

EDITORIAL

I. From the Editor

A. Editor's Note

Welcome to this Volume 33, another Double Issue (Numbers 1 and 2) of The West Indian Journal of Engineering (WIJE). It is planned to have another forthcoming Volume 34 that would appear by January 2012. Thereafter, the Journal will be coming off the press regularly with 2 issues per year.

B. New Development of the Official Journal Website

We are pleased to announce that we have been launching a Website Project for the Journal and the trial run of the new Journal Website (<http://sta.uwi.edu/eng/wije/>) that has been alive since June 2011 with tremendous efforts made by the Editorial Sub-Committee. The Website Project is composed of five (5) phases, and we are in progress in the second phase. The project with highlights of respective phases is as follows:

- **Phase 1** (From June to mid-September 2011): Build platform and design the Web format to incorporating the journal's archives from 2006 till 2011 (including five most recent 5 Volumes i.e., 32, 31, 30, 29 and 28 in reverse order).
- **Phase 2** (From Mid September to mid December 2011): Continue the Phase 1 work and extend it to cover the following 5 Volumes i.e., 27, 26, 25, 24 and 23 in reverse order (i.e., from 2001 to 2005). Starting from Phase 2, there would have substantial amount of scanning jobs.
- **Phase 3** (From January to end March 2012): Continue the Phase 2 work and extend it to cover next 5 Volumes i.e., 22, 21, 20, 19 and 18 in reverse order (i.e., from 1996 to 2000).
- **Phase 4** (From April to end June 2012): Continue the Phase 3 work and extend it to cover another 5 Volumes i.e., 17, 16, 15, 14 and 13 in reverse order (i.e., from 1991 to 1995).
- **Phase 5** (From July to October 2012): Continue the Phase 4 work and extend it to cover all the remaining 12 Volumes i.e., from Vol.1 to Vol.12 (i.e., since 1967 to 1990).

II. About This Volume

This Volume incorporates two issues (i.e. Volume 33 Numbers 1 and 2). It includes eleven research articles. The relevance and usefulness of respective articles are summarised below.

E.I. Ekwue, R.J. Stone and D. Bhagwat, “Thermal Conductivities of Some Common Soils in Trinidad”, measure the thermal conductivity (k) of twelve soils from Trinidad in the field and the laboratory using a portable sensor and probe. Results show that laboratory measurements of k for twelve soils in Trinidad are in close agreement with the corresponding field measurements. It is claimed that most soils apart from those with appreciable sand contents would require standard backfills during underground cable laying.

B.O. Bolaji, T.M.A. Olayanju and T.O. Falade, “Performance Evaluation of a Solar Wind-Ventilated Cabinet Dryer”, present the design, construction and testing of a solar wind-ventilated cabinet dryer in Nigeria on latitude 7.5oN. They discuss the benefits of using forced convection solar dryers through the use of a rotary wind ventilator in the remote areas where electricity and other power sources are non-existent. The results obtained show that the temperatures inside the dryer and the air-heater are higher than the ambient temperature during most hours of the daylight.

S. Mujaffar and C.K. Sankat, “The Effect of Temperature on the Drying Characteristics of Salted Shark Fillets”, explore the drying mechanisms and investigate into the mathematical modelling of food drying processes of salted shark fillets. Results show that the favoured appearance and texture of the slabs make drying at 50°C the preferred drying temperature for commercial salted fish production. It is claimed to provide better understanding of the process parameters that are under the control of the operator as well as to predict drying behaviour under given drying conditions.

F. Castellanos and V.I. Ramesar, “Reliability Evaluation for the Assessment of Wind Energy Penetration in Power Systems”, present a reliability evaluation method that comprised wind data modelling, wind turbine generator power evaluation and a system adequacy assessment. Monte-Carlo techniques have been used based on random combinations of conditions for hourly wind speed, conventional generation availability and load. Results show that the method could allow comparison of the reliability of the system with a variable number of wind turbine generators, and generate indexes for facilitating economic analysis of the wind generation.

M.I. Mutabazi, “Trinidad Road Users Understanding of the New Zebra Crossing”, reports the result of a recent study on exploring road users’ understanding of the new Zebra crossing in Trinidad and Tobago. Findings show that some crossing elements are well understood by drivers while other elements present a challenge in relation to yielding right-of-way to pedestrians crossing roads. Most pedestrians are not satisfied with drivers’ yielding rates. The results pave the need to increase public education on the new crossing, and suggest crossing improvements.

E.I. Ekwue and K. Samaroo, “A New Laboratory Equipment for Assessing Soil Erosion by Water”, present the design, construction and testing of a laboratory research facility to quantify wash erosion by overland flow. The setting of the apparatus for testing the wash

erosion is from two Trinidadian soils, with four levels of peat content exposed to two lengths of slope and two slope gradients. Results show that the facility could allow for small incremental changes in the slope length and gradient, the separation of the eroded sediment from the runoff water and the removal of infiltrated water during testing.

J. Chandler and T.M. Lewis, “Designing Buildings for Ease of Maintenance in the Caribbean”, investigate into the integration of maintainability into design of large, multi-storey buildings. A survey was conducted of 50 professionals involved on the design of such buildings in the Caribbean. The findings reveal that the main areas where designers considered are in the specification of materials and of equipment selection and location.

E.J. Peters, “Water Quality of Rainwater Cisterns in the Grenadines”, assesses the quality of rainwater harvested and stored in cisterns in two Grenadian islands, Carriacou and Petite Martinique, using the H₂S strip test method. Detailed chemical and biological tests are also carried out on samples of rainwater and rainwater stored in cisterns. The results show that cistern water meets the drinking water standard in some cases, while there is evidence of contamination in other cases.

M. Atherley-Ikechi, W.A. Mellowes, and H. Farabi, “Optimal Sequencing Batch Reactor Conditions for Greywater Nitrogen Removal”, discuss the pressing need of wastewater treatment, and assessed the nitrogen removal capability of a sequencing batch reactor (SBR) on low strength greywater in Trinidad and Tobago. The collection time of greywater varies so as to allow for observation and assessment of the treatability relative to the composition and different biological solid retention times (SRT). Results show that a maximum of 83% total nitrogen removal is attained amongst the morning samples using a 5-day SRT.

L.F. Quildon and K.F. Pun, “Development of a Value Creation Programme in the Yachting Services Cluster: A Value Management Approach”, investigate into the current status and discuss the key variables affecting value creation of the yachting services cluster in Trinidad and Tobago. Based in the empirical evidence acquired from the targeted groups of the cluster stakeholders, a host of factors/elements, including repair accuracy, concurrent engineering, quality standards, quality assurance, and quality control, are identified. A value creation programme is also derived for the cluster using a value management (VM) approach.

K.F. Pun, C.K. Sankat and C.B. Motilal, “Assessing Multi-factor Productivity of the Agro-Industries in Trinidad and Tobago: A Research Agenda”, discuss the forward and backward linkages, and identify leverage points in the agro-industry sector with reference to Trinidad and Tobago (T&T). A research agenda is proposed to investigate into these linkages in the context of agro-production functions, and use the Törnqvist index to determine the agro-contributions towards the nation’s gross domestic product.

III. Acknowledgements

On behalf of the Editorial Office, we gratefully acknowledge all authors who have made this special issue possible with their research work. We greatly appreciate the voluntary contributions and unfailing support that our reviewers give to the Journal. Our reviewer panel is composed of academia, scientists, and practising engineers and professionals from industry and other organisations as listed below:

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Finally, the views expressed in articles are those of the authors to whom they are credited. This does not necessarily reflect the opinions or policy of the Journal.

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