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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.

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## Editorial

The synergy (the journal, the contributors and the reviewers) has produced yet another edition. In furtherance of the journal's mandate to disseminate research findings to the research community, volume 9, number 2, December edition is presented to our expanding audience. This edition could not have come at a more auspicious time as the United Nations Conference on Climate Change (COP 24) has just been concluded in Poland where stakeholders met to chart the way forward on the huge challenge that has been thrown up as a result of climate change. It is therefore not surprising when the Nigerian government declared at the conference that no country could confront the change alone thereby urging all the member nations that signed up to the charter to re-dedicate themselves to the task of re-building and restoring a healthy environment for future generations. In a related development, the World Bank restated its commitment to step up climate finance to \$100 billion, half of which will go to build better adapted homes, schools and infrastructure and also invest in smart agriculture, sustainable water management and responsive social safety nets. It is therefore heart-warming to present 16 articles à la carte to you all during this festive season. The articles ranged from design variables and considerations, transportation, building finishing, rework, competencies to building information modelling, real estate investments, building materials, construction forecasting logistics, urban crime and physiological effects of the environment on human wellbeing.

Adedokun, Adedayo and Isah in the 1<sup>st</sup> paper examined the architects' perception regarding the spatial needs of users in general hospitals with a view to determining how effective the methods used by architects are in arriving at design

decisions. The study recommended that general hospitals like any other public building should be subjected to public presentations where prospective users could make inputs, which would help the architects in the final design and that, the clients should not be considered as the users of the hospitals.

The influence of socio-economic attributes on travel demands of inter-urban public transport passengers in Lagos metropolis were explored by Agunloye and Nwokoro in the 2<sup>nd</sup> article. The study showed that there is a positive significant relationship between respondents' income and travel distances and between respondents' number of cars and travel distances meaning that passengers' income level influence travel distances amongst others. The study concluded that there is a need for socio-economic considerations in transport policy formulations.

Aluko, Ogunsote and Adedeji argued that building facades are the most noticeable element of buildings and are directly associated to the quality of urban environment hence prone to the effects of climatic conditions. Based on this, their paper assessed the degradation of external paint finish in some public residential buildings in coastal climatic zones of Nigeria. The paper revealed that the average service life for the external paint finish in coastal climatic design zone of Nigeria is 2-5 years contrary to the established research findings in different climatic zones different from Nigeria that stipulate 5-10 years.

The 4<sup>th</sup> article by Anifowose, Babarinde and Olanrewaju on the adoption of building information modelling (BIM) among professionals in Kwara State recommended that BIM should be

incorporated in the curricula of all Tertiary Institutions providing training in undergraduate programmes in built environment and also by incorporating a short-term BIM training for professionals could enhance the adoption.

Dosumu *et al.* in the 5<sup>th</sup> paper investigated the implication of rework on selected residential building projects in Lagos, Nigeria. They came to a conclusion that the causes of rework are mostly design-related and they are different for government-owned and private residential buildings. Hence, it was recommended that designers/consultants should visit construction sites before recommending any type of substructure, and projects should be supervised and coordinated by experienced personnel.

Babatunde and Kemiki in the 6<sup>th</sup> paper established that the potentials of Real Estate Investments (REI) in growing the Nigerian economy had not been adequately explored. They therefore advocated for reforms that would provide for investment databank, institutional framework for transparency and ease of land titling among other far reaching reforms.

Coming from the background that many studies have focused on women who are employed in the construction industry, but only a limited number of these studies have specifically investigated their actual involvement. Ali *et al.* in the 7<sup>th</sup> paper assessed the competences of women in the evolved and emerging roles of Quantity Surveying. Their paper recommended that female Quantity Surveyors should develop and increase their competency especially in those roles they least perform, in order to attract women participation in the area.

Yamusa *et al.* also assessed the capability of contractors in the Nigerian construction industry with a viewing to establishing and improving the contractors about their performance in risk management in the 8<sup>th</sup> paper. The paper advised contractors to define clearly their risk management responsibilities.

The 9<sup>th</sup> paper by Ibrahim *et al.* explored the possibility of using waste gear inner wire (WGIW) in Fibre Reinforced Mortar (FRM). The paper concluded that the development of FRM using WGIW from local wastes was an interesting approach to solving raw material shortage for the current generation mortar or structural concrete and to reduce waste disposal cost and related environmental issues in Nigeria.

Nasiru, Kasimu and Mohammed in the 10<sup>th</sup> paper investigated the causes of rework in building projects. The authors advocated that adequate attention be focused on quality supervision, monitoring and communication among the players during the course of building projects.

In a related development, the 11<sup>th</sup> paper by Isah, Shakantu and Ibrahim investigated how material requirement planning (MRP) technology could be utilised from the manufacturing and retailing industries background to improve the forecasting processes of construction logistics. The paper concluded that effective utilization of MRP technology in the logistics system of the construction industry could lead to realization of full efficiency gains in the forecasting aspect.

Land Use (LU) and change analysis have always been the contemporary challenge in sustainable environmental management. Based on this, Oladejo and Morenikeji in the 12<sup>th</sup> paper provided a baseline data for sustainable environmental management and adaptability of GIS/RS techniques for identifying the observed changes due to human activities in the studied area.

The influence of architectural design variables on the cost of energy consumption in office buildings was sought by Saba, Shittu and Idiako in the 13<sup>th</sup> paper. The paper established that design variables like floor areas, shape, height, perimeter, orientation, shading and extent of glazing have significant effect on cost of energy consumption in office buildings.

Medayese *et al.* in the 14<sup>th</sup> paper analysed urban crime in Maitumbi neighbourhood in Minna. Their paper recommended that adequate equipping of the security personnel is imperative for effectiveness in execution of duties; deployment of officers from CID unit in patrolling the crime hotspots is a necessity in apprehending criminals and ameliorating the incessant occurrence of crime in the neighbourhood.

GIS application for suitability assessment of sites for municipal solid waste disposal in Kano Metropolis, Nigeria was the focus of Adegboyega's paper. Based on the final suitability map, he asserted that parts of Ungogo and Kumbotso areas provided the suitable ground and location for solid waste disposal facility in the studied area.

The last paper by Ojobo advances empirical evidence of the physiological effects of contact with mountain landscape environment compared with urban environment using quantitative research approach to elicit objective physiological responses from subjects. The study concluded that contact with mountain landscape environments promote recovery from stress and supports the notion that natural landscape environments improve human wellbeing.

So far, the ride has been pleasant through the help of numerous people from the members of the Board of the School of Environmental Technology, Federal University of Technology (SET), Minna, SET Postgraduate Co-ordinators of the Departments of Architecture, Building and Quantity Surveying, reviewers and the contributors. Above all, without the seamless support of the Editorial Board members, it would have been difficult to keep fate with our audience.

Past editions of the Journal can be found at this web address: <http://etsj.futminna.edu.ng> for download

Let us do it again next year, peace!

**R. A. Jimoh, PhD**  
**Managing Editor**



# Contents

- 1-14 Architects' Perception on Spatial Design Considerations for Users in General Hospitals in Niger State Nigeria  
*Adedokun A.J., Adedayo O.F. & Isah A.D.*
- 15-25 Socio-Economic Influence of Inter-Urban Travel Demands of Road Transport Passengers in Lagos Metropolis  
*O. O. Agunloye & I. I. C. Nwokoro*
- 26-34 Evaluation of the service life of external paint finish in Public Residential Buildings in coastal climatic zone of Nigeria  
*Aluko O. O, Ogunsote, O. O. & Adedeji Y. M. D*
- 35-44 Adoption Level of Building Information Modelling by Selected Professionals in Kwara State  
*Anifowose O. M., Babarinde S. A. & Olanrewaju, O. I.*
- 45-57 Implication of Rework on Selected Residential Building Projects in Lagos, Nigeria  
*O. S. Dosumu, O. E. Akinsiku, F. J. Giwa & C. O. Aigbavboa*
- 58-67 The Potentials of Real Estate Investments in Growing the Nigerian Economy  
*Babatunde I. O. & Kemiki O. A*
- 68-75 Perception of Competences of Women in the Evolved and Emerging Roles of Quantity Surveying in Nigeria  
*A. A. Ali, F. M Bello, F. A. Idowu & R. Salmanu*
- 76-86 An Assessment of the Risk Management Capability Level of Building Contractors  
*Yamusa M. A, Muhammad A, Dalhatu A & Dahiru A*
- 87-93 Experimental Study of Mortar Containing Steel Fibre from Waste Gear Inner Wire  
*A.G. Ibrahim, M.M. Garba, J. Usman & S. Gambo*
- 94-103 Professionals Perception of the Factors Causing Rework in Building Projects in Abuja  
*A.M. Nasiru, A. M. Kasimu & Y. D. Mohammed*
- 104-113 Improving Construction Forecasting Logistics Using Material Requirement Planning (MRP) Technology in Nigeria  
*Y. Isah, W. M. W Shakantu & S. Ibrahim*
- 114-122 Assessment of Land Use Change using Remote Sensing and GIS Techniques in South Western Nigeria  
*Oladejo S. O. & Morenikeji O. A.*

- 123-135      Influence of Architectural Design Variables on Cost of Energy  
Consumption in Office Buildings in Minna  
*Saba, M., Shittu, A. A & Idiake, J.E.*
- 136-147      Analysis of Urban Crime in Maitumbi Neighbourhood, North-Central,  
Nigeria  
*Medayese S. O., Kemiki A. O., Shaibu S. I., Alonge O. D. & Abbah A. O.*
- 148-157      GIS Application for Suitability Assessment of Sites for Municipal Solid  
Waste Disposal in Kano Metropolis, Nigeria  
*Adegboyega, S.A.*
- 158-169      Physiological Effects of Contact with Mountain Landscape Compared with  
Urban Environment on Human Wellbeing  
*Ojobo, H.*