

## Acta Mechanica Malaysia (AMM)

### HEAD OFFICE ADDRESS:

#### Zibeline International Publishing Sdn Bhd

C2-2-3, Block 2, CBD Perdana 3,  
Persiaran Cyberpoint Timur,  
Cyber 12, 63000 Cyberjaya,  
Selangor.

**Tel:** +603-86879842

### EDITORIAL STAFF:

#### Publishing Manager

Tasbia Ab Rajul

#### Publishing Editor

Nurul Afiqah Ab Manan

#### Publishing Editor

Rozalaidah Abdul Karim

#### Technical Editor

Dg Ku Siti Noraina Awang

#### Technical Editor

Nuraliah Natasha Amirurrulhisam

#### Technical Editor

Muhammad Aqil Zikry Mohd Nizam

### Frequency:

Bi-annual (2 issue per year)

ISSN: 2616-4302 (Online)

### Price:

Single issue: 50 MYR

Price for abroad

Single issue: 25 USD

### Web:

[www.actamechanicamalaysia.com](http://www.actamechanicamalaysia.com)

### E-mail:

[info@zibelinepub.com](mailto:info@zibelinepub.com)

## Contents

VOLUME 5, ISSUE 1, 2022		
No	Editorial	Pages
1	A PCTRAN BASED ANALYSIS ON THE EFFECT OF BREAKSIZE AND COMPARATIVE STUDY BETWEEN HOT AND COLD LEG LOSS OF COOLANT ACCIDENTS IN VVER 1200 POWER REACTOR	31-34
2	MECHANIZATION IN FRUIT CULTIVATION: PRESENT STATUS, ISSUES, CONSTRAINTS AND FUTURE ASPECTS OF NEPAL	35-43
3	DESIGN OF A NEW POTATO COMBINE HARVESTER	44-46
4	DESIGN, FABRICATION AND EXHAUST GASES ANALYSIS OF CORN COB FEEDING UNIT INSTALLED WITH STEAM BOILER	47-51
5	ASSESSMENT OF THE SUITABILITY OF SOLAR ELECTRICITY ADOPTION IN POULTRY INDUSTRY OF PAKISTAN	52-57
6	DESIGN OF POLAR COORDINATE WHEEL HUB MARKING MACHINE	58-59

# Acta Mechanica Malaysia (AMM)

## Editorial

Due to recent advancements in the field of mechanical engineering and automation, it become inventible to provide the most recent information and technology not only on leading-edge research in specialist areas but also on research and development to solve cross-cutting issues. Acta Mechanica Malaysia (AMM) publishes papers of high quality research and critical reviews in the field of mechanical engineering and automation. The journal features a mix of experimental, numerical, and theoretical articles dealing with all aspects of the field. Acta Mechanica Malaysia (AMM) is a collaborated publishing project under VOLKSON PRESS and Zibeline International.

## Scientific Board

### Editorial Team

#### Editor in Chief

Assoc. Prof. Ir. Dr. Nuriani Abdul Aziz  
Department of Mechanical and Manufacturing  
Engineering,  
Faculty of Engineering Universiti Putra Malaysia  
43400 Serdang, Selangor, Malaysia

Dr. Tauseef Aized  
Professor, Mechanical Engineering,  
University of Engineering and Technology, Lahore  
Pakistan

#### Editorial Board

Engr. Prof. Mike Agbesi Acheampong  
Pro Vice-Chancellor,  
Kumasi Technical University, Kumasi-Ghana

Dr Devarajan A/L Ramasamy  
Faculty of Mechanical Engineering  
Universiti Malaysia Pahang

Associate Prof. Dr Kumaran A/L Kadirgama  
Faculty of Mechanical Engineering  
Universiti Malaysia Pahang

Asst. Prof. Er. Gaurav Kumar  
Assistant Professor of Mechanical,  
Vidya College of Engineering, Meerut

Asst. Prof. P.Umamaheswarrao  
Department of Mechanical Engineering,

Asst. Prof. Dr. Ram Rohit V  
Department of Mechanical Engineering  
BMS College of Engineering, Bengaluru

Monaem Elmnifi  
Bright Star University, Libya  
College of Engineering/Renewable and  
Sustainable Energy

Engr. Rana Shahzad Noor  
Department of Agriculture, Biological,  
Environment and Energy Engineering, College of  
Engineering, Northeast Agricultural University,  
Harbin 150030, China

Arjun Prasad Khanal  
Agriculture Extension officer  
Ministry of Land Management Agriculture  
and Cooperatives, Province 5, Nepal

Abid Hossain Khan  
Department of Mechanical Engineering,  
Sonargaon University (SU), Dhaka-1212,  
Bangladesh