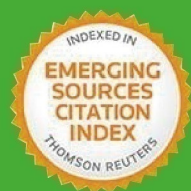
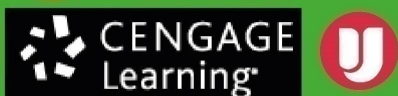


ISSN: 2186-2982 (Print) 2186-2990 (Online)



Scopus
EBSCO



Volume 28, Issue 127-128

March - April 2025

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)

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

Paper Acceptance Rate

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%
2017: 41.09%	

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 Jaksa, 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 28, Issue 127, March 2025

AN EXPERIMENTAL STUDY ON COMPRESSIVE STRENGTH OF CONCRETE-FILLED BAMBOO COLUMNS: NOVEL DRILLING AND CASTING SYSTEM Trung-Phong Le, Canh-Thai Nguyen and Phi-Long Nguyen	1-11
METHOD FOR INCREASING LOAD-BEARING CAPACITY OF SOIL-CEMENT COLUMNS ON SOFT SOILS IN KAZAKHSTAN Saule Jumadilova, Vitaliy Khomyakov, Talal Awwad and Said Dursynov	12-19
ANALYSIS OF SUBGRADE STRUCTURE SETTLEMENT ON THE JAKARTA BANDUNG HIGH-SPEED RAILWAY PROJECT Bastian Stevanus Situmorang and Suryo Hapsoro Tri Utomo	20-27
RELIABILITY ANALYSIS OF RC STRUCTURES CONSIDERING SOIL STIFFNESS VARIABILITY AND SOIL-STRUCTURE INTERACTION Kamel Bezih, Ayat Errahmane Remadna, Mohamed Saddek Remadna and Rafik Demagh	28-38
A NOVEL METHOD FOR DETERMINING SOIL DAMPING RATIO COMBINING DMA AND STRAIN ENERGY Quan Shen, Yidan Zhang and Yuan Yan	39-46
APPLICATION OF THE ANN AND RANDOM FOREST MODELS FOR PREDICTING THE AREA OF THE TUNNEL FACE AFTER THE BLASTING Hoang Hiep Do, Tung Bui Manh and Chi Thanh Nguyen	47-54
RESIDUAL STRENGTH OF EPOXY-COATED PINEAPPLE LEAF FIBER EXPOSED TO HIGH ALKALINE ENVIRONMENT Anurak Tappakron, Manote Sappakittipakorn, Sittisak Jamnam and Piti Sukontasukkul	55-62
EFFECT OF CLIMATE ANOMALY IN 2023 DRY SEASON ON RAINFALL, GROUNDWATER LEVEL, SOIL MOISTURE AND HOTSPOT ON PEATLANDS Azhar Kholiq Affandi, Sri Safrina, Awaluddin, Albertus Sulaiman and Muhammad Irfan	63-70
STRESS-STRAIN RELATIONSHIP OF GEOPOLYMER CONCRETE UNDER COMPRESSIVE LOADING Apichat Janpila, Piyawat Foytong, Patcharapol Posi, Nonthaseith Laungekatin, Ampol Wongsas, Vanchai Sata and Prinya Chindaprasirt	71-78
FLOOD AND DROUGHT PRELIMINARY ASSESSMENT IN THE BANG PAKONG RIVER BASIN USING THE WEIGHED FACTOR INDEX METHOD Pinit Tanachaichoksirikun, Jinghan Jiao, Uba Sirikaew and Uma Seeboonruang	79-87
AN INTEGRATED APPROACH TO EVALUATING SOIL COMPACTION: THE IMPACT OF SHEAR BANDS IN NON-PNEUMATIC TIRES Juthanee Phromjan, Kittipos Loksupapaiboon, Panit Kamma and Chakrit Suvanjumrat	88-95
EXPERIMENTAL STUDY ON THE AIR PERMEABILITY CHARACTERISTICS OF NONWOVEN MEDIA IN BAGHOUSE FILTERS Kittipos Loksupapaiboon, Angtida Punyaponchai, Juthanee Phromjan, Panit Kamma and Chakrit Suvanjumrat	96-103
PREPARATION OF CONSTRUCTION MATERIALS FROM SIMULATED LUNAR ROCK SAND USING ALKALI SALTS Takaaki Wajima and Osamu Toda	104-111
PHASED-CONTROLLED ACTUATOR SYSTEM CAPABLE OF VISUAL INSPECTION INSIDE IRON STRUCTURES Sota Abe and Hiroyuki Yaguchi	112-120
VISUALIZED EVALUATION OF INTERNAL EROSION PROGRESS UNDER DIFFERENT SEEPAGE FLOW HISTORIES Koji Nakashima, Hideaki Yoshida and Katsuyuki Kawai	121-128
ASSESSING THE PROPERTIES AND USABILITY OF SELECTED RECYCLED FINE AGGREGATES IN COOL PAVEMENT CONSTRUCTION Mohammad Raihanul Islam, Seiya Nagaoka and Kenji Okajima	129-138

INTERNATIONAL JOURNAL OF GEOMATE

(Geotechnique, Construction Materials & Environment)

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

Volume 28, Issue 128, April 2025

ANALYTICAL SOLUTION FOR THE NONLINEAR BEHAVIOR OF STEEL-CONCRETE COMPOSITE GIRDERS Hieu Nghia Hoang, Quoc Anh Vu and Manh Hien Nghiem	1-8
COMPRESSIVE STRENGTH OF WASHED BOTTOM ASH AND WASTE PAPER SLUDGE ASH MORTAR FILLED IN COLD-FORMED STEEL COLUMN Mohd Syahrul Hisyam Mohd Sani, Mohd Risham Jaafar, Nindyawati and Fadhluhartini Muftah	9-18
COASTAL SAFETY STRUCTURE PLANNING USING MODIFICATION OF ARTIFICIAL FISH APARTMENTS AT NORTH JAVA COASTAL INDONESIA Widyaningtias, Geryan Hardianto Putra, Ingerawi Sekaring Bumi, Aris Ismanto, Mohammad Bagus Adityawan, Arno Adi Kuntoro and Donny Rizki Pratama Santosa	19-32
PAVEMENT DESIGN INCORPORATING POLYMER-MODIFIED ASPHALT USING VARIOUS LABORATORY FATIGUE TESTS Van Bich Nguyen	33-40
DESIGN AND EVALUATION OF VERTICAL EVACUATION BUILDING AT KELUMBAYAN USING TSUNAMI MODELLING Dyah Kusumastuti, Hanan Fadhilah Ramadhani and Mohammad Bagus Adityawan	41-48
MANAGED AQUIFER RECHARGE FEASIBILITY USING WEIGHT FACTOR INDEX METHOD IN SUPHANBURI, THAILAND Pinit Tanachaichoksirikun, Xi Xiao, Uba Sirikaew and Uma Seeboonruang	49-57
ALTERNATIVE APPROACH TO GROUNDWATER MODELING IN DATA-DEFICIENT REGIONS Pinit Tanachaichoksirikun, Jutamas Srisuk, Uba Sirikaew and Uma Seeboonruang	58-67
PREDICTION OF LONG-TERM CREEP BEHAVIOR OF AN HDPE GEOGRID BY ACCELERATED STRESS RELAXATION TECHNIQUES Rawiwan Eakintumas and Warat Kongkitkul	68-75
RAILWAY TRACKS VEGETATION IN RELATION TO VARIOUS MANAGEMENT, KUMAMOTO, JAPAN Taizo Uchida, Masaaki Furuno, Hiroaki Furuno, Teruo Arase and Tetsuo Okano	76-83
PERMEATION GROUTING USING ALKALI-ACTIVATED GROUT FOR LIQUEFACTION CONTROL Jemy C. Chua, Naoaki Suemasa, Kazuya Itoh, Takamitsu Sasaki and Koichi Nagao	84-91
FLOOD AND INUNDATION RISK ANALYSIS DUE TO POTENTIAL LAND SUBSIDENCE ON ALLUVIAL PLAINS Ade Tricia Miranda, Dinar Dwi Anugerah Putranto and Taufik Ari Gunawan	92-99
EFFECT OF DIFFERENT CALCINATION TEMPERATURES DURING THE MANUFACTURING OF FISHBONE-BASED ADSORBENT ON THE ADSORPTION CAPACITY OF THE ADSORBENT Ayane Yanaka, Naomichi Matsumoto, Yoshihiro Suenaga and Hidenori Yoshida	100-107
CYCLIC LOAD-DRIFT BEHAVIOR OF EXTERIOR BEAM-COLUMN JOINTS RETROFITTED WITH ULTRA-HIGH-PERFORMANCE CONCRETE Trung-Hieu Tran	108-116
CFD SIMULATIONS AND VALIDATION FOR PEDESTRIAN WIND COMFORT: INSIGHTS FROM A UNIVERSITY CAMPUS OUTSIDE BANGKOK Chakrit Suvanjumrat, Aekapob Naksusuk, Jadsupa Porananont and Jetsadaporn Priyadumkol	117-124
OPTIMAL GEOGRID WEIGHT AND FAILURE MODES OF GEOGRID ENCASED STONE COLUMNS UNDER AXIAL COMPRESSION LOADING WITH COST CONSIDERATIONS Wittawat Yodsomjai, Chana Phutthananon, Pornkasem Jongpradist, Suraparb Keawsawasvong and Pitthaya Jamsawang	125-132
ANALYSIS OF FACTORS INFLUENCING 3D CONCRETE PRINTING ADOPTION FOR HOUSING CONSTRUCTION IN INDONESIA Rani Gayatri Kusumawardhani Pradoto and Enrique Matthew Hadinata	133-140
EVACUATION RISK ASSESSMENT ON FLOODING SLOPING ROAD DURING TYPHOON HAGIBIS AND PAST DISASTERS IN KAMAISHI Yuriko Matsubayashi and Mako Ebina	141-148