KMUTNB Int J Appl Sci Technol Vol. 11, No. 4, October-December 2018 Contents

Editorial Corner

233 Natural Fibers as Perspective Materials Sanjay Mavinkere Rangappa and Suchart Siengchin

Review Articles

- 235 Effect of Oxygen Concentration on Distributed Flame Regime Richard Scenna and Ashwani K. Gupta
- **239** The Roles of Plant Cell Wall as the First-line Protection Against Lead (Pb) Toxicity *Thitinun Sumranwanich, Kanpong Boonthaworn and Ajit Singh*

Research Articles

- 247 Alkali Pretreatment and Enzyme Hydrolysis to Enhance the Digestibility of Rice Straw Cellulose for Microbial Oil Production Chayanun Kobkam, Jidapha Tinoi and Sila Kittiwachana
- 257 Approximate Confidence Interval for Effect Size Base on Bootstrap Resampling Method Suvimol Phanyaem
- 263 Design of a Varying Die-plate Fish Feed Pelletizer and Performance Evaluation Using a Non-conventional Feed Sources Musliu Olushola Sunmonu, Michael Mayokun Odewole and Kehinde James Falua
- 273 Dynamic Characteristics of Amorphous Photovoltaic Module by Light-induced Degradation Nitikorn Silsirivanich and Prungsak Auttaphut
- 279 Essential Oil Composition and *in Vitro* Anti-aging Potential of *Elettariopsis wandokthong* Rhizome Kris Jangjarat, Nisakorn Saewan and Wannisa Vichit
- 287 Removal of Methylene Blue Dye in Water Using Longkong Fruit Peels Vanida Chairgulprasert and Hongnapa Waehayee
- 297 Visible Light-driven BiOI/ZnO Photocatalyst Films and Its Photodegradation of Methomyl Insecticide Natkritta Boonprakob, Duangdao Channei, Burapat Inceesungvorn and Chen Zhao

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





KMUTNB: IJAST

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

Vol. 11, No. 4, October-December 2018

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.kmuthb.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), ASEAN Citation Index (ACI), CrossRef, Google Scholar and SCITE

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

Contact: ijast@op.kmutnb.ac.th

Copyright © 2018 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.