Editorial

I. From the Editor

A. Editor's Note

The West Indian Journal of Engineering (WIJE) has been plagued with difficulties of one kind or another in its effort to publish some scheduled issues in the past two years. Being the new editor appointed for the Journal starting from January 2011, one of the first tasks is to make expeditious treatment of the backlog of publication submissions. This Volume 32 (Nos. 1 and 2) is the first initiative under the new editorship.

We are planning to have two upcoming Volumes published shortly as scheduled below:

- 1)Volume 33 Number 1 (July 2010) and Number 2 (January 2011) to appear as a Double Issue (Numbers 1 and 2) by December 2011; and
- 2)Volume 34 Number 1 (July 2011) and Number 2 (January 2012) to appear another Double Issue (Numbers 1 and 2) by April 2012.

It is anticipated that an improved Journal will be coming off the press regularly and on schedule.

B. New Look and Author Guidelines for the Journal

The new WIJE's Publication and Editorial Board would like to strengthen the Journal for a wider and more international reader and authorship. Starting from this current Volume, a new look of professional/scholarly journal with revised format is adopted. A new set of 'Notes and Guidance for Authors' is included at the back of this Volume.

Papers submitted to the Journal should be original contributions and not be under consideration for any other publication at the same time. Each paper is first reviewed by the Editor-in-Chief and, if it is judged suitable for this publication, then sent to referees in respective disciplines/ areas for double blind peer review. Based on their recommendations, the Editor then decides whether the paper should be accepted as is, revised or rejected.

C. Special Issue Proposals Are Always Welcome

Proposals for special issues on topics of current interests in engineering, engineering management and related disciplines are always welcome. Please send a brief description of the concept for the issue to The Editorial Office, The West Indian Journal of Engineering, Faculty of Engineering, UWI (E-mails: uwije@sta.uwi.edu; KitFai.Pun@sta.uwi.edu). If the initial response is favourable, the Editor-in-Chief will request a specific plan and more detailed information to be used in the final decision about proceeding with the special issue.

II. About This Volume

This Volume incorporates two issues (i.e. Volume 32

Numbers 1 and 2). It includes eleven research articles. The relevance and usefulness of respective articles are summarised below.

W.G. Lewis and A.O. Ameerali, "Experimental Investigations into Manufacturing Processes Used to Produce Musical Steel Drums", explore innovative manufacturing processes, which can be used to manufacture the national musical instrument of Trinidad and Tobago, the Musical Steel Drum or Steelpan. Experimental investigations using the Flowforming or Spinforming and Marforming processes proved to be promising in achieving the required strain distribution of the formed component.

N.L. Hiregoudar and B. Soragaon, "Developing a Model for the Implementation of Six Sigma Concept in Manufacturing SMEs: The Indian Scenario", focus on the issue of implementing Six Sigma in Indian SMEs (small and medium-sized enterprises) and on developing an implementation model. This article points at the human element to be the major cause of rejections in SMEs. It is anticipated that the proposed model could help these firms to apply Six Sigma to their business processes.

B.V. Chowdary, R.R. Maharaj and W.G. Lewis, "Development of Welding Parameters to Perform Root Pass Welding a Mechanical GTAW Process: A Case Study", describe the development of welding parameters for an effective implementation of a mechanised GTAW process in the local industry in accordance with global welding standards. The experimental results showed that performing root pass welding becomes much easier as the pipe diameter increases. The weld current also varies to a significant extent in the case of welding smaller diameter pipes.

E.I. Ekwue, "Management of Water Demand in the Caribbean Region: Current Practices and Future Needs", assesses the availability, requirements and utilisation of water resources in the Caribbean region. This article examines the trends of water scarcity, identifies the countries with the greatest water scarcity in the region, and stresses the role of water demand management as a means of optimising the use of water in the region.

J. Marcelle-De Silva and R. Dawe, "The Challenge of Producing Thin Oil Rims in Trinidad", investigate into the problems of thin oil rim reservoirs in Trinidad. This paper discusses the successful current reservoir management practices for coning carried out within the economic restraints of the liquefied natural gas (LNG) contracts, and demonstrates how multidisciplinary teams, using horizontal wells and good use of modern technology, have successfully exploited the fields off the east coast of Trinidad.

O.J. Olukunle, A.S. Ogunlowo and L. Sanni, "The Search for an Effective Cassava Peeler", present the features, prospects, performance evaluation and limitations of the various models of cassava peeling

machines based on a study in collaboration with research institute, university and private fabricators in Nigeria. Results show appreciable improvement in the design and performance of the cassava peeling machines. The peel retained on the tubers with each model of the cassava peeler was influenced by peeler speed.

B.E. Okafor, S. Odi-Owei and A.J. Akor, "Using Regression Analysis to Model Wear in Flights in Palm Oil Mill Press Screws", explores the use of multiple regression models to determine the best wear model for the variable speed pulley system using a palm oil mill in Nigeria as a case study. With the aid of computer regression packages, results show that the double-log model would provide the best fitting curve for predicting flights wear for the system.

E.P. Edwards, A. Sowter and M.J. Smith, "Algorithm Development for the Automatic Extraction of Topographic Data Stereoscopic ENVISAT Imagery over Caribbean Territories", describe a stereoscopic Synthetic Aperture Radar (SAR) technique for extracting elevation data from pairs of ENVISAT imagery over cloud affected Caribbean territories. Using a test site over the island of Jamaica, comparisons with 'ground truth' data are used to quantify the elevation data quality.

M.I. Mutabazi and A. Ackbarali, "Trinidad School Travel Characteristics and Attitude Towards Ride Sharing", present the main results of a survey conducted in St. George East School District, Trinidad on the characteristics of transport modes used by students to and from school. The article also reports attitudes of students, parents and guardians on ride sharing for school trips.

K.F. Pun, and M-Y.R. Yiu, "Exploring the Challenges Facing Industrial Engineers in the Employment Market of Trinidad and Tobago: Some Findings", provide some factual account of challenges facing Industrial Engineers. It shows that there has been the prevalence of misconstrued perception towards industrial engineering (IE) that would have deteriorated the competitiveness of many Trinidad and Tobago (T&T) organisations. There is a pressing need to break such prevalence by recognising the IE roles and contributions to industry and the society at large.

R. Hosein, "Booming Mineral Resources and the Imperative of Economic Diversification", reviews the various problems that can arise in an economy when it is endowed with an abundance of natural resources. The paper then discusses the need for economic diversification and the role of the government in the whole process.

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:

- Ann Muggeridge, Imperial College, London, UK
- Charisse Griffith-Charles, University of the West Indies, T&T
- Edwin I. Ekwue, University of the West Indies, T&T
- Hazel Patterson-Andrews, University of the West Indies, T&T
- Henry C.W. Lau, University of Western Sydney, Australia
- Ian Khan-Kernahan, University of the West Indies
- Jeffery A. Jones, University of Warwick, UK
- John Buzacott, York University, Canada
- John Howell, University of Glasgow, Scotland, UK
- Jose Holguin-Veras, Rensselaer Polytechnic Institute, Canada
- Kamel Singh, University of Trinidad and Tobago, T&T
- Kit Fai Pun, University of the West Indies, T&T
- Man-Yin R. Yiu, University of the West Indies, T&T
- Raffie Hosein, University of the West Indies, T&T
- Ramesh Ramsaran, University of the West Indies, T&T
- Richelle V. Adams, University of the West Indies, T&T
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- S.G. Deshmukh, Indian Institute of Technology, Delhi, India
- Srirangapattanam Y. Keshavan; University of the West Indies, T&T
- Steve J. Ventura, University of Wisconsin-Madison, USA
- **T.V.V.L.N. Rao**, Mechanical Engineering Group, BITS, Pilani, India
- Walter K. Bilanski, University of Guelp, Canada
- William J.Emblom, University of Louisiana at Lafayette, USA
- Winston H.E. Suite, University of the West Indies, T&T

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.

> KIT FAI PUN, *Editor-in-Chief* Faculty of Engineering, The University of the West Indies, St Augustine, Trinidad and Tobago West Indies May 2011