

Environmental Technology & Science Journal

Vol. 12 Number 2

December 2021

Aim and Scope

The Environmental Technology and Science Journal (ETSJ) is devoted to the publication of papers which advance knowledge of practical and theoretical issues that daily plague our society. The aim of the journal is to provide an avenue for the dissemination of academic research findings from various disciplines of the environment, engineering, pure and applied sciences, arts and social science which have materials that emphasize on environmental issues.

ETSJ Policy

ETSJ prohibits an author from submitting the same manuscript for concurrent consideration in two or more publications. The author must ensure that when a manuscript is submitted to ETSJ, the manuscript must be an original work. The Author should check the manuscript for any possible plagiarism using any program such as TURNITIN or any other software before submitting the manuscripts to ETSJ. Authors are not permitted to add or remove any names from the authorship provided at the time of initial submission without the consent of the Journal's Editor-in-Chief.

Guide for Authors

Please read the guidelines and follow the instructions carefully; doing so will ensure that the publication of your manuscript is as rapid and efficient as possible. The Editorial Board reserves the right to return manuscripts without review that are not prepared in accordance with these guidelines.

1. Manuscripts should not be more than 15 pages of A4 paper size (including abstracts, tables, figures, references and appendices) typed in double spacing, times new roman and font size 12. Additional fee of two thousand (~~N~~2000) Naira will be charged for every additional page in excess of 15 pages.
2. Each paper must be compiled in one column; all text should be left and right justified. The page settings to be 25cm (1 inch) each for the top, bottom, left and right margins of an A4 paper. Decimal numbering of all sections of the article is recommended (with the exception of the reference and acknowledgement sections).
3. To ensure anonymity in the peer reviewing process, articles must be structured in such a way that the title of the paper, authors' names, address, and affiliation are written on the first page, followed by abstract and the body of the paper in that order.
4. Each article should contain an abstract of not more than 300 words.
5. Each article should contain between 5 and 7 key words (avoid use of phrases).
6. Use the SI (*Système Internationale*) units and symbols, while Unusual Characters and symbols should be explained in a list of nomenclatures.
7. The journal's referencing style is the APA format.
8. Figures, Tables and Graphs are to be placed at the appropriate places in the paper and not at the end of the paper.
9. Acknowledgement is optional, except for researches being funded through research grant awards.
10. Authors should avoid using headers, footers and special page breaks within the manuscripts.
11. The manuscript is to be sent via electronic means to: etsj@futminna.edu.ng for a blind peer review, which under normal circumstance will not exceed 4 weeks, after which the status of the article will be communicated to the Author(s).
12. Author(s) with positive review will be asked to effect corrections or revisions after which the camera-ready manuscript is to be emailed to etsj@futminna.edu.ng and to be accompanied by evidence of payment of publication fee.

13. The Editorial board is not responsible for the information or views expressed by the author(s).
14. The copyright of this journal belongs exclusively to the Editorial Board of Environmental Technology and Science Journal. No part of the publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission of the School of Environmental Technology, Federal University of Technology, Minna-Nigeria or a licence permitting restricted copying.

Frequency of Publication

The journal is published twice a year in June and December

Subscription Details

The 2021 subscription rates for hardcopies of the journal including postage are:

Individual within Nigeria: N2,000 per copy and N1,000 for postage

Individual outside Nigeria including postage \$ 100

Institution within Nigeria: N5,000 per copy and N1,000 for postage

Institution outside Nigeria including postage: \$ 150

Correspondence

All correspondence should be addressed to

The Managing Editor

Environmental Technology & Science Journal

SET, FUT, Minna, Nigeria

Email: etsj@futminna.edu.ng

Phone: +234 805 170 3663, +234 803 653 4507

Published By

School of Environmental Technology, Federal University of Technology,
Minna-Nigeria

Managing Editor

Prof R. A. Jimoh

Department of Building,
Federal University of Technology,
Minna, Nigeria

Editorial Secretary I

Dr B. O. Ganiyu

Department of Quantity Surveying,
Federal University of Technology,
Minna, Nigeria
+234 803 626 9235

Editorial Secretary II

Dr E. B. Ogunbode

Department of Building,
Federal University of Technology,
Minna, Nigeria
+234 806 328 6122

Editorial Committee

Dr A. D. Adamu

Department of Quantity Surveying,
Federal University of Technology,
Minna, Nigeria

Prof I. C. Onuigbo

Department of Surveying &
Geoinformatics,
Federal University of Technology,
Minna, Nigeria

Prof O. A. Kemiki

Department of Estate Management
and Valuation,
Federal University of Technology,
Minna, Nigeria

Dr P. Ayuba

Department of Architecture,
Federal University of Technology,
Minna, Nigeria

Dr J. E. Idiake

Department of Quantity Surveying,
Federal University of Technology,
Minna, Nigeria

Dr A. Kawu

Department of Urban & Regional
Planning,
Federal University of Technology,
Minna, Nigeria

Dr I. B. Muhammad

Department of Architecture,
Federal University of Technology,
Minna, Nigeria

Editorial Advisers

Prof R. E. Olagunju

Department of Architecture,
Federal University of Technology,
Minna, Nigeria

Prof (Mrs) S. N. Zubairu

Department of Architecture,
Federal University of Technology,
Minna, Nigeria

Prof A. M. Junaid

Department of Urban & Regional
Planning,
Federal University of Technology,
Minna, Nigeria

Prof Y. A. Sanusi

Department of Urban & Regional
Planning,
Federal University of Technology,
Minna, Nigeria

Prof D. A. Muazu

Department of Building,
Baze University,
Abuja, Nigeria

Prof I. O. Aje

Department of Quantity Surveying,
Federal University of Technology,
Akure, Nigeria

Prof B. T. Aluko

Department of Estate Management,
Obafemi Awolowo University,
Ile-Ife, Nigeria

Prof P. C. Nwilo

Department of Surveying &
Geoinformatics,
University of Lagos,
Lagos, Nigeria

Prof U. O. Nkwogu

Department of Architecture,
Imo State University,
Owerri, Nigeria

Editorial

The 2021 United Nations Climate Change Conference (COP26) that took place in Glasgow, Scotland from 31st October to 13th November has come and gone leaving the environment at the mercy of developed and developing nations. The global warming is still far from the 1.5°C benchmark set but countries such as Nigeria and India pledged net zero emissions by 2060 and 2070 respectively; ambitious? Time will tell, it is on this basis that I welcome our readers to Volume 12, number 2, December edition of Environmental Technology and Science Journal (ETSJ). There are 16 articles that cut across topical issues in the built environment. Happy reading!

Past and current editions of the Journal can be found at these web addresses:

<https://etsj.futminna.edu.ng> and
<https://www.ajol.info/index.php/etsj> (Yes, ETSJ on AJOL) for download at no cost.

Let us do it again, peace!

R. A. Jimoh
Managing Editor

Contents

1-10	Critical Attributes for Selecting Contractors for Long-term Collaborative Relationships <i>Ayegba C & Root D</i>
11-23	Evaluating Risk Factors of Build-Operate-Transfer Highway Projects in Nigeria <i>Fabi J. K & Akinseinde O. A</i>
24-36	Challenges Encountered by Peri-Urban Women in Landed Property Ownership in Minna <i>Popoola N. I, Martins I. V, Akanbi M. O & Bamgbade A. A</i>
37-47	Evaluating Urban Sprawl and Land Consumption Rate in Ilorin Metropolis Using Multitemporal Landsat Imagery <i>Idrees M. O, Adepoju B. D, Ipadeola A. O, Omar D. M, Alade A. K & Salami I. B</i>
48-57	Assessment of the Relationship between Community Services and Taxpayers' Willingness to Pay Residential Property Tax in Lagos Metropolis <i>Adepoju A. S, Ajayi M. T. A & Kemiki O. A</i>
58-70	Comparative Assessment of SRTM and UAV-Derived Dem in Flood Modelling <i>Adesina E. A, Musa A, Ajayi O. G, Odumosu J. O, Opaluwa Y. D & Onuigbo I. C</i>
71-81	Variation in Land Use Cover and Surface Temperature of Kubwa, Federal Capital Territory, Nigeria <i>Abbas Y. A, Morenikeji O. O, Dalil M, Ohadugha C. B & Musa H. D</i>
82-90	Development of a Forced Convection Electric Fish Drying Machine <i>Isinkaye J. T, Oghenekaro J. S & Isinkaye O. D</i>
91-102	Assessment of the Impact of Participation in Recreational Activities on Mental Health of Participants in Abuja <i>Mustapha I. O, Muhammad A. Y & Muhammed B. B</i>
103-113	Safety Risk Assessment of Building Construction Work Items in Abuja <i>Mamman E. J, Mohammed D. Y, Shittu A. A & Adamu D. A</i>
114-121	Challenges of Housing Development in the Federal Capital City, Abuja <i>Adidi J. E, Alhassan M. M & Adekiya O. A</i>
122-132	Effects of Changing Climate Variables on Residential Building Fabrics in North Central Nigeria <i>Nsofor C., Zubairu S. N. & Abdulrahman M. E.</i>

- 133-144 Forceful Eviction and Non-Inclusive Gentrification: The Post-Occupational Assessment of Maroko Area, Lagos, Nigeria
Iweka A. C. O
- 145-159 Evaluating the Physical Properties of Potential Green Roof Growth-Media Compositions for Use in the Nigerian Built Environment
Salihu M. M
- 160-170 Assessment of the Psychological Dimension to Open Defecation in Ogun State
Olapeju O
- 171-183 Appraisal of the Housing Delivery Mandate of Selected Government Agencies in Nigeria
Oyewobi L, Agoi O, Medayese S, Bilau A, Martins V & Jimoh R