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UNIVERSITI
TEKNOLOGI
MARA

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MAY
2024



International Industrial Revolution 4.0 Exposition

"INNOVATING IDEAS, TRANSPIRING DREAMS"

ABSTRACT BOOK

Strategic Partners:



Perpustakaan
Sultan Badlishah

Organized By:

**COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS,
UNIVERSITI TEKNOLOGI MARA, KEDAH BRANCH**

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UITM Cawangan Kedah Channel

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IREx 2024

The successful inauguration of IR4.0 Exposition IREx 2019 has witnessed ground breaking initiatives, ideas, and innovations materialised into numerous practical devices today. Treading on the same triumph, the College of Computing, Informatics, and Mathematics, UiTM Kedah is thrilled to announce the continuation of said event, IREx 2024 with the theme: *Innovating Ideas, Transpiring Dreams*.

The IREx 2024 aspires to incorporate even more exciting new technologies including, but not limited to, Information & Communication Technology (ICT), Educational Technology & Innovation (ED), Operational Excellence (OE), Internet of Things (IoT), Process Improvement, Ideas & Design, Multimedia, and Electronics that will chart new milestones in human history. This will serve as an excellent platform for scientists and innovators alike to meet the like-minded individuals and showcase inspiring ideas and notable innovations.

PROGRAM SCHEDULE

International Industrial Revolution 4.0 Exposition (IREx 2024)
21ST May 2024 (Tuesday)
Dewan Perdana, UiTM Kedah Branch

TIME	EVENT
8.00 – 9.00 am	Registration & Booth Set Up
9.00 am – 12.00 pm	Exhibition & Judging Session
12.00 pm – 2.00 pm	Obedient Drone Session & Break
2.00 pm – 5.00 pm	Official Closing & Prize Giving Ceremony
5.00 pm	Program Ends

Official Closing Ceremony

International Industrial Revolution 4.0 Exposition (IREx 2024)

TIME	EVENT
2.00 pm	Arrival of Guests and Participants
2.30 pm	Arrival of VVIP
	National anthem - Negaraku And Wawasan Setia Warga
2.40 pm	UiTM
	Welcoming Speech
3.00 pm	Rector's Welcoming Speech
	Officiating Speech
3.10 pm	Gimmick & Montage presentation
3.30 pm	Prize Giving Ceremony
4.00 pm	Photography
5.00 pm	Program Ends

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IRX068	PRO CROSS-MATH CHALLENGE	4
IRX082	MULTIPURPOSE SOAP	5
IRX083	PUFFER FISH BOAT	6
IRX092	MY GAMES ACADEMIA	7
IRX095	'ROBOCRAB' PEMBERSIH SAMPAH	8
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CATEGORY B

ECO FRIENDLY TILES

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ABSTRAK - *Eco friendly Tiles* ialah nama produk inovasi yang ingin diperkenalkan kepada semua. Eco friendly bermaksud mozek yang mesra alam. Produk inovasi ini memilih tema mesra alam kerana ingin mengajak semua manusia menjaga ekosistem alam sekitar yang bersih. Inovasi ini memilih plastik yang dikatakan sampah sebagai bahan utama dan ditambahkan dengan campuran simen, batu dan pasir bagi menghasilkan mozek yang pelbagai guna. Plastik ini dijadikan serat bagi memastikan mozek dihasilkan mempunyai ketumpatan yang stabil untuk mozek yang pelbagai guna. Kajian inovasi ini menguji potensi mozek campuran plastik ini dalam mengurangkan pencemaran plastik melalui penggunaan bahan alternatif yang mesra alam. Kesan positif kepada kelestarian alam ialah membantu mengurangkan penimbunan sampah plastik dan meminimumkan kesan negatif terhadap alam sekitar termasuk pencemaran laut dan habitat haiwan. Dari segi ekonomi, inovasi ini membuka peluang baru dengan memanfaatkan sumber-sumber buangan plastik mencipta peluang perniagaan baru serta mengurangkan kos pengurusan bahan buangan. Selain itu, inovasi ini dapat merangsang pertumbuhan industri bahan alternatif yang lebih mesra alam. Inovasi ini dipraktikkan di sekolah bagi membina landskap taman herba sains. Secara tidak langsung inovasi ini mencetuskan idea kreatif pelajar untuk menghasilkan mozek yang pelbagai warna sebagai laluan pejalan kaki.

Kata Kunci: Mozek, Plastik, Pelbagai guna, Mesra alam.



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