

Editorial Note

MARKING THE 75TH VOLUME OF BULLETIN OF THE GEOLOGICAL SOCIETY OF MALAYSIA

It is a pleasure to present to you the 75th volume of the Bulletin of the Geological Society of Malaysia. The inaugural issue of the Bulletin was published in 1967; it carried eight papers by geologists from the colonial era like D.J. Gobbett, C.S. Hutchison, N.S. Haile and P.H. Stauffer, to name a few. They have left a legacy of knowledge that we are now building upon. The first paper of the inaugural volume was from the sole Malaysian contributor, T. Suntharalingam. Over time, the number of Malaysian contributors increased; and the first paper in Malay was published a decade later authored by T.T. Khoo. The Bulletin has since maintained its bilingual documentation of research findings, publishing two volumes annually.

Before digital search functions became the norm, bibliography and index publications served as a ready and convenient reference aid to navigate the vast topics covered in geological sciences. Four such volumes have been published by the Society. Bulletin 2 released in 1968 comprised citations on the geology of West Malaysia and Singapore; Bulletin 30 issued in 1992 contained an annotated bibliography of the geology of the South China Sea and adjacent parts of Borneo; Bulletin 34 encompassed the bibliography and index of all scientific papers in the Bulletin and Warta Geologi, the newsletter of the Society, as well as abstracts of papers presented in the seminars, conferences and symposiums organised by the Society from its foundation till 1993; and Bulletin 50 in 2007 covered similar information from 1994 to 2004. The volumes were compiled by D.J. Gobbett, N.S. Haile, T.F. Ng and R.B. Tate respectively. We record our appreciation to these geologists, who diligently annotated the information for our benefit.

The treasure trove of geological knowledge from Bulletin 1 to 75, and all issues of Warta Geologi is now readily available on the website of the Society. The Geological Society of Malaysia is proud to maintain open access to all articles in the Bulletin, which are distributed under the terms and conditions of the Creative Commons Attribution License 4.0. Authors can self-archive all versions of their work in their own web pages, institutional web pages, and other repositories. All papers are subjected to a double-blind review by at least two reviewers. The standards of ethical behaviour is strictly upheld at all stages of the publication process. Thanks to the leadership of our immediate past Editor, W. H. Abdullah, both the flagship publications of the Society, Bulletin and Warta Geologi, are indexed by Scopus, AAPG Datapages and the MyJurnal/MyCite, the national citation indexing system.

Since its establishment, the Society has elected 10 Editors. They are P. H. Stauffer (1967-1971), B. K. Tan (1972-1973), T.T. Khoo (1974-1976), C.H. Yeap (1977-1978), A. Jantan (1979), G. H. Teh (1980-2004), K. K. Liew (2005), Y. L. Lau (2006-2011), T. F. Ng (2012-2015) and W. H. Abdullah (2016-2022). Collectively, the Editors have overseen the issuance of about 1400 articles covering engineering geology, environmental geology, geochemistry, geomorphology, geophysics, hydrogeology, mining geology, palaeontology, petroleum geology, regional geology, sedimentology, stratigraphy, structural geology and tectonics, among others. While the primary focus is on Southeast Asia, the geographic coverage of papers extend beyond the region, to cover trending research areas related to oil and gas exploration, mining, environment, conservation, geoheritage, geotourism, earthquakes, hazard assessment, disaster risk reduction and climate change. I stand on the shoulder of giants in continuing this excellent tradition of knowledge advancement in geological sciences.

Volume 75 contains seven articles reflecting the range of geological sciences. The first is on a useful approach for quantitative seawater intrusion interpretation from geoelectrical resistivity data for groundwater investigation by Islami *et al.* (2023) in Dumai, Indonesia. Geoelectrical resistivity data is normally interpreted qualitatively and the amount of seawater mixture in an aquifer is not estimated. Islami *et al.* (2023) used the data for predicting the proportion of seawater mixture in a shallow aquifer that is intruded by seawater. The second article in Malay by Hussin *et al.* (2023) is a general review of rock mass classification that has been used intensively for engineering design, specifically for tunnelling. Many classification systems have limited application for rock mass covered by shotcrete due to the masking of discontinuity planes. A new investigation approach and rock mass classification is vital to overcome this limitation. A way forward is to integrate findings from geoelectrical resistivity tomography surveys and engineering geological mapping, to evaluate and continuously monitor the quality of protected rock mass, to prevent localized or global rock mass failure.

The following two articles are outcrop scale case studies. The article on physical characterization of a weathering profile over sheared, biotite-muscovite granite in Selangor, Malaysia is authored by Raj (2023). Geological description was combined with the evaluation of mechanical properties, to classify weathered material on a slope cut close to the 10th milestone of the Kuala Lumpur-Ipoh trunk road. The findings are an addition to previous investigations conducted by the author on characterizing weathering profiles over porphyritic biotite granite and rhyolite. It contributes to the ongoing discourse for a suitable classification of weathering of rock mass in the tropics. The case study of Zaini *et al.* (2023) is on the efficacy of mature *Alstonia Angustiloba* trees in promoting slope stability of problematic and unsaturated soils in Pahang, Malaysia. Changes in climatic conditions caused variations in tree water uptake profiles, particularly when the tree is at the top of the slope. Results show that the presence of a single mature tree contributes greatly to water extraction from the residual soil. Higher tree water uptake led to the greatest increase in the factor of safety of the slope. The use of *Alstonia Angustiloba* represents an eco-friendly approach to prevent slope failures.

The fifth article is on tin mineralization indicators in Kedah, Malaysia by Fauzi & Ariffin (2023). Detailed field mapping and geochemical analysis of stream sediments were conducted in the study area, comprising Late Triassic igneous intrusion and sedimentary rocks of the Carboniferous Kubang Pasu Formation. Findings revealed up to six multi-element anomaly areas with tin as the major constituent. These areas occur primarily in the granitic – sedimentary contact zone within the Sungai Bahoi-Charok Jawa area. Further investigation is required to determine the potential of this area for tin mineralization. The sixth article by Kessler *et al.* (2013) is a synopsis of Upper Tukai Deposits along the Sungai Rait Road in Sarawak, Malaysia. The oldest deposit is dominated by black shale, followed by amalgamated sand sheets, and the youngest lies within a tidal depositional environment. The entire sequence appears to be a shallowing-upwards cycle, leading from subtidal to intertidal realms. Sharp boundaries between the deposits are inferred to abrupt changes in climate, tectonics or sea level change; requiring further investigation.

The seventh and final article is on the mineralogy and geochemistry of prehistoric pottery shards from Gua Kelew in Kelantan, Malaysia authored by Ali *et al.* (2023). Newly discovered by archaeologists, the caves of Gua Kelew is being investigated as a significant prehistoric site for the country. Earthenware samples were analysed for mineral content to determine their provenance. The minerals comprise quartz, calcite and anorthoclase, with a high content of silica and aluminium. Raw materials from nearby areas contain similar minerals, but graph plot analysis of the data indicates differences in the elemental content when compared to clay samples from the surroundings. This suggests that earthenware found in Gua Kelew were not locally produced. This article reflects the ever expanding use of geological methods in multidisciplinary knowledge domains.

I take this opportunity to acknowledge the immediate past Editor for her tremendous service. I also thank the Editorial Board, Assistant Editors and Editorial Management Committee Members for their constant and unwavering assistance. Last but not least, I express my deepest gratitude to all the authors and reviewers of Volume 75 for their contribution. I look forward to all your continuous support in my tenure as the Editor.

Joy Jacqueline Pereira
Editor