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Certification of Participation

This is to certify that

MOHAMMAD MUSTAFIZUR RAHMAN

has participated in

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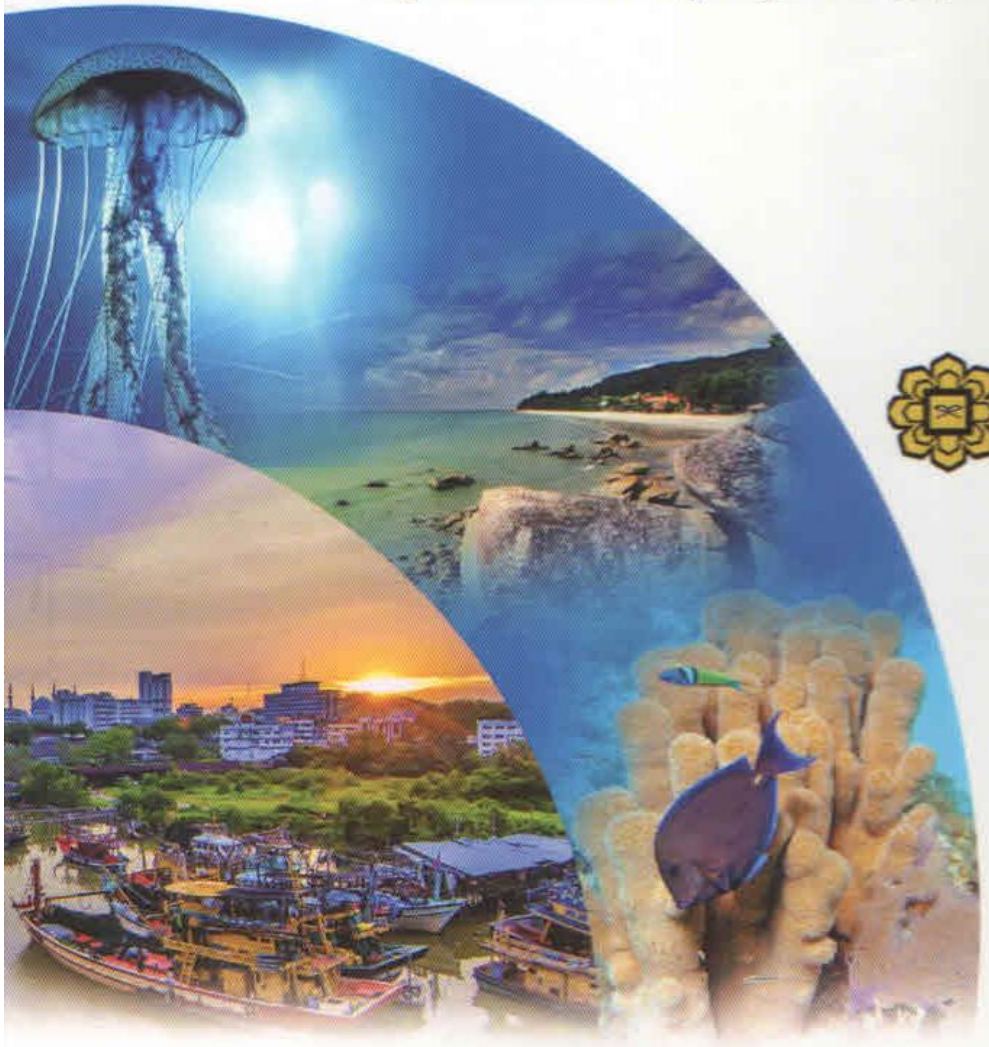

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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Poster Presentation

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VERTICAL DYNAMICS OF BACTERIA IN A TROPICAL TIDAL RIVER

M.M. Rahman[1,*] M.I. Haikal[2], N.S. Khan[2], B.Y. Kamaruzzaman[1]

[1]Department of Marine Science, Kulliyyah of Science, IIUM, Bandar Indera Mahkota, 25200 Kuantan, Pahang, Malaysia
[2]Department of Biotechnology, Kulliyyah of Science, International Islamic University Malaysia (IIUM), Bandar InderaMahkota, 25200 Kuantan, Pahang, Malaysia
**Correspondience: mustafizu.rahman@yahoo.com*

Bacteria play a very important in controlling mineralization of organic matter. Therefore, river ecosystem is greatly influenced by bacterial dynamics. A study was conducted to vertical dynamics of bacterial in the Kuantan River which is influenced by daily tidal activity. For this study water samples were collected from three layers: surface, middle and near bottom. Sediment samples also collected to observed bacterial load in this river sediment. Bacteria were cultured on both nutrient agar and marine agar. Results indicated that more bacteria preferred to grow on marine agar than to grow on nutrient agar. An opposite result was observed in the case of sediment bacteria. They preferred to grow on nutrient agar than to grow on marine agar. Overall gram negative bacteria were higher in number compared to gram positive bacteria. The mean total CFU were higher in middle layer of water compare to water from surface and near bottom.

Keyword: River, sediment, bacteria, vertical dynamics