

2019

ACADEMIC INTELLECTUAL
INTERNATIONAL INVENTION,
INNOVATION & DESIGN BOOK

Published by : Student Affairs Department,
Universiti Teknologi MARA Kedah,
P.O. Box 187, 08400 Merbok, Kedah, Malaysia.

Patron : Dr. Wan Irham Ishak
Dr. Abd Latif Abdul Rahman

Project Manager : Yazwani Mohd Yazid

Design Director : Mohd Hamidi Adha Mohd Amin
Fadila Mohd Yusof

Editorial Director : Mohd Hamidi Adha Mohd Amin
Mas Aida Abd Rahim

Copyright © 2019 Student Affairs Department, Universiti Teknologi MARA Kedah.
No part of this publication may be reproduced, stored in retrieval system, or transmitted in any form or by means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

ISBN : 978-967-0314-71-6

Printed by : Perpustakaan Sultan Badlishah,
Universiti Teknologi MARA Kedah,
P.O Box 187, 08400 Merbok, Kedah, Malaysia.

TABLE OF CONTENT

DESIGN CATEGORY	Pages
1. INTELLIGENT ESSENTIAL OIL EXTRACTION SYSTEM	2
2. DEVELOPMENT OF AN ELECTRONIC EDUCATIONAL KIT FOR LEARNING CONTROL PRINCIPLE SUBJECT; BLOCK DIAGRAM	3
3. E-TOURISM ATLAS: A WEB-MULTIMEDIA TOURISM MAPPING SYSTEM AND MOBILE APPS IN MALAYSIA	4
4. MTXbrooch: FINE METAL AND TEXTILE ARTS FOR MODERN CONTEMPORARY BROOCH	5
5. RULER MATH	6
6. BOOK POINT	7
7. EMOQUEST : BEST PRACTICE VISUAL EMOTIONAL TECHNIQUES SURVEY IN TEACHING AND LEARNING AS AN INNOVATIVE APPROACHES USING MOBILE APPLICATIONS	8
8. MODEL KIT I-BO	9
9. GUNA –GUNA	10

INNOVATION CATEGORY

10. WALKING AROUND IMPROVEMENT KEYS (WALKS)	12
11. A-DAM –ALAT BERMAIN, BERZIKIR DAN BERDOA	13
12. GAMEBOX: ALTERNATIVE THERAPY TO IMPROVE AUTISM’S THINKING AND MENTAL ABILITY	14
13. PENGHAYATAN DAN KEBERKESANAN PENGGUNAAN MULTIMEDIA DALAM KURSUS MAGNUM OPUS MELAYU DI UNIVERSITI MALAYSIA KELANTAN	15
14. REHAL TOOLKIT	16
15. BASIC ISLAMIC LEARNING (BIL) BOARD GAME	17
16. EZH2O-Citrullus	18
17. TEJA – ECO INDIKATOR	19
18. ARLITAR: AUGMENTED REALITY FOR BASIC CIRCUIT LEARNING MODULE	20
19. COOLING PAD TEMPERATURE MONITORING SYSTEM USING ARDUINO (CPTM)	21
20. AUGMENTED REALITY BASED APPLICATION FOR CHEMISTRY EDUCATION (ARCHEM)	22
21. DUAL-MODE DISTILLATION ESSENTIAL OIL EXTRACTION SYSTEM WITH STFPID	23
22. HOBP (HYDROGEL OF BANANA PEEL) : UTILIZATION OF BANANA PEEL WASTE AS A BASIC MATERIAL FOR ECO-FRIENDLY HYDROGEL PLANTING MEDIA	24

DESIGN CATEGORY

GUNA -GUNA

Zaidi Yusof¹, Abu Hanifa Ab. Hamid ², Muhammad Nizam Azahar ³, Ahmad Adam Zakaria ⁴, & Azlan Abdul Rahman ⁵

*Faculty of Arts & Design, UiTM Kedah,
Academy of Language Studies, UiTM Kedah*

The used materials are casted-off or not consumed and they are usually disposed of. In the Department of Industrial Design, most of the used materials will be collected and then sent to the disposal center. Among the main materials used by the students are the acrylic wood. In order to avoid them from being disposed, it is good to take the approach by collecting all the used materials to be transformed as a trophy for UiTM's internal activities and programs as well as external bookings. This can generate the income of student clubs and students who assist in the work of creating the designs and trophies. The price is based on the design and complexity of the trophy. The trophy is a pioneer project for the use of the used material and will be continued by producing other products under the brand name club for income generating purposes through design using the used materials. Acrylic is also the major component in the production of Industrial Design students and most of the surplus will be disposed-off and wasted. The used woods are then produced as a result of excess student projects reapply to create trophies or souvenirs that can be resold in order to generate student club income.

Keywords: reused materials, acrylic, trophies, industrial design, income generation



UNIVERSITI
TEKNOLOGI
MARA

Cawangan Kedah
Kampus Sungai Petani



KEMENTERIAN
PENDIDIKAN
MALAYSIA

MRM
MALIS REKABENTUK MALAYSIA

ISBN 978-967-0314-71-6



9 789670 314716