KMUTNB Int J Appl Sci Technol Vol. 10, No. 4, October–December 2017 **Contents**

Editorial Corner

Memristive Systems and Beyond Dalibor Biolek

Review Article

247 Is Doubled Haploid Production in Sorghum Impossible? Kanokwan Teingtham and Niegel D La Borde

Research Articles

- Discrete Least Square Estimation of Polynomial models for ECG Data Thitanont Charurotkeerati and Walailuck Chavanasporn
- Evaluation of Pyrolysis as a Method of Waste Recovery from the Non-Metallic Fraction 263 of Printed Circuit Board Waste Songpol Boonsawat, Premrudee Kanchanapiya, Erik L.J. Bohez and Soon Chia
- 279 Hydrogen-Rich Syngas Production from Biogas Reforming by Gliding Arc Plasma-Catalyst Banhan Khanchai, Sumaeth Chavadej, Hidetoshi Sekiguchi and Nongnuch Rueangjitt
- **Modeling Impacts of Dengue Vaccination on Sequential Epidemics** Nichaphat Patanarapeelert and Klot Patanarapeelert
- Molecular Docking Analysis on Epidermal Growth Factor Receptor Wild Type (EGFRwt) 293 with Quinazoline Derivative Compounds as Tyrosine Kinase Inhibitors Herlina Rasvid, Bambang Purwono and Ria Armunanto
- 301 The Genetic Algorithms for Dynamic Order Volume with Randomly and Inconsecutively **Demands**

Chartchai Usadornsak and Chayathach Phuaksaman

307 Warehouse Performance Measurement: Structural Equation Modeling Technique and

Anucha Hirunwat, Premporn Khemavuk and Vichai Rungreunganun

Academic Enhancement Department (AED) King Mongkut's University of Technology North Bangkok (KMUTNB) 1518 Pracharat 1 Road, Wongsawang, Bangsue, Bangkok 10800, Thailand Tel. (66) 2555-2238-40, E-mail: ijast@op.kmutnb.ac.th http://www.ijast.kmutnb.ac.th





Vol. 10, No. 4

KMUTNB: IJAST

King Mongkut's University of Technology North Bangkok International Journal of Applied Science and Technology

Vol. 10, No. 4, October-December 2017

ISSN: 2465-4531



KMUTNB: IJAST

King Mongkut's University of Technology North Bangkok International Journal of Applied Science and Technology

Paper Citation is as Followed: KMUTNB Int J Appl Sci Technol

ISSN: 2465-4531

Schedule

no. 1 January–March no. 2 April–June

no. 3 July–September no. 4 October–December

Editorial Policy

Paper, comprising review and report of original scientific research, will be judged for publication on the basis of evaluation by independent reviewers. Such reports and articles include those containing substantial supported theories, innovative work, substantial experimental results, useful and constructive discussion, and review articles standardized to regional or international acceptance. Each volume will comprise four issues. In addition, special issue containing the proceedings of conferences may be produced. These will be designated as supplements to the appropriate volume and number. An electronic journal is also provided on the website (http://www.ijast.kmutnb.ac.th). The editors reserve the right to require revision of the submitted manuscript as a condition for final acceptance.

The university and the editorial board claim no responsibility for the contents or views expressed by the authors of individual articles. Copying allowed freely provided acknowledgement is made thereof. All articles submitted for publication will be assessed by a group of distinguished reviewers.

Focus and Scope

The KMUTNB: IJAST, through full research papers and compact reviews, covers all applications of science and technology. The journal bridges the crucial gap between basic research and patenting of an invention, targeting a broad audience of academic and industrial researchers, as well as the increasingly important world of scientists and engineers at start-up companies. The journal provides a forum for scientists and engineers, physicists, and chemists to communicate on the most important topics in the field of:

- Technology (Engineering): Production Engineering, Mechanical Engineering, Automotive Engineering, Aerospace Engineering, Electrical Engineering, Communication Engineering, Computer Engineering, Control Engineering, Chemical Engineering, Industrial Engineering, Biomedical Engineering, Civil Engineering and etc.
- Applied Science: Natural Sciences, Social Sciences, Physics, Mathematics/Statistics, Energy, Agro/Food, Materials, Information Technology, Agricultural Sciences and etc.

Indexed by Thai-Journal Citation Index Centre (TCI), ACI, CrossRef, Google Scholar and SCITE

Website for Submissions: http://www.ijast.kmutnb.ac.th

Contact: ijast@op.kmutnb.ac.th

Copyright © 2017 by King Mongkut's University of Technology North Bangkok. All rights reserved.

No part of this publication may be reproduced stored or transmitted in any material form or by any methods including electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the publisher, except in accordance with the provisions of the Copyright Design and Patents Act 1988.