



# BULLETIN OF THE MARINE GEOLOGY



The Cretaceous of methasediment rock outcrop of outer island (Sekatung-Laut Island) of Indonesian Archipelago (by Budiono, K., 2011)

- IDENTIFICATION OF HARD ROCK BASED ON SHALLOW SEISMIC INTERPRETATION AND SPT TEST FOR FOUNDATION OF BRIDGE AT BALANG ISLAND, BALIK PAPAN BAY, EAST KALIMANTAN  
By : Ediar Usman and Kris Budiono . . . . . 1-14
- LITOSTRATIGRAPHIC AND SEDIMENTOLOGICAL SIGNIFICANTS OF DEEPENING MARINE SEDIMENTS OF THE SAMBIPITU FORMATION GUNUNG KIDUL RESIDENCE, YOGYAKARTA  
By : Surono and Asep Permana . . . . . 15-30
- ABNORMAL MICROFAUNAL SHELLS AS EARLY WARNING INDICATOR OF ENVIRONMENTAL CHANGES SURROUNDING BERAU DELTA, EAST KALIMANTAN  
By : Kresna Tri Dewi, Yusuf Adam Priohandono and A. Masduki . . . . 31-40
- FAULT PATTERN AND ACTIVE DEFORMATION OF OUTER ARC RIDGE OF NORTHWEST OF SIMEULUE ISLAND, ACEH, INDONESIA  
By : Permana, H., Hirata, K., Fujiwara, T., Udrek, Gaffar, E.Z., Kawano, M., and Djajadihardja, Y.S . . . . . 41-49
- ABRASION WAVE OBSTRUCTS TOURISM DEVELOPMENT IN COASTAL REGIONS OF BINUANGEUN, LEBAK - BANTEN  
By : Delyuzar Ilahude, Udaya Kamiludin and Abdul Wahib . . . . . 51-63

## **INSURED EDITOR**

Director of Marine Geological Institute

## **VICE CHIEF OF INSURED EDITOR**

Head of Afiliation Division

## **CHIEF OF EDITORIAL BOARD**

Kris Budiono, M.Sc.

## **VICE CHIEF OF EDITORIAL BOARD**

DR. Susilohadi

## **EDITORIAL BOARDS**

Dra. Kresna Tri Dewi, M.Sc. (*micropaleontologist*)

Ir. Hananto Kurnio, M.Sc. (*marine sedimentologist*)

Ir. Ediar Usman, MT. (*marine geologist*)

Ir. Noor Cahyo Dwi Aryanto, MT. (*marine mineralogist*)

## **SCIENTIFIC REVIEWERS**

Prof. Ris. DR. Ir. Udi Hartono (*petrologist*)

DR. Hermes Panggabean, M.Sc. (*sedimentologist-fossil Fuel*)

DR. Ir. Edi Prasetyo Utomo (*exploration geophysicist*)

## **PUBLISHER BOARDS**

Asep Makmur, S.Si. (*Chief*)

Ir. Andy H. Sianipar, M.Si.

Ir. I Wayan Lugra

Sutisna

For communication of this publications, please contact :

MARINE GEOLOGICAL INSTITUTE

Jalan Dr. Junjuran 236, Bandung-40174, Indonesia

Telephone : +62-22-6032020, 6032201, Fax : +62-22- 6017887

E-mail : [bulletin@mgi.esdm.go.id](mailto:bulletin@mgi.esdm.go.id)

## **PREFACE**

*Marine Geological Institute of Indonesia (MGI'S) responsibilities are to provide marine geoscientific map, research and information to support sustainable development of Indonesian's mineral and petroleum industries, mapping of Indonesian Coastal and Ocean Territory, identification of marine and coastal geological hazards, and to provide marine and coastal geological and geophysical data base for marine and coastal landscape.*

*In this first issue of year 2011, the number of important information are highlighted involving: identification of hard rock based on shallow seismic reflection interpretation and standard penetration test for foundation of bridge at Balang Island, Balikpapan Bay, East Kalimantan; lithostratigraphic and sedimentological significants of deepening marine sediments of the Sambipitu Formation Gunung Kidul Residence, Yogyakarta; abnormal microfaunal shells as early warning indicator of environmental changes surrounding Berau Delta, East Kalimantan; fault pattern and active deformation of outer arc ridge of northwest of Simeulue Island, Aceh, Indonesia; abrasion wave obstructs tourism development in coastal regions of Binuangeun, Lebak, Banten*

*Editors*

