

DETERMINATION OF SEDIMENT MOVEMENT  
AROUND MERANG COASTLINE

AHMAD TAUFIQ BIN MURAD

FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU  
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d/n 6294

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Ahmad Taufiq Murad.



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UNIVERSITI MALAYSIA TERENGGANU (UMT)  
21638 KUALA TERENGGANU

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**DETERMINATION OF SEDIMENT MOVEMENT  
AROUND MERANG COASTLINE**

**By  
Ahmad Taufiq Bin Murad**

**Research report submitted in partial fulfillment of  
the requirements for the degree of  
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**Department of Marine Science  
Faculty of Maritime Study And Marine Science  
UNIVERSITY MALAYSIA TERENGGANU  
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FAKULTI PENGAJIAN MARITIM DAN SAINS MARIN  
UNIVERSITI MALAYSIA TERENGGANU**

**PENGAKUAN DAN PENGESAHAN LAPORAN  
PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: **Determination of Sediment Movement Around Merang Coastline** oleh **Ahmad Taufiq Bin Murad**, No.Matrik **UK12500** telah diperiksa dan semua pembedaan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah **Sarjana Muda Sains (Sains Samudera)**, Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

Disahkan oleh:

Penyelia Utama

Nama: Prof. Madya Dr. Rosnan Bin Yaacob

Cop Rasmi:

**PROF. MADYA DR. ROSNAN YAACOB**  
Timbalan Pengarah  
Institut Oseanografi  
Universiti Malaysia Terengganu (UMT)  
21030 Kuala Terengganu, Terengganu

Tarikh: 5/5/08

Penyelia Kedua

Nama: Dr. Nor Antonina Bt. Abdullah

Cop Rasmi

**DR. ANTONINA ABDULLAH**  
Lecturer  
Department of Marine Science  
Faculty of Maritime Studies and Marine Science  
Universiti Malaysia Terengganu (UMT)  
21030 Kuala Terengganu.

Tarikh: .....

Ketua Jabatan Sains Marin

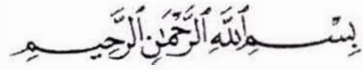
Nama:

Cop Rasmi:

**DR. RAZAK ZAKARIYA**  
Ketua Jabatan Sains Marin  
Fakulti Pengajian Maritim dan Sains Marin  
Universiti Malaysia Terengganu  
(UMT)

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*"This thesis was dedicated to my beloved mum.."*

## ABSTRACT

A study to determine the sediment movement around Merang coastline was conducted on August 2007 to February 2008. The samples were collected on August, November 2007 and February 2008. This study was done to determine the direction of sediment movement along the coast and also to determine the sedimentological characteristic. Furthermore, the changed of beach profile also has been plotted. The sediment was carried out from eight stations located at the beach area which included high tide, middle tide, low tide and swash zone. Two of the stations were located at the river mouth. The sediment distribution resulted from this study shows the sediment can be categorized as moderately well sorted, moderately sorted and poorly sorted. The sediment also very negatively skewed, negatively skewed, positiveely skewed and symmetrical skewed. Also, the sediment was extremely leptokurtic and leptokurtic. The beach profile at each beach station was changed due to the sampling time. The direction of Net shore drift was deternimed by using some indicator such as the average of mean and sorting value at mid tide at each beach station, beach width and beach slope. Maximum beach width recorded was 28.67 meter. The average of beach slope at each station was between  $5.42^\circ$  and  $15.32^\circ$ .