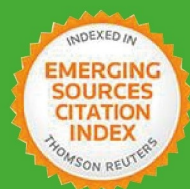
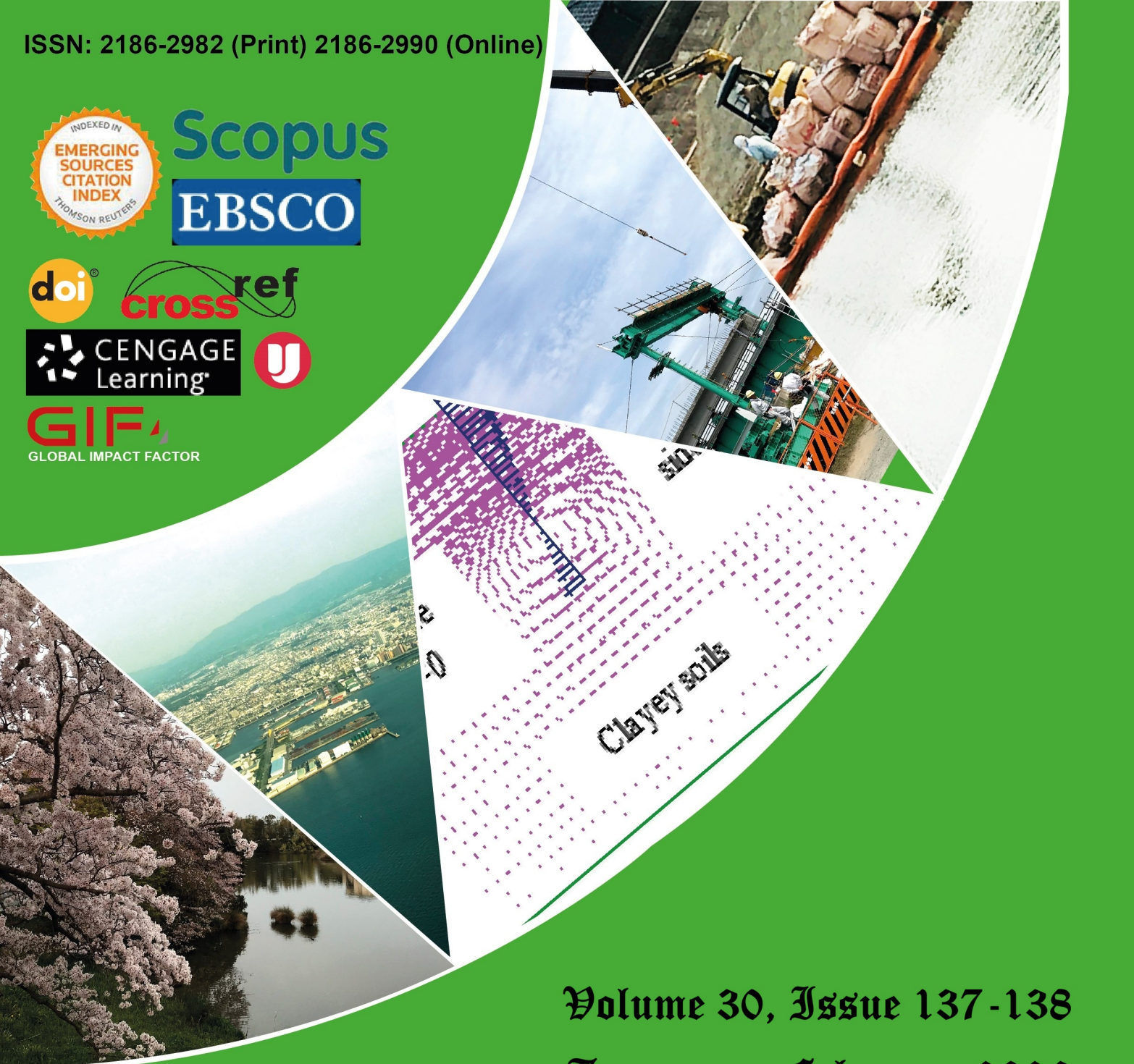
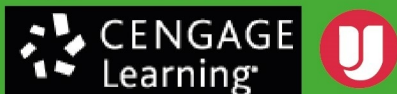


ISSN: 2186-2982 (Print) 2186-2990 (Online)



Scopus
EBSCO



Volume 30, Issue 137-138

January - February 2026

International Journal of Geomate

(Geotechnique, Construction Materials and Environment)



Tsu, Japan

THE GEOMATE INTERNATIONAL SOCIETY

<https://www.geomatejournal.com/>

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

International Journal of GEOMATE is Abstracted/Indexed in SCOPUS, Web of Science Emerging Sources Citation Index (ESCI), EBSCO, Global Impact Factor (GIF), Gale (a Cengage Learning Company), Ulrichsweb, Global Serials Directory, etc.

Impact Factor by Web of Science: 0.9 (2024)

Impact Factor by SCOPUS (SJR)

2024: 0.310	2017: 0.251
2023: 0.340	2016: 0.284
2022: 0.360	2015: 0.250
2021: 0.360	2014: 0.248
2020: 0.270	2013: 0.143
2019: 0.300	2012: 0.115
2018: 0.302	

Paper Acceptance Rate

2024: 37.23%	2017: 41.09%
2023: 38.32%	2016: 41.31%
2022: 40.20%	2015: 35.28%
2021: 36.64%	2014: 37.50%
2020: 53.84%	2013: 38.71%
2019: 43.45%	2012: 46.66%
2018: 46.60%	2011: 61.53%

Editor-in-Chief:

Prof. Dr. Zakaria Hossain, Mie University, Japan

Associate Editors:

Prof. Dr. Fumio Tatsuoka, Tokyo University of Science, Japan
Prof. Dr. Sai Vanapalli, University of Ottawa, Canada
Prof. Dr. Ian Jefferson, University of Birmingham, United Kingdom
Prof. Dr. Mounir Bouassida, National School of Engineering of Tunis
Prof. Dr. Bujang B.K. Huat, University Putra Malaysia, Malaysia
Prof. Dr. Nemy Banthia, University of British Columbia, Canada
Prof. Dr. Toshinori Sakai, Mie University, Japan
Prof. Dr. Valeriy Perminov, Tomsk Polytechnic University, Russia
Prof. Dr. Jing-Cai Jiang, University of Tokushima, Japan
Prof. Dr. Lilia Robles Austriaco, Angles University Foundation, Philippines
Prof. Dr. Muhammad Ibn Ibrahimy, International Islamic University, Malaysia
Prof. Dr. Shamsul I. Chowdhury, Roosevelt University, USA
Prof. Dr. Isabel Pinto, University of Coimbra, Portugal
Prof. Dr. Mark Jaksá, University of Adelaide, Australia
Prof. Dr. Kaneco Satoshi, Mie University, Japan
Prof. Dr. Junichiro Takeuchi, Kyoto University, Japan
Prof. Dr. Ranjith Pathegama Gamage, Monash University, Australia
Prof. Dr. Kingshuk Roy, Nihon University, Japan
Prof. Dr. Arif Ali Baig Moghal, NIT Warangal, India
Prof. Dr. Pedro Arrua, Universidad Tecnológica Nacional, Argentina
Prof. Dr. Miguel A. Pando, University of North Carolina, USA
Prof. Dr. Suksun Horpibulsuk, Suranaree University of Technology, Thailand
Prof. Dr. Musharraf Zaman, University of Oklahoma, USA
Prof. Dr. Rafiqul Tarefder, University of New Mexico, USA
A/Prof. Dr. John Victor Smith, RMIT University, Australia
Prof. Dr. Basir Mir, National Institute of Technology Srinagar, India
Prof. Dr. Lily Surayya Eka, State Islamic University Syarif Hidayatullah Jakarta, Indonesia

A full list of sub-editors and editorial assistants is given on the web page.

Copyright © International Journal of GEOMATE

All rights reserved. In principle, no part of this publication or the information contained herein may be reproduced in any form or by any means, translated in any language, stored in any database or retrieval system, or transmitted in any form or by any means without prior permission in writing from the publisher.

Disclaimer: The editors and the publisher have tried their best effort to ensure the integration and quality of this publication and the information herein. However, they give no warranty of any kind, expressed or implied, with regard to the material contained in this journal, and will not be liable in any event for the consequences of its use.

Publisher: The GEOMATE International Society

Place of publication: Tsu city, Mie, Japan

Contact: Editor-in-Chief, Dr. Zakaria Hossain, Professor, Graduate School of Bioresources, Mie University, 1577 Kurimamachiya, Tsu city, Mie 514-8507, Japan

E-mail: editor@geomatejournal.com, URL: <http://www.geomatejournal.com/>

Tel & Fax: +81-59-231-9578

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

Founded in 2011, *The "International Journal of GEOMATE"* is a Scientific Journal of the GEOMATE International Society that encompasses a broad area in Geotechnique, Construction Materials, and Environment. The key objective of this journal is to promote interdisciplinary research from various regions of the globe. The journal's editorial board is comprised of extensively qualified researchers, academicians, and scientists from Japan and other countries of the world. It is a peer-reviewed journal that is published quarterly. All articles published in this journal are available online. Contributors may download the manuscript preparation template for submitting the paper or contact the Editors-in-Chief [editor@geomatejournal.com].

Aims and Scopes:

The journal aims to become an efficient means of publishing and distributing high-quality information from researchers, scientists, and engineers. The main scopes are as follows:

- Advances in Composite Materials
- Computational Mechanics
- Foundation and Retaining Walls
- Slope Stability
- Soil Dynamics
- Soil-Structure Interaction
- Pavement Technology
- Tunnels and Anchors
- Site Investigation and Rehabilitation
- Ecology and Land Development
- Water Resources Planning
- Environmental Management
- Earthquake and Tsunami Issues
- Safety and Reliability
- Geo-Hazard Mitigation
- Case History and Practical Experience
- Others

Review Policy:

- The paper which meets the editorial criteria will be assigned to at least two anonymous reviewers for peer review.
- Authors may recommend some reviewers - however, Editors are entitled to consider them or not.
- The Editorial Board consists of an outstanding group responsible for the review process of the submitted manuscripts and will guarantee the quality of the publication.
- The manuscript will be published as soon as accepted, and all the modifications recommended by the reviewers are made.
- The review procedure is as strict as in the most prestigious journals, but publication time is minimized.
- Based on the reviewers' comments, the Editors will decide on a paper as one of the following four conditions:
 1. Accept without revision
 2. Accept with minor revision
 3. Encourage to resubmit with major revision
 4. Reject

In case of acceptance with minor or major revisions, the authors will be advised to revise the manuscript according to the reviewers' comments.

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

Instruction to Author:

The manuscript to be submitted should be prepared using the manuscripts submission template.

Download the manuscript formatting template from the download files menu.

The manuscript to be submitted adheres to the rules and guidelines given in the manuscript template.

The manuscript should be written in English. A list of references must be translated into English if other languages (both should be noted).

The page limit is 8 pages for an ordinary manuscript and 10 pages for the invited manuscript.

The references inside the text and in the bibliographic list should follow the formats as per the manuscript template.

All figures, graphs, and tables must follow the font style of the text. Ensure clear and good-quality pictures in the first submission.

Selected manuscripts from the "GEOMATE Conference Presentation" will be reprinted in the journal with nominal charges (40% discount on regular fees) based on the agreement of the authors.

Accepted papers not presented at the "GEOMATE Conference" need publication charges of 800 USD as regular fees. Any page or fraction exceeding the page limit will be charged 100 USD per page. The extra author fee is 100 USD/author if exceeding 5 authors.

This is required for its maintenance, such as managing article submission and peer review, typesetting, tagging, and indexing of articles, hosting articles on dedicated servers, supporting sales and marketing costs to ensure global dissemination via different databases, and permanently preserving the published journal article.

Copyright: GEOMATE is required to obtain the copyright of papers from authors for the term of copyright by signing and returning the publishing agreement.

Submission Method:

Submit the full manuscript online using the "Submission" menu. We accept online submissions only.

Copyright release form to be E-mailed separately along with the manuscript submission. Download it from the "Download Files Menu."

Abolition of the printed version: Considering environmental conservation, the paper version has been discontinued since June 2016.

For any questions: Contact us [editor@geomatejournal.com].

Membership Fees: Regular Member 100USD/year; Life Member 900USD only.

Membership Benefits:

- Receive Membership ID/Card
- Use M.G. or L.M.G. after your name (M=Member, G=Geomate, L=Life)
- Be involved in GEOMATE technical committees and activities
- Be up-to-date on the current development in the field
- Priority right to participate in international conferences with 20% discount
- 20% discount for Journal paper publication
- Vote in the election of GEOMATE officers
- Access to the Journal webpage

Membership Application (send the related items below using the online form):

- Full Name:
- Title/Position (check one): Prof. A/Prof. Dr. Mr. Ms.
- Membership Category (check one): Regular Member Life Member Others
- Address:
- Tel & Fax:
- E-mail (co-authors' e-mail separated by comma):
- Research Area (check one): Geotechnique Construction Materials Environment Others

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

STATEMENT ON PUBLICATION ETHICS AND PUBLICATION MALPRACTICE (1/2)

The International Journal of GEOMATE is a double-blind peer-reviewed journal. All parties involved in publishing an article for this journal, i.e., the editors, the author, the peer-reviewers, and the publisher, must follow the ethical behavior indicated in the COPE's Best Practice Guidelines for Journal Editors. In order to warrant high-quality scientific publications, public trust in scientific findings, and that people receive credit for their ideas, the ethical standards for publication are followed.

DUTIES OF EDITORS

A decision on the Publication of an Article: Based on the double-blind peer review of a paper, the Chief Editor and the Associate Editor are responsible for deciding which articles are accepted for publication. Neither the Chief Editor nor the Associate Editor has the authority to influence the reviewers conducting the blind review of the articles submitted for peer review. The Chief Editor and the Associate Editor may be guided by the policies of the journal's Editorial Board and subjected to such legal requirements regarding libel, copyright infringement, and plagiarism.

Honest Play: Manuscripts submitted to GEOMATE shall be exclusively evaluated based mainly on their intellectual quality and significance. GEOMATE will not consider authors' race, gender, sexual orientation, religious beliefs, ethnic origin, citizenship, or political philosophy.

Confidentiality: The Chief Editor, the Associate Editor, and any editorial staff must not disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, other editorial advisers, and the publisher.

Disclosure and Conflicts of Interest: Unpublished materials disclosed in a submitted manuscript must not be used by anyone who has a view of the manuscript (while handling it) in their own research without the express written consent of the author.

DUTIES OF REVIEWERS

The contribution of Double-Blind Peer Review: Any identifying information will be stripped out from the submitted paper so that the reviewers do not know any information about the authors and vice versa, i.e., reviewers' comments to the editors are confidential and before passing on to the authors, it will be made anonymous. The Double-Blind Peer review assists the reviewers in making editorial decisions, while editorial communications with the author may also assist the author in improving the manuscript. The names of the reviewers are known only to the Chief Editor and the Associate Editor, and it remains strictly confidential to authors.

Punctuality: Any selected referee who feels unqualified to review the assigned manuscript or unable to provide a prompt review should notify the Chief Editor and the Associate Editor and excuse themselves from the review process.

Confidentiality: Private information or ideas obtained through double-blind peer review must be kept confidential and not used for personal advantage. Manuscripts received for review must be treated as confidential documents. Without any authorization by the Chief Editor and the Associate Editor, the information of the submitted manuscript must not be shown to or discussed with others.

Standards of Objectivity: There shall be no personal criticism of the author. Reviewers should express their views clearly with supporting arguments, and reviews should be conducted objectively.

Acknowledgment of Sources: Authors should cite relevant references and corresponding citations if any statement in the submitted paper has been published or reported elsewhere. Reviewers should identify relevant published work that the authors have not cited. If a reviewer finds any substantial similarity or overlap between the submitted manuscript and any other published works, s/he should inform the Chief Editor/Associate Editors.

Conflict of Interest: In any reviewers find that the submitted manuscript has conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions, s/he should not review those manuscripts and notify the Chief Editor/Associate Editors prompt.

DUTIES OF AUTHORS

Reporting Standards: Authors of original research papers should present an accurate account of the work performed and objectively discuss its significance. Underlying data should be represented accurately in the paper. A manuscript should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behavior and are unacceptable.

Data Access and Retention: Authors may be asked to provide the raw data in connection with a paper for editorial review and should be prepared to provide such data for public access or access to the journal's readers.

Originality and Plagiarism: The authors should ensure that they have written entirely original works. If the authors have used the work and words of others, this must be appropriately cited or quoted. All papers published by the International Journal of GEOMATE are committed to publishing only original material, i.e., material that has neither been published elsewhere nor is under review elsewhere. A paper that is found to have been plagiarized from a manuscript by other authors, whether published or unpublished, will incur plagiarism sanctions.

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

STATEMENT ON PUBLICATION ETHICS AND PUBLICATION MALPRACTICE (2/2)

Acknowledgment of Sources: Proper acknowledgment of the work of others must always be given. Authors should cite publications that have been influential in determining the nature of the reported work.

Manipulation of Citations: Submitted papers that are found to include citations whose primary purpose is to increase the number of citations to a given author's work or articles published in a particular journal will incur sanctions for manipulating citations.

Falsification and Fabrication: Submitted papers that are found to have either falsified or fabricated numerical/experimental results, including the manipulation of images, will incur data fabrication and falsification sanctions.

Authorship: The authorship of a paper should be limited to those who have contributed significantly to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Others who have participated in certain substantive aspects of the research project should be acknowledged or listed as contributors.

Scientific Contribution: All listed authors must have made a significant scientific contribution to the research in the manuscript and approved all its claims. It is important to list everyone who made a significant scientific contribution, including students and laboratory technicians.

Corresponding Author: Corresponding Author is the author responsible for communicating with the journal for publication. The corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included in the paper. All co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

Acknowledgment of Funding Sources: Funding sources for the research reported in the manuscript should be duly acknowledged after the conclusion and before the list of references.

Disclosure and Conflicts of Interest: All sources of financial support for the project or any substantive conflict of interest that might be interpreted to influence the results of the paper should be disclosed.

Fundamental Errors in Published Works: The author must promptly notify the Chief Editor/Associate Editor if s/he discovers a significant error or inaccuracy in their published work to retract or correct the paper.

Redundant, Concurrent, or Multiple Publications: An author should not generally publish manuscripts describing essentially the same research in more than one journal or primary publication. Manuscripts found to have been published elsewhere or under review elsewhere will incur duplicate submission/publication sanctions. Suppose authors have used their own previously published work or work that is currently under review as the basis for a submitted manuscript. In that case, they must cite the previous work and indicate how their submitted manuscript offers novel contributions beyond those of the previous work. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behavior and is unacceptable. Redundant publications involve the inappropriate division of study outcomes into several articles.

SANCTIONS

Suppose there are documented violations of any of the policies mentioned above in any journal. In that case, regardless of whether or not the violations occurred in a journal published by GEOMATE, the following sanctions will be applied:

- *Immediate rejection of the infringing manuscript.*
- *Immediate rejection of every other manuscript submitted to GEOMATE by any of the authors of the infringing manuscript.*
- *The prohibition against all authors for any new submissions to GEOMATE, either individually or in combination with other authors of the infringing manuscript, as well as in combination with any other authors. This prohibition will be imposed for a minimum of five years.*
- *Prohibition against all of the authors from serving on the Editorial Board of the International Journal of GEOMATE*

In cases where the violations of the above policies are found to be particularly outrageous, the publisher reserves the right to impose additional sanctions beyond those described above.

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

Volume 30, Issue 137, January 2026

UTILIZATION OF SPENT ANTHRACITE FILTER MEDIA IN CEMENT MORTAR: STRENGTH AND DURABILITY ASSESSMENT Phattharachai Pongsopha	1-11
EVALUATION OF THE IMPACT OF A MODIFIED ADDITIVE IN INJECTION SOLUTION ON ITS PHYSICAL AND MECHANICAL PROPERTIES Yerik Amirbayev, Zhibek Zhantlessova, Rauan Lukpanov, Duman Dyusseminov, Adiya Zhumagulova, Saltanat Ashimova, Mariya Smagulova, Galiya Asanova and Manarbek Zhumamuratov	12-19
WATER AND SOIL PRESSURE CALCULATION METHOD FOR DEEP FOUNDATION PIT WITH SUSPENDED WATERPROOF CURTAIN IN WATER-RICH SANDY COBBLE STRATUM Da Li, Shenao Wang, Yiyuan Chen, Ningyi Liu and Lei Jiao	20-32
FLY-ASH BASED GEOPOLYMER MORTAR FOR PAVING BLOCKS: MECHANICAL PERFORMANCE AND MICROSTRUCTURE ANALYSIS Syafiadi Rizki Abdila, Muhammad Isradi, Syafri Wardi, Agung Sumarno, Muhammad Faheem Mohd Tahir and Syafwandi	33-42
RELIABILITY ANALYSIS OF DAMPALIT MEGA DIKE USING MONTE CARLO SIMULATION AGAINST SLIDING FAILURE Isaiah Sam Bartolome and Albert Griño, Jr.	43-51
BRITTLE CONTRACTIVE BEHAVIOR IN SOIL, TAILINGS, AND ROCK MASS John Victor Smith	52-59
DEVELOPMENT OF A LITERATURE-BASED DATABASE ON BEACHROCK FORMATION IN TROPICAL ASIA Rahubadda Kankanamge Hiroshima Surangani, Anjula Buddhika Nayomi Dassanayake, Chulantha Lakmal Jayawardena, Niki Evelpidou and Satoru Kawasaki	60-67
EVALUATING MICROGRAVITY EFFECTS ON MICP PERFORMANCE FOR LUNAR IN-SITU RESOURCE UTILIZATION Yuru Chen, Tomoya Hamada, Chikara Takano, Kazunori Nakashima and Satoru Kawasaki	68-74
A PERFORMANCE STUDY OF DEHUMIDIFICATION IN AN EVAPORATIVE COOLING SYSTEM USING THERMOSYPHON HEAT PIPES Niran Watchrodom, Jeerattikul Kaharn, Aekchai Rattanabanlue, Luedate Phatedoung and Thana Ananacha	75-82
OPTIMIZATION OF MICROORGANISM-ENRICHED BIO-COATED CLAY GRANULES FOR SUSTAINABLE PLANT GROWTH USING RESPONSE SURFACE METHODOLOGY Piyawadee Saraphirom, Orn-Anong Chaiyachet, Piyarat Namsena, Chakkrit Sreela-or, Nonthaphong Phonphuak and Mullika Teerakun	83-90
EXPERIMENTAL STUDY ON SWELLING CHARACTERISTICS OF BENTONITE BUFFER MATERIAL CONSIDERING VARIOUS INITIAL CONDITIONS Kira Iida, Shin-ichi Kanazawa, Masanori Kohno, Zihao Liu and Osamu Yoshino	91-98
DEVELOPMENT OF A HAZARD ASSESSMENT APPROACH BASED ON AN INTEGRATED MODEL FOR LARGE WOODY DEBRIS DISCHARGE IN DAM WATERSHEDS Yunhao Liu, Daisuke Komori, Sartsin Phakdimek and Yuta Abe	99-106
EFFECTIVE CUTTING TO CONTROL THE REGROWTH OF BAMBOO GRASS FOR THE CONSERVATION OF MOUNTAIN TRAILS Teruo Arase, Ren Yokota, Masamichi Yoshizawa, Taizo Kato, Taizo Uchida and Masaaki Furuno	107-114
RECHARGE ESTIMATION AND SITE IDENTIFICATION FOR MANAGED AQUIFER RECHARGE IN SUPHANBURI, THAILAND USING GIS AND MODFLOW Pinit Tanachaichoksirikun, Uba Sirikaew, Uma Seeboonruang and Jutamas Srisuk	115-122
EXPECTED GROUNDWATER DEVELOPMENT AND WATER SECURITY IN DEFICIT SMALL TOURISM ISLAND Jutamas Srisuk, Pinit Tanachaichoksirikun, Uba Sirikaew and Uma Seeboonruang	123-130
CORRELATION BETWEEN INFILL DENSITY AND MECHANICAL PROPERTIES IN 3D PRINTING Boonthum Wongchai and Suphattharachai Chomphan	131-138

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

ISSN: 2186-2982(Print), 2186-2990(Online)

Volume 30, Issue 138, February 2026

MECHANICAL PROPERTIES AND MORPHOLOGICAL STRUCTURES OF ALKALINE TREATED BAMBOO AND COCONUT FIBERS FOR NATURAL GEOTEXTILE APPLICATION Cheryl F. Daleon	1-12
UAV-BASED 1/500 TOPOGRAPHIC MAPPING FOR ESTIMATING LIMESTONE VOLUME AT TRAI SON QUARRY, VIETNAM Hanh Hong Tran and Thuy Thu Thi Luu	13-20
COMMUNITY-BASED ADAPTIVE SUSTAINABILITY AND FLOOD VULNERABILITY ZONING USING SOCIAL RESILIENCE INDICATORS IN KAMPAR REGENCY, INDONESIA Dedi Hermon, Tengku Adeline Adura Tengku Hamzah, Febriandi, Risky Ramadhan and Rahadhatul Aisy	21-30
PERFORMANCE OF CONCRETE MIXED WITH VOLCANIC ASH AND BUKHO STONE FRACTIONS Rika Deni Susanti, Aazokhi Waruwu, Riyanti, Husni Thamrin, Muhammad Rabbil Akbar, Andre Ansyah and Agung Syahputra	31-39
STUDY OF LOCAL SITE EFFECTS FOR SEISMIC VULNERABILITY MITIGATION BASED ON MICROTREMOR MEASUREMENTS IN THE NYIA AIRPORT AREA Budi Eka Nurcahya, Mochamad Aryono Adhi and Nugroho Budi Wibowo	40-52
SPATIOTEMPORAL ANALYSIS AND PREDICTION OF MANGROVE DYNAMICS FOR NATURE-BASED SOLUTIONS IN TANJUNG CARAT, SOUTH SUMATRA Herda Sabriyah Dara Kospa, Johan Ariyantoni and Hala Haidir	53-61
AXIAL COMPRESSIVE STRENGTH OF REINFORCED CONCRETE COLUMN STRENGTHENING WITH CFRP SUBJECTED TO CONCENTRIC LOADING Stanislaus Pati, Henda Febrian Egatama, Ade Lisantono, Nuroji and Han Ay Lie	62-68
DEVELOPMENT OF PORE WATER PRESSURE AND DISPLACEMENT IN LIQUEFACTION OF STRATIFIED SAND WITH A CAPPING LAYER Yelvi, Adrin Tohari, Abdul Hakam, Jafri Tanjung, Handi Sudardja and Istiatun	69-76
UTILIZATION OF RICE HUSK ASH AS A SUSTAINABLE ADDITIVE FOR SUBBASE STRENGTH ENHANCEMENT Chotikan Ratchakrom, Pisut Rodvinij, Sattaya Chaiwithee and Pitiwat Wattanachai	77-84
DEVELOPMENT OF SOLIDIFIED CULTIVATING SOIL BLENDED WITH WASTE WOODY BIOMASS PREPARED BY THE CEMENTATION TECHNIQUES Daiki Kawamura and Satoru Kawasaki	85-92
POROSITY ASSESSMENT IN ONE-DIMENSIONAL PERMEATION GROUTING USING SUSPENSION-TYPE GROUT SOLUTION Jemy C. Chua, Naoaki Suemasa and Takamitsu Sasaki	93-100
DESERTIFICATION IN SAUDI ARABIA: IMPACTS OF EXCESSIVE IRRIGATION AND CLIMATE CHANGE ON VEGETATION LOSS THROUGH MATHEMATICAL MODELING Dalal Adnan Maturi and Hunida Malaikah	101-108
HEAT ACCUMULATION REDUCTION IN CONDOMINIUM BUILDINGS USING MULTI-TYOPOLOGY ROOFTOP LANDSCAPES Anon Anan-archa and Thana Ananacha	109-118
IMAGE-BASED ESTIMATION OF SOIL PARTICLE SIZE AS A SUPPLEMENT TO SIEVE ANALYSIS Jose Manuel U. Subido, Erica Elice Saloma Uy and Joanel Gales Galupino	119-126
ELECTRIC VEHICLE SERVICE CENTRE (EVSC) FACILITIES OPTIMIZATION IN JAKARTA USING GEOGRAPHIC INFORMATION SYSTEMS (GIS) Jiang Liangliang, Lita Sari Barus, Irene Sondang Fitritinia, Fidan Safira and Luzern Yuven Luis	127-137