

A STUDY ON BEACH PROFILE AND SEDIMENT CHARACTERISTICS
IN RESPONSE TO MONSOONAL CHANGES AT
CAHAYA BULAN BEACH, KELANTAN

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CAHAYA BULAN BEACH, KELANTAN**

**By
NUR LIYANA BINTI FAUZI**

**Research report submitted partial fulfillment of the requirement for the Degree of
Bachelor of Science (Marine Science)**

**DEPARTMENT OF MARINE SCIENCE
FACULTY OF MARITIME STUDY AND MARINE SCIENCE
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DECLARATION AND VERIFICATION REPORT
FINAL YEAR RESEARCH PROJECT

It is hereby declared and verified that this research report entitled:

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LIST OF ABBREVIATIONS

ABBREVIATIONS

HT	High tide
MT	Mid tide
LT	Low tide
°	Degree
'	Minute
”	Second
N	North
E	East
S	South
W	West
m	Metre
km ²	Square kilometre
°C	Degree Celcius
cm	Centimetre
%	Percent
ms ⁻¹	Metre per second
km	Kilometre
g	Gram
µm	Micrometre
Φ	Phi
mm	Milimetre

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ABSTRACT

A study on beach profile and sediment characteristics was conducted along the Cahaya Bulan Beach, Kelantan. The beach profile measurement and sediment samples were taken on June 2011, October 2011 and March 2012. The objectives of this study were to determine the beach profile and sediment characteristics of Cahaya Bulan Beach in response to monsoonal changes and to study the relationship between beach profile and sediment characteristics of study area. Result showed study area experiencing deposition on October 2011 and erosion on March 2012 at major parts of the beach. The sediment at study area consisted of coarse to very coarse sand with sorting, skewness and kurtosis characteristics that changes in range of poorly sorted to moderately well sorted, very negatively skewed to positively skewed and very leptokurtic to extremely leptokurtic. The changes of beach profile and sediment characteristics at study area mostly influenced by Southwest Monsoon and the presence of rock revetment there.

Satu Kajian Mengenai Profil Pantai dan Ciri-ciri Enapan dalam Tindakbalas Terhadap
Perubahan Monsun di Pantai Cahaya Bulan, Kelantan

ABSTRAK

Satu kajian mengenai profil pantai dan ciri-ciri enapan telah dijalankan sepanjang Pantai Cahaya Bulan, Kelantan. Pengukuran profil pantai dan sampel enapan telah diambil pada Jun 2011, Oktober 2011 dan Mac 2012. Objektif kajian ini adalah untuk menentukan profil pantai dan ciri-ciri enapan di Pantai Cahaya Bulan dalam tindakbalas terhadap perubahan Monsun dan untuk mengkaji hubungan antara profil pantai dan ciri-ciri enapan di kawasan kajian. Keputusan menunjukkan kawasan kajian telah mengalami timbunan pada Oktober 2011 dan hakisan pada Mac 2012 di sebahagian besar pantai tersebut. Enapan di kawasan kajian terdiri daripada pasir kasar dan sangat kasar dengan ciri-ciri sisihan, kepencongan dan kurtosis yang berubah dalam kadar sisihan tidak sempurna kepada sisihan pertengahan paling sempurna, kepencongan paling negatif kepada kepencongan positif dan sangat leptokurtik kepada leptokurtik ekstrem. Perubahan profil pantai dan ciri-ciri enapan di kawasan kajian adalah kebanyakannya dipengaruhi oleh Monsun Baratdaya dan juga terdapatnya revetmen batu di sana.