



# CREATIONS de UiTM

INTERNATIONAL MEGA INNOVATION CARNIVAL **2023**

*Fostering Innovation To Global Communities*

LET'S CRAFT A BETTER WORLD TOMORROW!

## ABSTRACT BOOK

20<sup>th</sup> MAY 2023

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UNIVERSITI TEKNOLOGI MARA  
CAWANGAN SELANGOR, KAMPUS DENGKIL  
MALAYSIA

ORGANISED BY:



جامعة  
Teknologi  
MARA  
UNIVERSITI

Pusat  
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# **CREATIONS de UiTM: INTERNATIONAL MEGA INNOVATION CARNIVAL 2023**

## **ABSTRACT BOOK**

### **Editors**

Dr. Nur Izzatie Hannah Razman  
Dr. Hartini Ahmad Rafaie  
Fatimah Azzahra Md Raus  
Nor Faridah Hanim Mat Junit  
Nur Haryati Mohammad Raduan  
Nurul Hannan Mahmud  
Dr. Tengku Norbaya Tengku Azhar

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**UiTM CAWANGAN SELANGOR KAMPUS DENGKIL**

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CARNIVAL 2023**

**ABSTRACT BOOK/**

**Editor Nur Izzatie Hannah Razman/ Hartini Ahmad Rafaie/ Fatimah Azzahra**

**Md Raus/ Nor Faridah Hanim Mat Junit/ Nur Haryati Mohammad Raduan/**

**Nurul Hannan Mahmud/ Tengku Norbaya Tengku Azhar**

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## **PROGRAM OVERVIEW**

CREATIONS de UiTM: INTERNATIONAL MEGA INNOVATION CARNIVAL 2023 (CDU2023) is inspired by UiTM2025 Strategic Plan, which outlines the university's transformation to become a leading global university of science, technology, humanities, and entrepreneurship by 2025. Innovation development is crucial to gain knowledge, information, know-how, and technology, which could offer opportunities to the institution as well as the country to achieve the national development agenda. The implementation and diffusion of new ideas and talents, as well as their continual evolution, are critical in making innovation a major catalyst that can propel Malaysia five years ahead toward the status of a developed and high-income country.

In 2023, the Centre of Foundation Studies at UiTM Cawangan Selangor Kampus Dengkil once again assumes the responsibility of hosting an international innovation exhibition and competition following the success of a mega exhibition and innovation competition in previous years. With the theme “Fostering Innovation to Global Communities”, CDU2023 provides a golden opportunity for innovators from all walks of life to showcase their creativity and the spirit of innovation. This program will adapt to the new norms and be conducted in hybrid mode. The innovation competition is open virtually to both international and Malaysian innovators ranging from school students to professionals. The physical exhibition is open to UiTM industrial partners, selected primary and secondary schools, and our students, to share their work with the local community. The aim of this program is to provide exposure and experience with various academic content on innovation that is not only interesting but also useful to the community. It keeps countries and innovators remain relevant, competitive, and adaptive, which also strengthening the culture of innovation among innovators, as a well-nurtured and optimized culture of innovation plays a pivotal role in successful innovation.

**CATEGORY D**  
**School**

## **Papan Pelangi**

**\*Mohd Firdaus Maskan, Suhaila Bahrom, Muhammad Asyraf Daniyal Mohd Zarifi,  
Nur Alisha Athirah Mohd Al-Fattah, Anas Mohd Firdaus,  
Amirah Mohd Firdaus**

PPKI SK Taman Tun Aminah, Johor Bahru, Malaysia

\*E-mail: firdausmaskan769@gmail.com

### **ABSTRACT**

Dalam menghadapi kemajuan revolusi industri 4.0 tidak ketinggalan sektor pendidikan, Program Pendidikan Khas Integrasi SK Taman Tun Aminah mengambil inisiatif mencipta “Papan Pelangi” yang mempunyai ciri tarikan emosi MBK yang menarik disamping merangsang daya intelektual (murid berkeperluan khas) dalam membanding beza huruf jawi yang seolah-olah sama bentuk. Terdapat 3 masalah utama iaitu masalah kecelaruan dengan huruf yang seakan sama; masalah lambat untuk memberi respon kerana keraguan dengan huruf yang seakan sama; Masalah Afektif iaitu keadaan mood yang lemah kerana bosan. Kajian ini menggunakan kaedah kualitatif berbentuk deskriptif. Data dikumpul melalui pemerhatian. Sampel dilakukan pada 10 orang pelajar. Pelajar di pantau melalui penilaian bilik darjah berfokus pada pemahaman selapas belajar dan keberkesanan produk yang dilakukan ketika subjek Pend Islam. Hasil mendapati 10/10 murid dapat mengusai huruf yang sama bentuk berlaianan bunyi dan meningkatkan fokus pelajar. Sementara itu, “Papan Pelangi” dapat mengoptimakan keupayaan murid khususnya MBK dalam subjek pendidikan Islam dengan keberhasilan pencapaian melalui penilaian bilik darjah yang dilakukan guru. Dalam pada itu, “Papan Pelangi” direka dengan kompenan teknologi terkini dalam bentuk bantu mengajar yang sesuai dengan peredaran zaman juga mampu menarik minat MBK serta mencapai objektif kajian. Selain itu juga, “Papan Pelangi” direka dengan alatan yang murah dan mudah didapati disampiang kualiti yang mampu tahan lasak sesuai dengan murid berkeperluan khas.

**Keywords:** PPKI (Program Pendidikan Khas Integrasi), Papan Pelangi, MBK (murid berkeperluan khas)



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MALAYSIA

<https://creations.uitm.edu.my>

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**7<sup>TH</sup> MARCH - 20<sup>TH</sup> MAY 2023**

CENTRE OF FOUNDATION STUDIES, UiTM CAWANGAN SELANGOR  
KAMPUS DENGKIL, SELANGOR, MALAYSIA

**LET'S CRAFT A BETTER WORLD TOMORROW!**

## *Certificate of Award*

This is to certify that

Suhaila Binti Bahrom

Mohd Firdaus Bin Maskan

Muhammad Asyraf Daniyal B Mohd Zarifi

Nur Alisha Athirah Bt Mohd Al-Fattah

Anas Bin Mohd Firdaus

Amirah Bt Mohd Firdaus

have been awarded

### **GOLD**

for the

**Keberkesanan Papan Pelangi dalam Program Pendidikan  
Khas Integrasi Pendidikan Islam 3.0**

at the

### **VIRTUAL INNOVATION COMPETITION**

**CREATIONS de UiTM:  
International Mega Innovation Carnival (CDU2023)**



**PROFESSOR IR. DR. AHMAD FARID ABIDIN @ BHARUN**

Director

Centre of Foundation Studies  
UiTM Cawangan Selangor  
Kampus Dengkil

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## *Certificate of Participation*

This is to certify that

Suhaila Binti Bahrom

Mohd Firdaus Bin Maskan

Muhammad Asyraf Daniyal B Mohd Zarifi

Nur Alisha Athirah Bt Mohd Al-Fattah

Anas Bin Mohd Firdaus

Amirah Bt Mohd Firdaus

have participated in:

### **VIRTUAL INNOVATION COMPETITION**

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International Mega Innovation Carnival (CDU2023)**

for the

**Keberkesanan Papan Pelangi dalam Program Pendidikan  
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Kampus Dengkil

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## LIST OF MEDAL CDU2023

CATEGORY	PROJECT CODE	PROJECT TITLE	MEDAL
CATEGORY A	CDU2023_A012	Beethoven Light – Improve Image Quality By Complying With Breathing Instructions For Patients With Hearing Impairment In Cardiac MRI	GOLD
	CDU2023_A013	Chaco-Ban: The Revolutionary Of Eco-Charcoal Utilising Kitchen Food Waste	GOLD
	CDU2023_A006	C.A.K.A.P. (Communication Kickstart Pro.)	GOLD
	CDU2023_A014	Pointer Calculator: Integrating Web Page In Calculating GPA & CGPA	GOLD
	CDU2023_A005	Chlorella Vulgaris In The Microbial Fuel Cell (MFC)	GOLD
	CDU2023_A015	The Application Of Jack D' Pack In Bio-Battery	SILVER
	CDU2023_A021	Polychaete Nervous System: A New Potential Model For Brain Disease Studies	SILVER
	CDU2023_A001	Polarization Of Light Experimental Kit: New Design	SILVER
	CDU2023_A002	Affixes: Vocabulary Game	SILVER
	CDU2023_A017	Rabittry System: Smart Rabbit Breeding Monitoring System	SILVER
	CDU2023_A018	30 To 3000 Magnetite	BRONZE
	CDU2023_A008	The MOOVY I: Interactive Game For Vocabulary Learning	BRONZE
	CDU2023_A004	Cogliex: Exhibiting Knowledge, Skills And Talent	BRONZE
	CDU2023_A009	Hybrid Biology Teaching and Learning Module	BRONZE
	CDU2023_A019	A Study Of X-Ray Diffraction (XRD) And Surface Morphology Studies Of PVC Complexes	BRONZE
	CDU2023_A010	Preparation of Casein Protein-Based Bioplastics Prepared at Different Temperature and Percentage of Acid Used	BRONZE
	CDU2023_A007	A Garden Storage Trolley With Dried Leaves And Trash Collector	BRONZE
	CDU2023_A016	mBot Robot Kit Module: Scratch Coding For Special Needs Student	BRONZE
	CDU2023_A020	Effect Of Lights On Oyster Mushroom Indoor Cultivation	BRONZE
	CDU2023_A003	Conquering Mount KK: An Inference Game	BRONZE
CATEGORY B	CDU2023_B003	Design And Development Of Handle Packaging For Croffle With QR Code And Augmented Reality Technology	GOLD
	CDU2023_B007	Nanorelief Gel	GOLD
	CDU2023_B006	Photosensitisation Of Novel Ag <sub>2</sub> CO <sub>3</sub> /Nb <sub>2</sub> O <sub>5</sub> Photocatalyst For EDCs Removal In Wastewater	SILVER
	CDU2023_B005	Tackling Smart City Traffic Congestion	SILVER
	CDU2023_B002	Innovation Of File Folder Using The Implementation Of Augmented Reality Technology And QR Code	SILVER

## LIST OF MEDAL CDU2023

CATEGORY	PROJECT CODE	PROJECT TITLE	MEDAL
	CDU2023_B004	The Creation Of Innovation Packaging From Plastic To A Handle Box With Implementation Of Augmented Reality Technology And Qr Code	BRONZE
CATEGORY C	CDU2023_C036	Fun Vector Learning Kit	GOLD
	CDU2023_C041	EPROS	GOLD
	CDU2023_C024	Gas Explosion Prevention System (Gepres)	GOLD
	CDU2023_C032	Hirose Face Scrub Powder	GOLD
	CDU2023_C025	MasterLaw	GOLD
	CDU2023_C040	Automated Dish Sorter Using Arduino	GOLD
	CDU2023_C019	Plants bASed highlighter Pen (PASTERN)	GOLD
	CDU2023_C046	EcoE	GOLD
	CDU2023_C009	Power Exercycle	GOLD
	CDU2023_C021	Fostering Grammar Through Board Game: A Global Innovation	GOLD
	CDU2023_C035	Hajj Board Game	GOLD
	CDU2023_C015	Dietary Intake Program For Anaemia Patients: A Social Innovation Project	SILVER
	CDU2023_C038	Vector Hunt'S Game App	SILVER
	CDU2023_C014	i-Dry	SILVER
	CDU2023_C042	MyTabung: An Automatic Counting Machine For Money	SILVER
	CDU2023_C029	The Tale Of Candyman Awareness Kit	SILVER
	CDU2023_C045	The Virtual Hajj And Umrah	SILVER
	CDU2023_C022	Effect Of Different Primary Light Colours On Growth Of Betelvine (Piper Betle )	SILVER
	CDU2023_C028	Bleed Bright: Overcoming Period Poverty With Menstrual Education	SILVER
	CDU2023_C043	Designated Parking For OKU With RFID Access	SILVER
	CDU2023_C018	Lost Voices Of Palestine: Amplifying The Call Of Freedom	SILVER
	CDU2023_C027	Self-Iron And Dryer	BRONZE
	CDU2023_C030	Stretchy Duster	BRONZE
	CDU2023_C033	Hanging Pump Station	BRONZE
	CDU2023_C034	Salahsnooz	BRONZE
	CDU2023_C012	Sparkle Aplenty	BRONZE
	CDU2023_C007	Smatbox9000	BRONZE
	CDU2023_C004	Epididymitis: A Silent Male Issues	BRONZE
	CDU2023_C001	Pecof Heal The World	BRONZE
	CDU2023_C020	Anti-Mess Baby Bib	BRONZE
	CDU2023_C003	The Solarluxe Torchlight	BRONZE

## LIST OF MEDAL CDU2023

CATEGORY	PROJECT CODE	PROJECT TITLE	MEDAL
CATEGORY C	CDU2023_C016	Tourette Syndrome: Perception And Adaptation Within Society	BRONZE
	CDU2023_C013	Rechauffer	BRONZE
	CDU2023_C023	Lumi Lamp	BRONZE
	CDU2023_C026	BuzzAcademia	BRONZE
	CDU2023_C031	Gotta Go Heater	BRONZE
	CDU2023_C044	Automatic Laundry Folding Machine (A.L.F.M)	BRONZE
	CDU2023_C011	Eureka Ball	BRONZE
	CDU2023_C006	Development Of Epilepsy Action Plan (An Innovation Of Disease Management)	BRONZE
	CDU2023_C010	Multiple Sclerosis	BRONZE
	CDU2023_C005	Communication Campaigns On Cardiovascular Disease Awareness: A Case Study Among Youngster In Malaysia	BRONZE
	CDU2023_C039	Little Helper	BRONZE
	CDU2023_C037	Scrabble Jawi	BRONZE
CATEGORY D	CDU2023_D003	Trehafe (Treat.Beauty.Healthy.Safe)	GOLD
	CDU2023_D004	Facemist Speuros(Special Nature Rose)	GOLD
	CDU2023_D002	Keberkesanan Papan Pelangi Dalam Program Pendidikan Khas Integrasi Pendidikan Islam 3.0	GOLD