

INDONESIAN MINING JOURNAL

Volume 26 Number 1, April 2023

pISSN 0854-9931

eISSN 2527-8797

Accreditation No.: 200/M/KPT/2020

-
- ❖ Evaluation of Rock Slope Using Q-Slope, Limit Equilibrium and Failure Probability at Andesite Mine of Sidomulyo Village
Evaluasi Kestabilan Lereng Batuan Menggunakan Q-Slope, Kesetimbangan Batas dan Probabilitas Longsor pada Tambang Andesit Desa Sidomulyo
Wahyu N. Akbar and Bagus Wiyono 1 - 17

 - ❖ Leaching Optimization of Manganese Ore from North Central Timor Using H₂O₂ as a Reducing Agent
Optimalisasi Pelindian Bijih Mangan Asal Timor Tengah Utara Menggunakan H₂O₂ sebagai Pereduksi
Faustina D.Y.P. Abi, Rachmat T. Tjahjanto and Yuniar P. Prananto 19 - 27

 - ❖ Lithium Extraction from Dieng Geothermal Brine Using Solvent Extraction – A Preliminary Study
Studi Pendahuluan: Ekstraksi Litium dari Fluida Panas Bumi Dieng Melalui Ekstraksi Pelarut
Agus Wahyudi, Andina Septiarani, Hairunnisa and Isyatun Rodliyah 29 - 37

 - ❖ Exploration of Indigenous Arbuscular Mycorrhizal Fungi on *Arenga pinnata* Merr in Post-Mining Land
Eksplorasi Fungi Mikoriza Arbuskula Indigenos pada Arenga pinnata Merr di Lahan Pascatambang
Shaleha I. Samal, Irdika Mansur and Ahmad Junaedi 39 - 47

 - ❖ Study of Supply-Demand of Indonesia Buton Asphalt
Kajian Pemasokan-Kebutuhan Aspal Buton Indonesia
Agus Miswanto, Ijang Suherman, Triswan Suseno and Willy Pravianto 49 - 59

INDONESIAN MINING JOURNAL

Jalan Jenderal Sudirman 623 Bandung 40211, Indonesia
Ph. (022) 6030483 Ext. 285, Fax. (022) 6003373

Indonesian Mining Journal (IMJ) is periodically published in April and October. The journal contains paper, which relates to research and development projects in mineral and coal, i.e. exploration, exploitation, processing, utilization, environment, economics and policy. The editors only accept papers that are relevant to the substance of this publication.

ADVISOR

Head of R&D Centre for Mineral and Coal Technology
Head of Affiliation and Information Division

Editor-in-Chief

Dr. Agus Wahyudi (Testing Center for Mineral and Coal)

MANAGING EDITOR

1. Sri Sugiarti, S.H., M.H. (Testing Center for Mineral and Coal)
2. Deni Nurul Kamal, A.Md. (Testing Center for Mineral and Coal)
3. Andi Achridan Amdari, S.Komp. (Testing Center for Mineral and Coal)

EDITORIAL BOARDS

1. Prof. Dr. Datin Fatia Umar, Ir., MT. (National Research and Innovation Agency - Chemical Engineering/Coal Processing and Utilization)
2. Retno Damayanti, Dra., Dipl. EST. (National Research and Innovation Agency - Chemistry/Mine Environment)
3. Sri Handayani, Dra., M.Sc. (National Research and Innovation Agency - Mineral Biotechnology)
4. Dr. Miftahul Huda, Ir., M.Sc. (National Research and Innovation Agency - Applied Chemical Technique/Coal Beneficiation Technology)
5. Isyatun Rodliyah, S.T., M.Si. (Testing Center for Mineral and Coal - Mineral Processing)
6. M. Ade A. Efendi, S.T., M.Eng. (Testing Center for Mineral and Coal - Coal Beneficiation Technology)
7. Phiciato, Dipl. Ing. (National Research and Innovation Agency - Coal Beneficiation Technology)
8. Prof. Hiroshi Suzuki (Kobe University - Mechanical Engineering)
9. Dr. Jacob Yan Mulyana (Tokyo Metropolitan University - Applied Chemistry)
10. Dr. Winarto Kurniawan (Tokyo Institute of Technology - Chemical Engineering)
11. Prof. Dr. Ir. Surono (Centre for Geological Survey - Mine Geology)
12. Sunbaek Bang, Ph.D. (Mine Reclamation Corporation (MIRECO) - Environmental Engineering)
13. Nurhadi, S.T., M.T. (Testing Center for Mineral and Coal - Coal Processing Technology)
14. Hairunnisa, S.Si., M.Si. (Testing Center for Mineral and Coal - Biochemistry)
15. Wulandari Surono, S.T. (Testing Center for Mineral and Coal - Geology)
16. Hasniati Astika, S.T. (Testing Center for Mineral and Coal - Geology)
17. Ir. Tatang Wahyudi, M.Sc. (National Research and Innovation Agency - Geology/Mineralogy Process)

SCIENTIFIC REVIEWERS

1. Dr. Agus Wahyudi
2. Sri Handayani, Dra., M.Sc.
3. Prof. Dr. Datin Fatia Umar, Ir., MT.
4. Ir. Tatang Wahyudi, M.Sc.

PEER REVIEWERS

1. Dr. Ir. Komang Anggayana, M.S. (Institute of Technology Bandung - Earth's Resources Exploration)
2. Achmad Subardja Djakamihardja, Ir., M.Sc. (Indonesian Science Institute (LIPI) - Rock Geomechanics)
3. Dr. Nana Suwarna (IJOG - Coal Geology)
4. Prof. Dr. Ir. Robert M. Delinom, M.Sc. (Indonesian Science Institute (LIPI) - Geotechnology)
5. Dr. Ir. Dudi Nasrudin Usman, S.T., M.T. (Bandung Islamic University - Mining Engineering)
6. Nendaryono Madiutomo, Ir., M.T. (National Research and Innovation Agency - Mining Technology)
7. Zulfahmi, Ir., M.T. (National Research and Innovation Agency - Underground Mine)
8. Dr. Asep B. Purnama, S.T., M.T. (Testing Center for Mineral and Coal - Geology/Earth's Resources Exploration)
9. Dr. Raden Irvan Sophian, S.T., M.T. (Padjadjaran University - Geotech)
10. Ir. Prima Muharam, M.Sc. (Center for Mineral, Coal and Geothermal Resources - Geology, Mineral Exploration, GIS, Remote Sensing)
11. Dr. Joko Wahyudiono, S.T., M.T. (Centre for Geological Survey - Geological and Tectonic Structures)
12. Dr. Hermes Panggabean, M.Sc. (Centre for Geological Survey - Fossil Energy)
13. Dida Kusnida, Ir., M.Sc. (Marine Geology Research and Development Center - Marine Geophysics)
14. Lukman Arifin, Drs., M.Si. (Marine Geology Research and Development Center - Marine Geology)
15. Dr. Sri Mulyaningsih, S.T., M.T. (Institute of Science and Technology AKPRIND Yogyakarta - Engineering Geology)
16. Dr. Ronaldo Irzon (Centre for Geological Survey - Chemistry; Geochemistry; Weathering; Laboratory Equipment Optimization; Granite)
17. Prof. Dr. Ir. Udi Hartono (Centre for Geological Survey - Petrology and Mineralogy)
18. Dr. Said Muzambiq, M.Sc. (Medan Institute of Technology - Mining Environment)
19. Dr. Muchlis, M.Sc. (Institute of Science and Technology AKPRIND Yogyakarta - Geological Environment)
20. Muhammad Aziz, Dr. Eng. (Tokyo Institute of Technology - Energy System, Power Generation)
21. Prof. Dr. Siti Rochani, M.Sc. (National Research and Innovation Agency - Chemistry/Material Science)
22. Dr. Ir. Edi Sanwani (Institute of Technology Bandung - Mineral-Coal Processing)
23. Dr. Ir. Ismi Handayani, MT. (Institute of Technology Bandung - Mineral Processing)
24. Ir. Linda Pulungan, M.T. (Bandung Islamic University - Mineral and Coal Processing)
25. Dessy Amalia, S.T., M.T. (National Research and Innovation Agency - Mineral Processing)
26. M. Ikhlasul Amal, Ph.D., M.Si., S.Si. (Indonesian Science Institute (LIPI) - Material Engineering)

27. Andrieanto Nurrochman, M.Sc. (Bandung Islamic University – Material Science and Engineering)
28. Dr. Ir. Reginawanti Hindersah, M.P. (Padjadjaran University - Biotechnology)
29. Prof. Dr. Ir. Betty Natalie Fitriatin (Padjadjaran University – Soil Biology and Biotechnology)
30. Dr. Asri Peni Wulandari, M.Sc. (Padjadjaran University - Biotechnology)
31. Dahlia Diniyati, S.T., M.Eng. (Testing Center for Mineral and Coal - Chemical Engineering/Coal Processing and Beneficiation)
32. Dr. Edy Nursanto, S.T., M.T. (University of National Development "Veteran" Yogyakarta - Coal Processing)
33. Hernandi Albeto Octaviano, S.T., M.E.M. (Directorate General of Mineral and Coal – Environmental Management)
34. Dr. Nuzul Achyar (University of Indonesia - Economics)
35. Sri Widayati, Ir., M.T. (Bandung Islamic University - Mineral Economics)
36. Dr. Imas Soemaryani, S.E., M.Si. (Padjadjaran University - Economics)
37. Gandhi K. Hudaya, S.T., M.A.B. (Testing Center for Mineral and Coal - Techno-economy)
38. Dr. Tri Nuke Pudjiastuti, M.A. (Indonesian Science Institute (LIPI) - Mining Environment/Mining Law)
39. Prof. Dr. Ir. Adjat Sudradjat, M.Sc. (Padjadjaran University - Mining Policy)
40. Bambang Yunianto, Drs. (National Research and Innovation Agency - Mining Policy)
41. Dr. Nendi Rohaendi, S.T., M.Sc., M.T. (PPSDM Geominerba - Tectonic Geomorphology and Spatial Planning, Survey and Mapping, Mining Safety and Environment)

42. Dr. Wanda Adinugraha (PPSDM Geominerba - Mining, Coal Processing, Blasting, Occupational Health and Safety)
43. Dr. mont. Imelda Eva Roturena Hutabarat, ST., MT. (PEPB - Mineral and Coal Processing and Refining, Geometallurgy, Mining Operations Supervisor, Environmental Impact Assessment and Mining Environment)

The Indonesian Mining Journal would like to thanks the peer reviewers for the reviewing the manuscripts to published in the Indonesian Mining Journal Vol. 26, No. 1, Month 2023. Those are:

1. Prof. Dr. Siti Rochani, M.Sc.
2. Dr. Asri Peni Wulandari, M.Sc.
3. Zulfahmi, Ir., M.T.
4. Dr. Asep B. Purnama, S.T., M.T.
5. Gandhi K. Hudaya, S.T., M.A.B.

COPY EDITOR

1. Ir. Tatang Wahyudi, M.Sc.

LAYOUT EDITOR

1. Bachtiar Effendi (Testing Center for Mineral and Coal)
2. Ginanjar Aji Sudarsono, S.Kom. (Testing Center for Mineral and Coal)
3. Zetana G. Nazarulloh, S.Ds. (Testing Center for Mineral and Coal)
4. Novan Adhitya Putra, S.Kom. (Testing Center for Mineral and Coal)



All articles published are embedded with DOI numbers that are affiliated with Crossref DOI prefix 10.30556

ACCREDITATION

Indonesian Mining Journal has been accredited as a scientific journal by the Director General of Research and Development Strengthening, Ministry of Research, Technology and Higher Education of the Republic of Indonesia (RISTEKDIKTI).
No. 200/M/KPT/2020
Valid until October 2024

BUSINESS AND ADMINISTRATION STAFF

Deni Nurul Kamal, Wulandari Surono, Hasniati Astika, Bachtiar Effendi and Ginanjar Aji Sudarsono, Novan Adhitya Putra, dan Andi Achridan Amdari

PUBLISHER

Testing Center for Mineral and Coal

EDITOR ADDRESS

Jl. Jend. Sudirman 623 Bandung 40211
Telpon : (022) 6030483 - 5, Fax : (022) 6003373
e-mail : imjournal@gmail.com
Web : <http://jurnal.tekmira.esdm.go.id/index.php/imj>
DOI : [10.30556/imj](https://doi.org/10.30556/imj)

Disclaimer:

Opinions and statements expressed in IMJ are the author's responsibility