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GEOLOGICAL AGENCY MINISTRY OF ENERGY AND MINERAL RESOURCES

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### BULLETIN OF THE MARINE GEOLOGY

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# Preface

This year marks the deadline for re-accrediting the Bulletin of the Marine Geology. The publication of its first edition in 2024 is a key component of the re-accreditation process with the Ministry of Education, Culture, Research, and Technology. The Marine Geological Institute credits its editorial board, general division, and legal cooperation and information sub-division for their collaboration in completing the inaugural edition.

Featuring five articles from different scientific disciplines, all written by field experts, the Editorial Board extends its gratitude to all who contributed to the submission and review of papers. The papers tells us an impact of environmental factors on coastal ecosystems, with each topics addresses different aspects of how pollutants, ocean energy, sediment dynamics, heavy metals, and tidal patterns can affect the health and resilience of coastal environments.

The first paper highlights the potential risks of PAH pollutants released into the Indramayu Coast from anthropogenic activities, emphasizing the need for further awareness and periodic monitoring to detect carcinogenic PAHs. The second paper explores the seasonal and intraseasonal variability of ocean thermal energy as a clean energy alternative, with fluctuations ranging between 280.09 GW and 295.65 GW, demonstrating its potential as a renewable energy resource. The third paper emphasizes the importance of understanding sediment dynamics to support the revitalization of ports and ensure the sustainability of port operations through effective solutions. The fourth paper reveals the increased pollution in coral reef environments due to heavy metal lead (Pb) content from rapid industrial development and ship traffic, with surface water Pb concentrations exceeding threshold levels and posing potential harm to the coral reef ecosystem. The last article discusses Tidal Harmonic Analysis and Prediction to support Early Warning for Coastal Flooding, highlighting the importance of accurate tide predictions in providing early warning, mitigation, and adaptation to frequent coastal flooding in at-risk coastal areas.

By submitting research findings to be published in this periodical, you, as top-tier scientists, will help us in our endeavours to make the Bulletin of Marine Geology reputable, prestigious, and respectable. Enjoy reading this edition.

Bandung, June 2024 Warm regards,

Editorial Board

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