

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.

89.	Dadu BiMate TJI: AN INNOVATION OF BOARD GAME FOR FUN AND	91
	EFFECTIVE NUMBER, BASIC OPERATIONS AND BASIC MEASUREMENT	
	FACTS LEARNING IN PRIMARY MATHEMATICS	
90.	ANICARE	92
91.	PEMPEK BO SANG (FISHCAKE MADE OF BANANA'S FLORAL STEM)	93
92.	EXAMINATION MANAGEMENT SYSTEM (EXAMS)	94
93.	KLEAN	95
94.	MUSON (MUSHROOM NOODLE) INNOVATION OF HEALTHY FOOD	96
	PRODUCTS FROM OYSTER MUSHROOMS WITH NEW INNOVATION AS A	
	POTENTIAL BUSINESS OPPORTUNITY IN PUBLIC SECURITY	
95.	TENAGA GUNA SEMULA (TEGUSE)	97
96.	ANALISIS PUNCA MASALAH PEMBELAJARAN OPERASI TOLAK	98
	DALAM LINGKUNGAN 10 DAN KEUPAYAAN BITOBI MATCH-UP	
	DALAM MENGATASI MASALAH: KAJIAN RINTIS	
97.	IMPROVING STUDENTS AWARD SELECTION PROCESS THROUGH THE	99
	DEVELOPMENT OF AKSIS (ANUGERAH KECEMERLANGAN SISWA) WEB	
	INFORMATION SYSTEM	
98.	IMPROVING RECORDS' MANAGEMENT PRACTICES VIA	100
	ATTENDANCE MONITORING SYSTEM (AMOS)	
99.	DELAT ADLER: THE PORTABLE AND VERSATILE ELECTRCITY GENERATOR.	101
100.	DISASTER E-DRONE PREVENT INCREASING OF VICTIM ENGLISH!	102
101.	SPEAK UP SYSTEM	103
102.	H-BALM: HARUMANIS-BASED RELIEVING PRODUCT	104
103.	H-CUBE: INNOVATIVE HARUMANIS PERLIS PRODUCT	105
104.	DARE TO INVEST: CREATIVE MIND AND INNOVATIVE IDEA	106
105.	POLYVALENT CARREL	107
106.	Ezi4BANNER 2.0	108
107.	RANGGU "THE NATURAL COLOUR"	109
108.	SMART EMERGENCY DRONE FOR MANAGEMENT OF DISASTER	110
109.	SMARTOVATION YUZA WITH LONG DEPENDABLE WIRES	111
110.	THE CONVERSION OF THERMOELECTRIC ENERGY INTO ELECTRICAL	112
	ENERGY IN APPLICATION OF DEREM CHARGER	
111.	TEH HARUMANIS PERLIS	113
112.	CAR CARBON MONOXIDE DETECTOR (CARMOD)	114
113.	RECYCLE BIN: WASTE BUSINESS PLATFORM TO IMPROVE	115
	SCAVENGER'S CHILDREN EDUCATION BASED ON MOBILE APPLICATION	
114.	SMART WUDHUK	116
115.	CAPTION (CANTILEVER PIEZOELECTRIC ENERGY HARVESTER	117
	WITH ENERGY BANK SYSTEM FOR FISHERMAN) AS AN ALTERNATIVE	
	TECHNOLOGY INNOVATION TO OPTIMIZE MARITIME ENERGY RESOURCES	
116.	AUTO WATER RECLOSE	118
117.	WIRELESS AIR POLLUTION DETECTOR (MAGIC NOZZ)	119
118.	E-CAMFINDER LEARNING APPLICATION	120
119.	ROTARY GRILL-gen2	121
120.	GARBARGAIN: A SOLUTION FOR PRA-PROSPEROUS COMMUNITIES	122
	BY EXCHANGED GARBAGE TO GET THE SUITABLE LEFTOVER FOOD	



CANDLE ELECTRICAL POWER GENERATOR SYSTEM (CEPSIS)

Umi Kalthom

The goal of this project was to design and construct an electrical power source using waste heat energy from candle. Normally when blackout occurs, candle is often used to light up an area. All knows that candle when light up, produces light energy and heat energy. Only the light energy is normally used. Therefore the heat energy is considered a waste.

The heat that is generated from the candle can be processed and designed to output small amount of electrical power. It was designed to be an open-ended and to be applicable to power almost all small electrical system. The main source of this process is the waste heat energy is used to process electrical charge when there is unwanted heat. This project is proven that heat energy from candle can actually generate enough voltage to power small fan. It can be also designed to able to charge mobile phones and lights up LED lamp. The main aim of this project is to design and construct a power electrical source to be used for powering small electrical appliances and to light up an area with fire and heat. To ensure the light up area is brighten, we upgraded the lighting system using magnifying glass. This will enlarge the area as well as give a cooling area when blackout occurs. This project is good to be used when there is a blackout or to be used in remote areas where there is no electricity or irregular and insufficient electricity.







