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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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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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IRX083	PUFFER FISH BOAT	6
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IRX095	'ROBOCRAB' PEMBERSIH SAMPAH	8
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CATEGORY A

MULTIPURPOSE SOAP

Kartini Binti Suhari¹, Nurul Insyirah Binti Mohd Khairi², Nur Najeeha Izzatul Hana Binti Abdullah³, Muhamad Adam Hakimi Bin Muhamad Anuar⁴

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ABSTRACT - Improper disposal of used cooking oil, such as pouring it down the drainage system or dumping it in landfills, can have detrimental effects on the environment, particularly causing water pollution and soil problems (Kalam et al., 2011). This pollution can result in the death of aquatic life and harm aquatic ecosystems, as we have learned through our studies in Science subjects. Being mindful of the importance of environmental cleanliness, we are motivated to take better care of our surroundings. To address this issue, we have collaborated with our teachers to transform the used cooking oil into soap. This soap is specifically designed to effectively remove stains, including oil and foundation, from hijabs. Introducing our innovative product, Hijab Wash, which aids our mothers in cleaning hijabs and eliminating stubborn stains on hijab. Our soap formulation prioritizes safety by excluding harmful chemicals like borax, making it suitable for everyone, even those with sensitive skin. Furthermore, our soap made from cooking oil is environmentally friendly as it easily biodegrades. Its affordability, thanks to its low cost and natural ingredients, makes it accessible to all individuals.

Keyword: Hijab wash, multipurpose soap, cooking oil, natural ingredient



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