. *Asian Journal of Chemistry*, 29(10), 2211–2215.
60. Ong MC, Nor Amalina MA, Shazili NAM & Joseph B (2017) Selected Heavy Metals Concentration in Edible Tissue of the Mud Crab (*Scylla serrata*) from Setiu Wetlands, Terengganu. *Journal of Sustainability Science & Management*. 12(2), 112–118.
61. Ong MC, Norhazirah AA, Shazili NAM & Kamaruzzaman BY (2018) Selected heavy metals content in commercial fishes at different season landed at Fisheries Development Authority of Malaysia Complex (LKIM) Complex, Kuala Terengganu, Malaysia. *Journal of Sustainability Science and Management*, 13(S15), 29–38.

62. Joseph B, Adiana G, Shazili NAM, Ong MC, Juahir H, Shari H, Yii MW, Kamarudin MKA, Gasim MB, Maulud KNA, Mir Sujaul Islam (2018) The Evaluation of Brunei Bay Sediment Cores Sedimentation Rate Using  $^{210}\text{Pb}$  Radiometric Dating Technique. *International Journal of Engineering & Technology*, 7(3.14), 107–114.
63. Ariffin MM, Adiana G, Joseph B, 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*, 27, 104806.
64. Tengku Nur Alia TKA, 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*, 35(3), 1187–1194.
65. Sani NA, Shazili NAM, Ong MC & Arai T (2019) Levels of Non-Essential (Cd, Pb and Hg) Elements in Muscle Tissues of *A. bicolor bicolor* McClelland 1844 from Kedah and *A. bengalensis bengalensis*, Gray 1831 from Perak and Human Consumption Risks. *Malaysian Journal of Health Science*, 17(2), 63–72.
66. Raveena K, Arularasu M, Ganesan SSK, Amelia TSM, Ong MC, Bhubalan K (2019) Screening of rhamnolipid produced by marine bacterium for heavy metal removal in mangrove soil. *Universiti Malaysia Terengganu Journal of Undergraduate Research*, 1(4), 29-36.
67. Shamsudin AA, Suratman S, Shazili NAM, Ong MC & Rahim MFA (2020) Determination of heavy metal concentrations in sediment of Kemaman River Estuary, Terengganu. *Malaysian Journal of Analytical Sciences*, 24(1), 125-133.
68. Tengku Nur Alia TKA, Hing LS, Sim SF, Pradit S, Ahmad A & Ong MC (2020) Comparative study of raw and cooked farmed sea bass (*Lates calcarifer*) in relation to metal content and its estimated human health risk. *Marine Pollution Bulletin*, 153, 111009.
69. Poong JH, Tee LS, Evonne T, Yip TH, Muhammad Hasbi R, Abd Rahman AH, Ahmad A, Chen MH, Lam CWJ & Ong MC (2020) Level of heavy metals in Bamboo Sharks (*Chiloscyllium* sp.) in Straits of Malacca, Malaysia. *Malaysian Journal of Analytical Sciences*, 24(4), 546-557.
70. Norhazirah AA, Shazili NAM, Kamaruzzaman BY, Sim SF, Ahmad A & Ong MC (2020) Heavy metals in Tuna species and potential consumer health risk: A review. *IOP Conference Series: Earth and Environmental Science*, 494, 012013.
71. Norhazirah AA, Adiana G, Kamaruzzaman BY, Annual ZF, Ahmad A & Ong MC (2020) Longtail Tuna (*Thunnus tonggol*) consumption frequency in Terengganu, Malaysia. *Open Journal of Marine Science*, 10, 141–148.
72. Nur Marni Z, Lee HW, Mohamed KN, Sabuti AA, Suratman S & Ong MC (2020) Datasets on spatial and temporal distribution of heavy metals concentration in recent sediment at Merang River system, Terengganu, Malaysia. *Data in Brief*, 31, 105900.
73. Joseph B, Adiana G, Ong MC, Shazili NAM & Shaari H (2020) Scrutinizing the anthropogenic metals in the Brunei Bay sediment cores off the Malaysian waters. *Environmental Earth Sciences*, 79, 452.
74. Hing LS, Abd Halim Shah MNM, Mohd Yusoff N & Ong MC (2020) Fractionation of As, Co, Cu and Zn by sequential extraction in surface sediment of Kuala Terengganu River Estuary. *Malaysian Journal of Applied Sciences*, 5(2), 57-68.

75. Amelia TSM, Khalik WMAWM, Ong MC, Shao YT, Pan HJ & Bhubalan K (2021) Marine microplastics as vectors of major ocean pollutants and its hazards to the marine ecosystem and humans. *Progress in Earth and Planetary Science*, 8, 12.
76. Ong MC, Pan HJ, Shazili NAM, Menier D, Dupont V, Revillon S & Connell A (2021) Heavy metals concentration in sediments of South Brittany Waters, France: An ecological risk assessment approach. *Open Journal of Marine Science*, 11(1), 55-68.
77. Norhazirah AA, Shamsudin AA, Adiana G, Ahmad NI, Ali A & Ong MC (2021) Comparison of proximate composition of raw and cooked intramuscle tissue of *Thunnus tonggol* from Terengganu, Malaysia. *Pertanika Journal of Science and Technology*, 21(1), 629-639.

### Conference Publication

1. Ong MC, Kamaruzzaman BY, Noor Azhar MS, Rosnan Y & Nor Hizam HAG (2006) Seasonal Surface Sediment Characteristic of the Major Estuarine Mangrove Forest in Terengganu Region, Malaysia. *International Conference on Coastal Oceanography & Sustainable Marine Aquaculture (ICCOSMA)*. May 2–3. Kota Kinabalu, Sabah.
2. Kamaruzzaman BY, Ong MC & Nor Hizam HAG (2006) The Pollution Status of the Selected Heavy Metals in Mengabang Telipot River Surrounding Kolej Universiti Sains & Teknologi Malaysia (KUSTEM), Terengganu. *International Conference on Coastal Oceanography & Sustainable Marine Aquaculture (ICCOSMA)*. May 2–3. Kota Kinabalu, Sabah.
3. Ong MC, Kamaruzzaman BY, Noor Azhar MS & Rosnan Y (2006) Seasonal Surface Sediment Characteristic of the Major Estuarine Mangrove Forest in Terengganu Region, Malaysia. *KUSTEM 5<sup>th</sup> Annual Seminar on Sustainability Science & Management*. May 2–3. Kuala Terengganu, Terengganu.
4. Kamaruzzaman BY, Airiza Z & Ong MC (2006) The Sediment Geochemical Proxy of Some Chemical Elements in Dungun and Paka Mangrove Forest in Terengganu, Malaysia. *KUSTEM 5<sup>th</sup> Annual Seminar on Sustainability Science & Management*. May 2–3. Kuala Terengganu, Terengganu.
5. Kamaruzzaman BY, Syalindran S & Ong MC (2006) The Geochemical Profile in Sediment of Marang Mangrove Forest, Terengganu. *KUSTEM 5<sup>th</sup> Annual Seminar on Sustainability Science & Management*. May 2–3. Kuala Terengganu, Terengganu.
6. Vijayendran G, Kamaruzzaman BY, Effendy AWM, Siti ZA & Ong MC (2006) Investigation of Acute Toxicity of Copper, Zinc and Lead on Nile Tilapia (*Oreochromis niloticus*) Fingerlings. *KUSTEM 5<sup>th</sup> Annual Seminar on Sustainability Science & Management*. May 2–3. Kuala Terengganu, Terengganu.
7. Kamaruzzaman BY, Ong MC, Noor Azhar MS, Effendy AWM and Ridzwan H (2007) Geochemistry of Sediment in the Major Estuarine Mangrove Forest of Terengganu Region, Malaysia. *International Symposium on Sediment Quality Assessment (SQA7)*. November 28–30. Hong Kong.
8. Kamaruzzaman BY, Ong MC, Shahbudin S, Jalal KCA & Joseph B (2008) Distribution and Accumulation of Heavy Metals in the Surface Sediment of South China Sea East Coast

- Coastal Water, Malaysia. *South China Sea Conference*. November 25–29. Kuantan, Pahang.
9. Kamaruzzaman BY, Rina SZ, Jalal KCA, Ong MC & Joseph B (2008) Accumulation of Selected Heavy Metals (Cu, Pb and Zn) in Marine Commercial Fishes of Pahang Coastal Waters, Malaysia. *Simposium Kimia Analisis Malaysia (SKAM-21)*. November 26-28. Kota Kinabalu, Sabah.
  10. Kamaruzzaman BY, Nurulnadia MY, Noor Azhar MS, Ong MC & Joseph B (2008) Heavy Metal Concentration in the Surface Sediment of Tanjung Lumpur Mangrove Forest, Kuantan, Pahang, Malaysia. *Simposium Kimia Analisis Malaysia (SKAM-21)*. November 26–28. Kota Kinabalu, Sabah.
  11. Kamaruzzaman BY, Siti Waznah A, Ong MC & Shahbudin S (2008) Variability of Organic Carbon Content in Bottom Sediment of Pahang River Estuary, Pahang, Malaysia. *Simposium Kimia Analisis Malaysia (SKAM-21)*. November 26–28. Kota Kinabalu, Sabah.
  12. Ong MC, Kamaruzzaman BY, Effendy AWM & Joseph B (2009) Trace Metal in Muscle, Gills and Stomach of Fish Species Caught at UMT Water Body in Relation to Body Length and Weight. *Annual Seminar on Marine Science & Aquaculture*. March 11–13. Kota Kinabalu, Sabah.
  13. Ong MC & Kamaruzzaman BY (2009) Spatial Distribution of Total Organic Carbon in Surficial Sediment of Kuantan River Estuary, Kuantan, Pahang. *UMT 8th International Annual Symposium on Sustainability Science & Management (UMTAS)*. May 3–4. Kuala Terengganu, Terengganu.
  14. Kamaruzzaman BY, Nurulnadia MY, Shahbudin S, Jalal KCA, Shazili NAM, Ong MC (2009) Vertical Variation of Lead, Copper, Manganese and Cobalt in Tanjung Lumpur Mangrove Forest, Pahang, Malaysia. *UMT 8th International Annual Symposium on Sustainability Science & Management (UMTAS)*. May 3–4. Kuala Terengganu, Terengganu.
  15. Ong MC & Kamaruzzaman BY (2008) Lead, Copper, Zinc and Cobalt Accumulation in Surface Sediment at Marang Mangrove Forest, Terengganu, Malaysia. *International Conference on Environment*. December 15–17. Penang.
  16. Joseph B, Ong MC & Shazili NAM (2010) An Assessment of Heavy metal Contamination in Surficial Sediment from Bidong Island, South China Sea East Coast Water, Malaysia. *UMT 9th Annual Seminar on Sustainability Science & Management (UMTAS)*. May 8–11. Kuala Terengganu, Terengganu
  17. Ong MC, Menier D, Noor Azhar MS, Dupont V & Révillon S (2012) Occurrence and distribution of selected heavy metals in the surface sediments of South Brittany coastal waters: an assessment using pollution indicators. *European Geosciences Union (EGU) General Assembly*. April 22–27. Vienna, Austria.
  18. Ong MC, Menier D, Dupont V, Noor Azhar MS & Effendy AWM (2012) Biomonitoring of trace element contamination in the South Brittany coastal waters (France), using oyster *Crassostrea gigas*, a local food source Paper presented at *International Conference on Environment, Agriculture and Food Sciences*. August 11–12. Phuket, Thailand.

19. Ong MC, Shazili NAM & Menier D (2013) Assessment of the Environmental Significance of Metallic Elements Pollution in Surficial Sediments of South Brittany Waters, France: An Ecological Risk Assessment. *7th International Conference on Marine Pollution and Ecotoxicology*. June 17–21. Hong Kong
20. Ong MC, Yong JC, Khoo XY, Tan YF, Shazili NAM & Joseph B (2014) Selected Heavy Metal and Polycyclic Aromatic Hydrocarbon in Commercial Fishes Caught from UMT Enclosed Lagoon, Terengganu, Malaysia. *International Conference on Environmental and Biological Sciences*. September 26–17. Krabi, Thailand.
21. Ong MC, Aziz NA, Shazili NAM & Joseph B (2015) Selected Heavy metals in Commercial Fish Landed at LKIM Pulau Kambing, Kuala Terengganu, Malaysia. *International Conference on Marine Science and Aquaculture*. March 17–19. Kota Kinabalu, Sabah.
22. Ong MC, Ismail N, Chai WY, Gan SL & Joseph B (2015) Potential Risk Assessment of Heavy Metal by Consuming Shellfish Collected from Muar Estuary, Johore, Malaysia. *International Conference on Biodiversity, Ecology and Conservation of Marine Ecosystem*. June 1–4. Hong Kong, China.
23. Ong MC, Nur Syafawati H, Shazili NAM, Joseph B & Nur Amirah Hidayah M (2016) Distribution of Heavy Metals Content in Surficial Sediment in Coastal Vicinity off Malacca Straits. *8th International Conference on Marine Pollution and Ecotoxicology*. June 20–24. Hong Kong, China.
24. Ong MC & Gan SL (2016) Assessment of Heavy Metals in the Muscle and Fins of Four Landed Shark from Kuala Terengganu Waters. *8th International Conference on Marine Pollution and Ecotoxicology*. June 20–24. Hong Kong, China.
25. Ong MC (2017) Accumulation of Metallic Elements in Squid Collected from Setiu Coastal Waters, Terengganu: Risk Assessment for Human Health. *International Conference on Marine Science and Aquaculture*. March 14–15. Kota Kinabalu, Sabah.
26. Ong MC & Shazili NAM (2017) Influence of the Sungai Setiu system on the spatial variation of metallic trace elements content in the Setiu nearshore recent sediments. *The 10<sup>th</sup> WESTPAC International Scientific Conference*. April 17-20. Qingdao, China.
27. Fok FM & Ong MC (2017) Assessment of selected metallic elements contamination in the surficial sediments among the six major Penang rivers, west coast of Peninsular Malaysia. *The 10th WESTPAC International Scientific Conference*. April 17-20. Qingdao, China.
28. Kamaruzaman MI & Ong MC (2017) Assessment of trace metal elements in commercial fish and its safety intake along Setiu coastal water, Terengganu, Malaysia. *The 10th WESTPAC International Scientific Conference*. April 17-20. Qingdao, China.
29. Gan SL & Ong MC (2017) Analysis of selected metallic trace elements in the different tissues of sharks collected along east coast, Peninsular Malaysia. *The 10th WESTPAC International Scientific Conference*. April 17-20. Qingdao, China.
30. Wan Jamil WMI, Ong MC, Shazili NAM, Mohamed CAR, Sabuti AA (2017) Estimation of Sedimentation Rate and Age of Sediment by Using Lead-210 (<sup>210</sup>Pb) as Radioactivity Tracers in Core Sediment of Sungai Muar, Johor, Malaysia. *The 10th WESTPAC International Scientific Conference*. April 17-20. Qingdao, China.

31. Ong MC (2017) Accumulation of Toxic and Essential Metallic Elements in Edible Bivalves Collected from Muar River Estuary, Johor, Malaysia. *International Conference of Analytical Sciences (SKAM30)*. August 26-29. Malacca.
32. Ong MC (2018) Geochemical Study on South China Sea Recent Sediments Along the East Coast of Peninsular Malaysia. *International Workshop on Marine Coastal Ecosystem and Ecotoxicology*. March 10-11. Guangzhou, China.
33. Ong MC (2018) Marine Pollution In Tropical Aquatic Environment: A Review Of Metallic Elements In Sediments And Aquatic Organism. *International Conference on Marine Science and Aquaculture (ICOMSA)*. March 14-16. Kota Kinabalu, Sabah.
34. Tengku Nur Alia TKA & Ong MC (2018) Bioaccumulation of Some Metallic Elements in Farmed *Lates calcarifer* in Tropical Coastal Lagoons. *International Conference on Marine Science and Aquaculture (ICOMSA)*. March 14-16. Kota Kinabalu, Sabah.
35. Fok FM & Ong MC (2018) Total Metallic Elements during Wet and Dry Seasons at the Bottom Sediment from Sungai Juru, Penang. *International Conference on Marine Science and Aquaculture (ICOMSA)*. March 14-16. Kota Kinabalu, Sabah.
36. Lee HW & Ong MC (2018) Spatial Distribution Of Metallic Elements In Surficial Sediment Of Sungai Merang. *International Conference on Marine Science and Aquaculture (ICOMSA)*. March 14-16. Kota Kinabalu, Sabah.
37. Imran Luqman MH & Ong MC (2018) Assessment Of Selected Metallic Element Uptake By *Holothuria Atra* (Lollyfish). *International Conference on Marine Science and Aquaculture (ICOMSA)*. March 14-16. Kota Kinabalu, Sabah.
38. Ong MC (2018) Accumulation of heavy Metals Content in Commercial Crab Collected from Johor Straits, Malaysia. *International Conference of Analytical Sciences (SKAM31)*. August 17-19. Kuantan, Pahang.
39. Norhazirah AA & Ong MC (2018) Heavy Metals in Tuna Species Meat and Potential Consumer Health Risk: A Review. *Tropical Ocean and Marine Sciences International Symposium 2018 (TOMSY2018)*. October 30-31. Kuala Terengganu, Terengganu.
40. Ong MC (2019) A Review of Heavy Metals in Sediment and Living Organisms in Malaysia Tropical Lagoon Ecosystem. *9<sup>th</sup> International Conference on Marine Pollution and Ecotoxicology*. June 10-14. Hong Kong, China.
41. Ong MC (2019) Heavy Metals Concentration in the Landed Sharks Along East Coast of Peninsular Malaysia. *3<sup>rd</sup> International Conference on Quaternary and Future Earth (ICQFE)*. June 26-27. Keelung, Taiwan.
42. Poong JH & Ong MC (2019) Heavy Metals Level in Bamboo Sharks (*Chiloscyllium* sp.) in Straits of Malacca, Malaysia. *32<sup>th</sup> International Conference of Analytical Sciences (SKAM-32)*. August 14-16. Port Dickson, Negeri Sembilan.
43. Ong MC (2020) Marine Pollution in Malaysia Aquatic Environment: A Review of Heavy Metals in Sediments and Living Organisms. *International Forum on Geoscience and Oceanography (IFGO)*. April 24-26. Zhangjiajie, China (Webinar).

## Other Outputs

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

1. Ong Meng Chuan (2003). *A Study of Some Physico-chemical Parameters in the Terengganu River Estuary System, Terengganu*. Undergraduate Thesis. Faculty of Science and Technology, Kolej Universiti Sains dan Teknologi Malaysia. 199p.
2. Ong Meng Chuan (2006). *Geochemistry of Sediment and Heavy Metals in the Major Estuarine Mangrove Forest of Terengganu, Malaysia*. Master Thesis. Faculty of Science and Technology, Kolej Universiti Sains dan Teknologi Malaysia. 100p.
3. Ong Meng Chuan (2012). *Evaluation and Mapping of Metallic Trace Elements in Surficial Sediments and Oysters from Quiberon Bay and Gulf of Morbihan, Brittany, France*. Doctor of Philosophy Thesis, Geosciences Marines et Geomorphologie du Littoral, Universite de Bretagne Sud, France. 78p.
4. Assoc. Prof. Dr. Kamaruzzaman Yunus; Assoc. Prof. Dr. Shahbudin Saad; Assoc. Prof. Dr. Ahmed Jalal Khan Chowdhury; Assoc. Prof. Dr. Arokiaraj Pappasamy; Ong Meng Chuan. 2008. THE OCEANOGRAPHER. Vol. 2(1). INOCEN, IIUM.
5. Assoc. Prof. Dr. Kamaruzzaman Yunus; Assoc. Prof. Dr. Shahbudin Saad; Assoc. Prof. Dr. Ahmed Jalal Khan Chowdhury; Assoc. Prof. Dr. Arokiaraj Pappasamy; Ong Meng Chuan. 2008. THE OCEANOGRAPHER. Vol. 2(2). INOCEN, IIUM.
6. Kamaruzzaman Yunus & Ong Meng Chuan. Estuary. In THE OCEANOGRAPHER. 2008. Vol. 2(1). INOCEN, IIUM. Page 20-21.
7. Ong MC & Kamaruzzaman BY (2019) Sediment and Organisms as Marker for Metal Pollution. Monitoring of Marine Pollution. InTech Open, 57-75.
8. Ong MC & Kamaruzzaman BY (2019) Metals pollution in Tropical Wetlands. Wetlands Management – Assessing Risk and Sustainable Solutions. InTech Open, 29-44.

## SUPERVISION

### Doctor of Philosophy Degree

Thesis Title : Studies on Selected Metals (Pb, Cd, Fe, Se, Ni, As, Zn and Hg) Accumulation in Tropical eels *Anguilla* sp. (*Anguilla bicolor bicolor* and *Anguilla bengalensis bengalensis*) of Malaysia.

Student Name : Noraifaa bt Abdullah Sani

Role : Co-supervisor

Status : Completed

Thesis Title : Geochemistry of Elements in the Sediment Core of Brunei Bay, Borneo

Student Name : Joseph Anak Bidai

Role : Main Supervisor

Status : On-going



Thesis Title : Heavy metals in *Thunnus tonggol* form Terengganu Water.  
Student Name : Norhazirah Abdul Aziz  
Role : Main Supervisor  
Status : On-going

Thesis Title : Effects of coastal hydrodynamic activity on polychaetes communities in Terengganu river estuary, Malaysia.  
Student Name : Nur Fazne Ibrahim  
Role : Co-supervisor  
Status : On-going

Thesis Title : Isolation, characterisation and heterologous expression of novel phosynthase genes from bacterial metagenome in selected marine sponges for bioplastic synthesis.  
Student Name : Amelia Tan Suet May  
Role : Co-supervisor  
Status : On-going

#### Master Degree

Thesis Title : Selected Heavy Metals Content in Commercial Fish from Pulau Kambing, Kuala Terengganu, Malaysia  
Student Name : Norhazirah bt Abd Aziz  
Role : Main Supervisor  
Status : Completed

Thesis Title : Heavy Metals Pollution in Sediments of Penang Rivers (Pinang, Perai, Juru, Jejawi and Kerian Rivers)  
Student Name : Fok Fei Mei  
Role : Main Supervisor  
Status : Completed

Thesis Title : Accumulation of Metallic Elements in Commercial Fish Species of Setiu Coastal Waters, Terengganu as Pollution Bioindicator  
Student Name : Muhammad Izzat b Kamaruzaman  
Role : Main Supervisor  
Status : Completed

Thesis Title : Determination of Heavy Metals Concentration, Sedimentation Rate and Total Organic Carbon in the Sediment of Muar River, Johor, Malaysia  
Student Name : Wan Mohd Ikhran b Wan Jamil  
Role : Main Supervisor  
Status : Completed

Thesis Title : Heavy Metals Concentrations in the Landed Sharks Along East Coast, Peninsular Malaysia  
Student Name : Gan Shi Ling  
Role : Main Supervisor  
Status : Completed

Thesis Title : Accumulation of Toxic and Essential Metallic Elements in Cage Seabass from Setiu Wetlands  
Student Name : Tengku Nur Alia bt Tengku Kamarol Aznam  
Role : Main Supervisor  
Status : Completed

Thesis Title : Seasonal Variation of Metallic Elements Concentration in Bottom Sediments of Sungai Merang, Terengganu, Malaysia  
Student Name : Nur Marni bt Zaini  
Role : Main Supervisor  
Status : Completed

Thesis Title : Analysis of Metallic Elements in Sungai Setiu Sediment for Assessment of Recent Increase in Anthropogenic Activities  
Student Name : Nur Amira Hidayah bt Madzlan  
Role : Main Supervisor  
Status : Completed

Thesis Title : Temporal and Spatial Distribution of Metallic Elements in Surficial Sediment from Sungai Terengganu  
Student Name : Chan Shue Fen  
Role : Main Supervisor  
Status : On-going

## COURSE TAUGHT

- Aquatic Pollution (MMS3202), (Undergraduate), UMT
- Environmental and Development (MMS3002), (Undergraduate), UMT
- Environmental Science (MMS3000), (Undergraduate), UMT
- Marine Science Field Work (MMB3000), (Undergraduate), UMT
- Industrial Training (MMS4992A), (Undergraduate), UMT
- Aquatic Instrumentation and Methodology (MMS3201), (Undergraduate), UMT
- Marine Pollution (MMS3203), (Undergraduate), UMT
- Environmental Pollution (MMS3204), (Undergraduate), UMT
- Tropical Oceanography, (Erasmus TROPIMUNDO Master Coursework), UMT

## LINKS

- SCOPUS 16231417700  
<https://www.scopus.com/authid/detail.uri?authorId=>
- WoS Researcher ID : H8919-2018  
<https://publons.com/researcher/1491800/ong-meng-chuan/>
- Researchgate [https://www.researchgate.net/profile/Ong\\_Chuan3](https://www.researchgate.net/profile/Ong_Chuan3)
- Academia.edu <https://terengganu.academia.edu/OngMengChuan>
- LinkedIn <https://www.linkedin.com/in/meng-chuan-ong-ba5812147/>
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- Google Scholar <https://scholar.google.com/citations?user=ObZTfywAAAAJ&hl=en>
- Facebook UMT Metallic Elements Research Group
- OPEC <http://fssm.umt.edu.my/opec/>

## OTHERS

- Associate Editor, Journal of Sustainability Science and Management (UMT)  
<http://jssm.umt.edu.my>
- Rescue SCUBA Diver (NAUI). Certification No.: ONG80180SRD07