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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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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

REVOLUTIONIZING MOBILITY: EASY COMPACT CHAIRCANE (E3C)

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ABSTRACT - Easy Compact CaneChair (E3C) is a mobility assistance device where it enhancing the quality of life for individuals with mobility challenges, empowering them to adapt with their environments with independence and confidence. Among these aids, E3C represents a groundbreaking innovation, offering a transformative solution that seamlessly integrates the functionality of a cane and a chair into a single versatile unit that has never existed before. Recognizing the limitations of traditional canes, which primarily provide stability while walking but offer limited support for extended periods of standing or waiting, E3C seeks to bridge this gap by combining the functionality of a cane with the convenience of a portable chair. Through meticulous design iterations and ergonomic considerations, E3C is engineered to seamlessly transition between its cane and chair modes, ensuring ease of use and optimal functionality for users. With its sleek and compact design, users can easily bring it to variety of locations, ensuring convenience and accessibility wherever they go. In conclusion, the innovation of E3C holds promise for further advancements and applications. As technology continues to evolve, opportunities exist to integrate smart features such as sensors, connectivity options, and ergonomic enhancements into future iterations of the CaneChair, further enhancing its functionality and user experience. Moreover, continued collaboration between designers, engineers, healthcare professionals, and end-users will drive ongoing innovation in mobility assistance devices, ultimately improving the lives of individuals with mobility challenges around the world.

Keywords: Compact, Ergonomic, Mobility, Combining, Portable



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