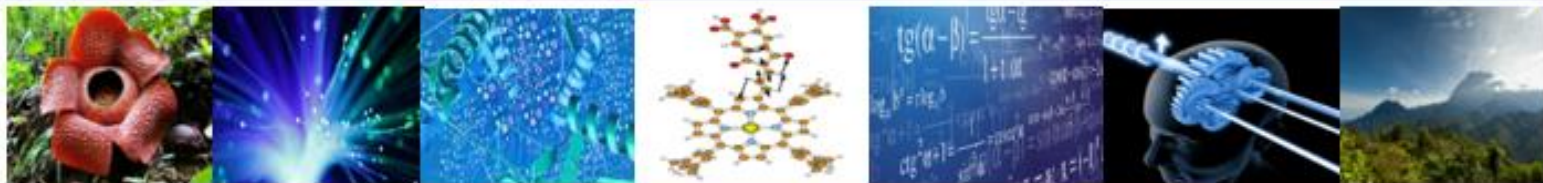


TRANSACTIONS ON SCIENCE AND TECHNOLOGY



Volume 8 Issue 1
March 2021



ISSN 2289-8786

Transactions on Science and Technology

ISSN: 2289-8786

Editors-in-Chief

- Jedol Dayou** **Khim Phin Chong**
*Energy, Vibration and Sound Research Group (e-VIBS),
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia.
 jed[at]jums.edu.my* *(Special Issue)*
*Biotechnology Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia.
 chongkp[at]jums.edu.my*

Managing Editor

- Fui Pien Chee** **Asmahani Awang**
*Energy, Vibration and Sound Research Group (e-VIBS),
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia.
 fpchee06[at]jums.edu.my* *Energy, Vibration and Sound Research Group (e-VIBS),
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia.
 asmahani_awang[at]jums.edu.my*

Editorial Board

- Aini Janteng** **Andy Russel Immit Mojiol**
*Mathematics with Economics Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.* *Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.*
- Chong Mun Ho** **Coswald Stephen Sipaut @ Mohd Nasri**
*Mathematics with Economics Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.* *Chemical Engineering Programme,
 Faculty of Engineering,
 Universiti Malaysia Sabah.*
- Ismail Jusoh** **Jidon Adrian Janaun**
*Faculty of Resource Science and Technology,
 Universiti Malaysia Sarawak.* *Chemical Engineering Programme,
 Faculty of Engineering,
 Universiti Malaysia Sabah.*
- Jualang Azlan Gansau** **Ko Ying Hao**
*Biotechnology Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.* *Department of Mechanical Engineering,
 Faculty of Engineering and Built Environment,
 Tunku Abdul Rahman University College.*
- Leong Wan Vun** **Mohd Kamel Wan Ibrahim**
*Environmental Science Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.* *Mechanical Engineering Programme,
 Faculty of Engineering,
 Universiti Malaysia Sabah.*
- Moh Pak Yan** **Noumie Surugau**
*Industrial Chemistry Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.* *Industrial Chemistry Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.*
- Ping Chin Lee** **Rachel Fran Mansa**
*Biotechnology Programme,
 Faculty of Science and Natural Resources,
 Universiti Malaysia Sabah.* *Chemical Engineering Programme,
 Faculty of Engineering,
 Universiti Malaysia Sabah.*
- Raseetha Vani Siva Manikam** **Sebastian Dayou**
*Faculty of Applied Sciences,
 Universiti Teknologi MARA Shah Alam.* *School of Engineering & Technology,
 University College of Technology Sarawak.*
- Thomas Moh Shan Yau** **Yeong Sheng Tey**
*School of Engineering & Technology,
 University College of Technology Sarawak.* *Institute of Agricultural and Food Policy Studies,
 Universiti Putra Malaysia.*

International Editorial Board

- Baba Musta** **Cesar G. Demayo**
Universiti Malaysia Sabah, Sabah, Malaysia *Mindanao State University-Iligan Institute of Technology,
 Philippines*
- Francisco Nuñez De Caceres** **Mariam Gaidamashvili**
Universidad Autonoma del Estado de Hidalgo, Mexico *Iv. Javakhishvili Tbilisi State University, Georgia*
- Patricia Anthony** **Sa-Ouk Kang**
Lincoln University, New Zealand *Seoul National University, South Korea*

Associate Editor

Jackson Chang, Malaysia

Associate Editors (Special Issue)

- Arnyitte Alexander** **Syahriel Abdullah**
 Malaysia Malaysia

<http://tost.unise.org/>

Volume 8, Issue 1 (March 2021)

Table of Contents

Original Articles

<i>Arnyitte Alexander; Jualang Azlan Gansau; Devina David.</i>	1	<i>In vitro</i> Seed Germination of <i>Coelogyne asperata</i> Lindl. (Orchidaceae)
<i>Januarius Gobilik; Cathy Tening Rechar; Andrea Joyce Maludin; Md. Amirul Alam; Suzan Benedick.</i>	7	Efficacy of Column Hydroponic System for Increasing Growth and Yield of Pak-choy (<i>Brassica rapa</i> L.) per Unit Area
<i>Yan Ying Neoh; Patricia Matanjun; Jau Shya Lee.</i>	25	Effects of Various Drying Processes on Malaysian Brown Seaweed, <i>Sargassum polycystum</i> Pertaining to Antioxidants Content and Activity
<i>S M Anisuzzaman; Mohd Syafiq Kamarulzaman.</i>	38	Removal of Nitrogen Containing Compounds From Fuel Using Modified Activated Carbon

Review Article

<i>Avinash Rames.</i>	45	COVID-19: Reviewing Risk Factors and Breaking Transmission
-----------------------	----	---