IC CArTe 2024

**1st International Conference
on Creative Arts Design and Technology**
Universiti Teknologi Brunei
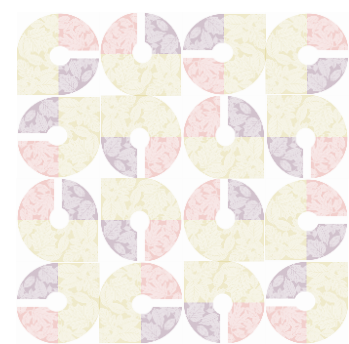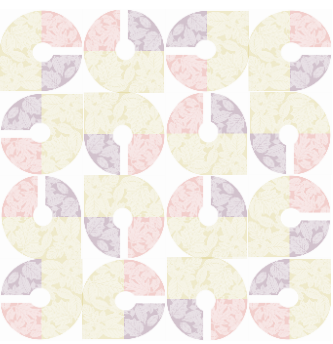Brunei Darussalam

21 August 2024

PROGRAMME BOOK

1st International Conference on Creative Arts Design and Technology (ICCArTe) 2024

Theme:
Harmonising Art and Culture through Sustainably Creative and Innovative Design

Organised by
Universiti Teknologi Brunei UTB

Strategic Partner for ICCArTe
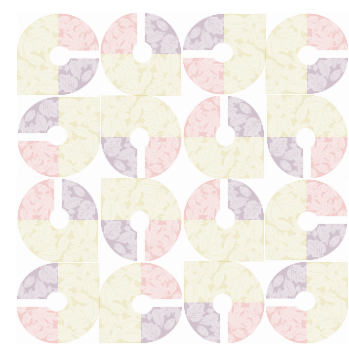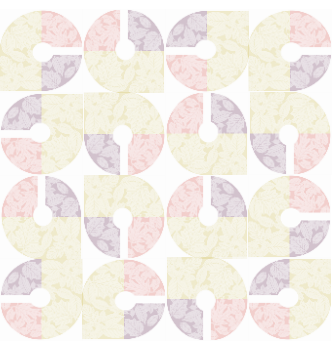**KUUB (Konsortium Universiti Universitas Borneo)**

Date: 21st August 2024, Wednesday
Venue: Universiti Teknologi Brunei

CONTENT

INTRODUCTION

This conference brings together researchers, practitioners, and educators in creative arts design to discuss the latest trends and developments in the field. It focuses on exploring new ideas and approaches in design and fostering creativity and innovation in the field. This conference explores the intersection of technology and artistic expression, showcasing cutting-edge digital art and design projects as well.

International conference in creative art, design and technology is great opportunities for international artists, designers, educators, and researchers to come together to share their work, ideas, and insights. Attending this conference can provide networking opportunities, allowing connection with peers and potential collaborators. Additionally, it offers a platform for showcasing innovative projects and artistic creations to a diverse audience.

Art, culture, and design are greatly influenced by diverse cultural perspectives and traditions and approached by interdisciplinary aspects and collaborations. The efforts to foster cross-cultural dialogue, to promote the exchange of ideas across borders by showcasing a diverse range of artistic styles and design approaches, are significantly important nowadays.
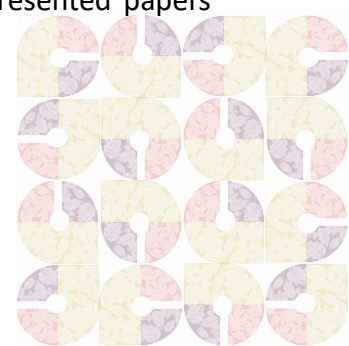
Also, technology plays a pivotal role in shaping contemporary artistic practices and design processes as well. From digital art and interactive installations to wearable technology and immersive experiences, technology intersects with its creative expression and design process.

Creative arts and design have a significant role in addressing global challenges and issues, such as sustainability, and community development. The conference explores how artists, designers, and technologists are using their skills and expertise to create meaningful impact and promote a more sustainable world.

Overall, the conference on creative art, design, and technology serve as a dynamic forum for advancing knowledge, fostering collaboration, and promoting creativity and innovation at the intersection of art, culture, and technology. By bringing together diverse perspectives and expertise, the conference contributes to the continued evolution and enrichment of creative practices worldwide.

CONFERENCE OBJECTIVES

- Provide a forum for intra/inter-disciplinary exchange of current research findings in culture and art design.
- Foster collaborative research and projects.
- Enhance dialogue between practitioners, researchers, and academics from different academia, practitioners, and industries.
- Explore opportunities for the development and implementation of research collaborations.
- To enhance life-long learning and nurture innovation in culture and art design through holistic approaches.
- Allow wider dissemination of the issues discussed and knowledge exchanged, presented papers through conference proceedings and publications.

CONFERENCE TOPIC/AREAS/TRACKS

A) **Architecture**
- ARC01: Sustainable Design
- ARC02: Hospitality Design and Experience
- ARC03: Residential Design
- ARC04: Commercial Design
- ARC05: Workspace Design and Corporate Environment
- ARC06: Retail Design, Lifestyle Trends and Customer Experience
- ARC07: Cultural Heritage Preservation and Adaptive Reuse
- ARC08: Urban Design and Community Development
- ARC09: Healthcare Design and Healing Environment
- ARC10: Educational Facilities Design
- ARC11: Exhibition and Museum Design
- ARC12: Interior Architecture
- ARC13: Cultural and Architecture
- ARC14: Digital Technology and Smart System in Architecture
- ARC15: Heritage Building
- ARC16: Vernacular Architecture
- ARC17: Traditional House in Borneo and Other Countries
- ARC18: Modularity and Adaptability

A) **Industrial and Product Designs**
- PID01: Production Design
- PID02: User Interface and Experience Design
- PID03: Transportation Design
- PID04: Furniture Design
- PID05: Packaging Design
- PID06: Interaction Design
- PID07: Environmental Design
- PID08: Medical Device Design
- PID09: Retail and Exhibition Design
- PID10: Industrial Equipment and Machinery
- PID11: Sporting Goods and Equipment
- PID12: Home and Kitchen Products
- PID13: Accessories Design
- PID14: Product Marketing and Branding
- PID15: Ergonomics and Design
- PID16: Design for Sustainability
- PID17: Future of Design
- PID18: Digital Technology and Smart System in Industrial and Product Design

A) **Fashion Design, Textile and Technology**
- FDT01: Apparel Design
- FDT02: Textile Design
- FDT03: Costume Design
- FDT04: Fashion Illustration
- FDT05: Pattern Making and Garment Construction
- FDT06: Fashion Merchandising and Retail Management
- FDT07: Fashion Styling
- FDT08: Fashion Marketing and Branding
- FDT09: Fashion Technology and Innovation
- FDT10: Apparel Textile
- FDT11: Home Textile
- FDT12: Technical Textile
- FDT13: Textile Production and Manufacturing
- FDT14: Textile Sustainability and Innovation
- FDT15: Textile Marketing and Merchandising
- FDT16: Fashion Textile and Trend Forecasting
- FDT17: Textile Education
- FDT18: Wearable Technology
- FDT19: E-textile and Smart Fabrics
- FDT20: Sustainable Fashion Technology
- FDT21: Digital Technology and Smart System in Fashion Design

A) **Technology in Creative Art Design**
- TED01: 3D Printing and Additive Manufacturing Technology
- TED02: Digital Design Tools
- TED03: Augmented Reality and Virtual Reality
- TED04: Generative Design and Artificial Intelligence
- TED05: Smart Design
- TED06: Motion Graphics and Animation
- TED07: Art Data Analytic and AI
- TED08: Product Robotics and Automation
- TED09: Product Apps and Mobile Commerce
- TED10: Building Systems and Components; Prefab Technology and Parasitic Architecture Design for Heritage Building
- TED12: Automation and Robotic; Reproduction through 3D printing in Building Construction
- TED13: Building Information Modelling BIM; Library of Building Systems and Components for Heritage Buildings
- TED14: Zero Energy Building (ZEB); Renewable Energy for Sustainability in Building

- TED11: Production Technology; Design for Manufacturing (DfM)

KEYNOTE SPEAKERS

Prof Dr Dzul Haimi Md Zain
Former Dean of Faculty of Art and Design
University Teknologi MARA (UiTM)
Title: Embracing Art and Culture in Art & Design

Ar. Haji Khalid bin Haji Sirat
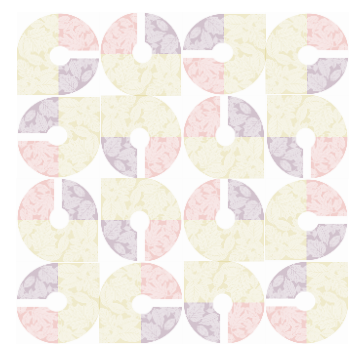Founder and Principal Architect of KHA Arkitek
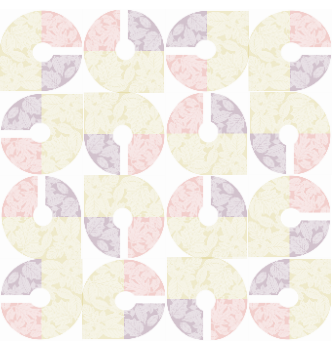*Title: Programming Architecture*

Associate Prof Dr. Nor Azwadi bin Che Sidik
Founder and Director of Semarak Ilmu Publishing and Akademia Baru Publishing
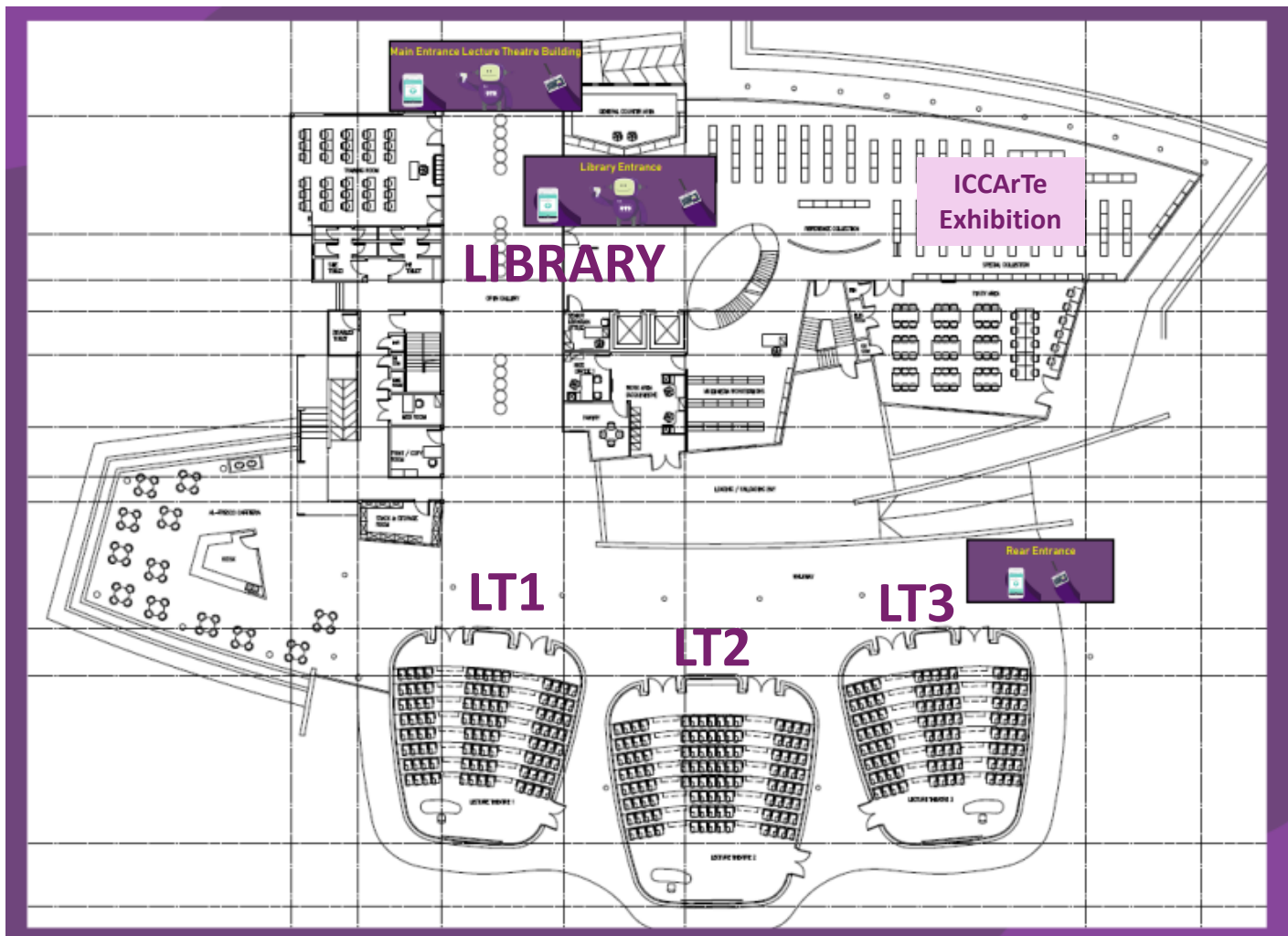*Title: The Art and Design of Journal Management*

VENUE LT1, LT2 AND LT3 MAP & DIRECTIONS

The Opening Ceremony will be held in lecture theatre LT2.

The Parallel sessions will be held in lecture theatres LT1, LT2 and LT3.

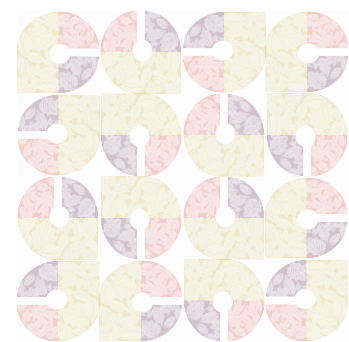Online Presentations will be conducted from lecture theatre LT2.

ICCArTe 2024 Schedule
21 August 2024

08.00	:	Participants registration
09:00		HSSE Announcment
09:05		Recitation of Surah Al-Fatihah & Doa Selamat
09.15	:	Welcoming Remark by Prof Dr Ing Yulfian Aminanda Chairman of ICCARTE 2024
09:30	:	Keynote Lecture 1 **Speaker: Prof Dr Dzul Haimi Md Zain** *Title: Embracing Art and Culture in Art & Design*
10:00	:	Coffee break
10:15	:	Keynote Lecture 2 **Speaker: Ar. Haji Khalid bin Haji Sirat** *Title: Programming Architecture*
10:45	:	Keynote Lecture 3 **Speaker: Associate Prof Dr. Nor Azwadi bin Che Sidik** *Title: The Art and Design of Journal Management*
11:15		Souvenir presentation
11:30	:	Parallel Session 1
12:30	:	Lunch
14:00	:	Parallel Session 2
15:00	:	Coffee break
15:15	:	Parallel Session 3
16:15	:	End of Conference

PARALLEL SESSIONS SCHEDULE
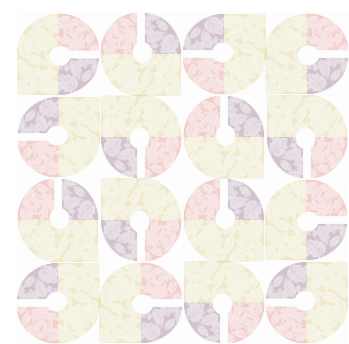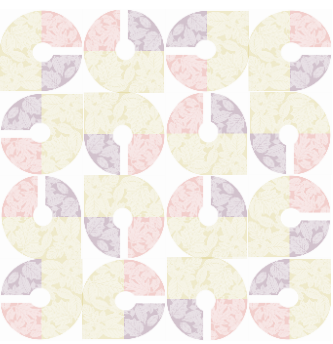## 21 August 2024

PARALLEL SESSION 1 — 11.30AM – 12.30PM

Lecture Theatre	Moderators
LT1	Dr. Ahmad Syamaizar Haji Ahmad Sabli Dr. Nor Aiman Sukindar
LT2	Dr. Zulkefle Ismail Dr. Rozia Haji Adenan
LT3	Dr. Saemah Yusof Dr. Nurul Syahidah Mat Hussin

PARALLEL SESSION 2 — 2.00PM – 3.00PM

PARALLEL SESSION 3 — 3.15PM – 4.15PM

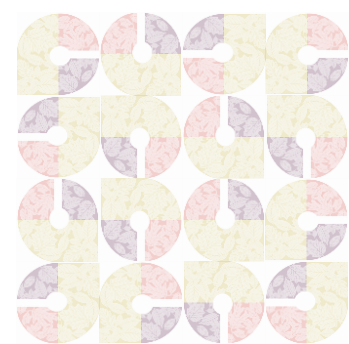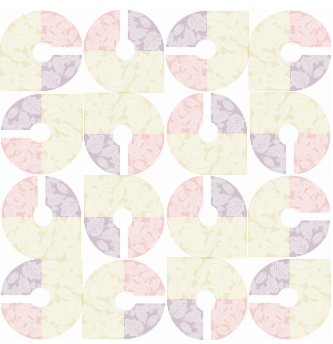| Lecture Theatre	Moderators
LT1	Dr. Ahmad Syamaizar Haji Ahmad Sabli Dr. Nor Aiman Sukindar
LT2	Dr. Ali Raza Soomro Dr. Mohd Zin Kandar
LT3	Dr. Saemah Yusof Dr. Mohamed Rashid Embi

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 1   11.30AM to 12.30PM
Lecture Theatre **LT1**
Moderators: Dr. Ahmad Syamaizar Haji Ahmad Sabli
Dr. Nor Aiman Sukindar

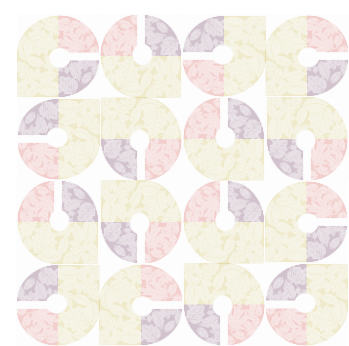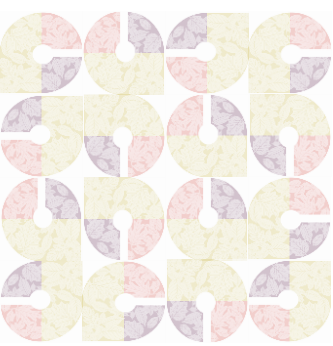| TIME	Track / Presenter / Paper Title
11.30 – 11.45	PID03: Transportation Design **Abdul Hadi bin Abd. Hakim** *Enhancing Road Safety through RFID-Enabled Beginner Driver Indicators*
11.45 – 12.00	PID07: Environmental Design **Afiq Mirza bin Azlan** *Incorporating Sustainability in The Creative Solution to Address the Nation's Floating Waste Issues*
12.00 – 12.15	PID07: Environmental Design **Abdul Muizz Safiuddin Sherin** *The Beehive Design*
12.15 – 12.30	PID16: Design for Sustainability **Hazim Zamri** *The Dynamic Envelope Folding Design: A solution to rising trends of outdoor sports and global warming*

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 1   11.30AM to 12.30PM
Lecture Theatre **LT2**
Moderators: Dr. Zulkefle Ismail & Dr. Rozia Haji Adenan

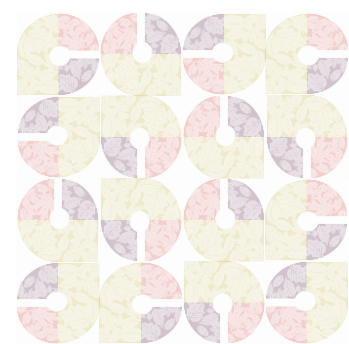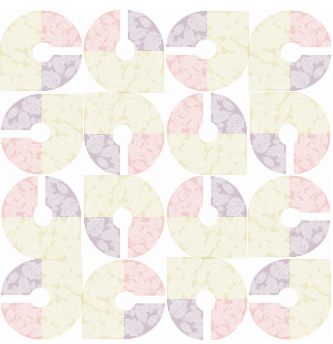| TIME	Track / Presenter / Paper Title
11.30 – 11.45	ARC12: Interior architecture **Mildred Accad** *Interior Design and Commercial Signage Analysis of Muslim-Friendly Restaurants in the Capital Town of Sultan Kudarat, Philippines.*
11.45 – 12.00	ARC15: Heritage Building **Ahmad Sid Hijaz Md Saaid (Online)** *Proportion and Order of Architectural Style in Alterations of Mughal-Indian Mosques in Kedah*
12.00 – 12.15	ARC06: Retail design, lifestyle trends and customer experience **Denis Twinomugisha** *The Impact of HVAC Systems Integration on Aesthetic of Public Buildings in Brunei Darussalam*
12.15 – 12.30	PID16: Design for Sustainability **Qinqin Wang (Online)** *Research on the Works and Techniques of Representative Inheritors of Yang's Clay Sculptures from 1980 to Present*

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 1   11.30AM to 12.30PM
Lecture Theatre **LT3**
Moderators: Dr. Saemah Yusof & Dr. Nurul Syahidah Mat Hussin

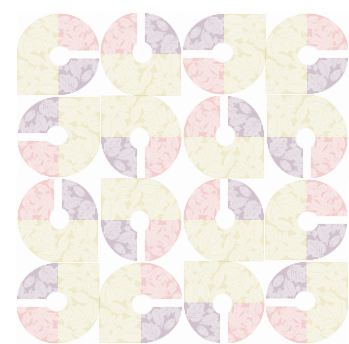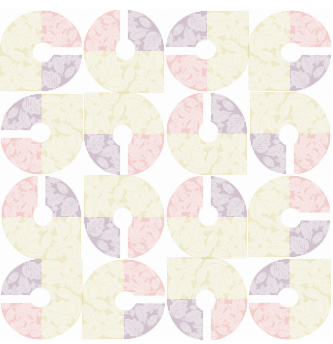| TIME	Track / Presenter / Paper Title
11.30 – 11.45	FDT09: Fashion technology and Innovation **Safiyyah Aisyah Kamilah Mohamad Jaafar** *From Environmental Challenge to Fashion Inspiration: Implementing Water Concept into Modest Fashion*
11.45 – 12.00	FDT09: Fashion technology and Innovation **Musfirah Jabri Athaullah** *Integrating Ethnic Dusun Brunei's Traditional Costumes into Modern Fashion*
12.00 – 12.15	FDT09: Fashion technology and Innovation **Tan Kok Chuan** *The Fusion of Exploring the Chinese Influence in Brunei Women's Silhouettes and Lifestyle*
12.15 – 12.30	ARC14: Digital Technology and Smart System in Architecture **Nur Amalia Muhammad Zailani** *Improving External shading device and Courtyard Design*

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 2   2.00PM to 3.00PM
Lecture Theatre **LT1**
Moderators: Dr. Ahmad Syamaizar Haji Ahmad Sabli
Dr. Nor Aiman Sukindar

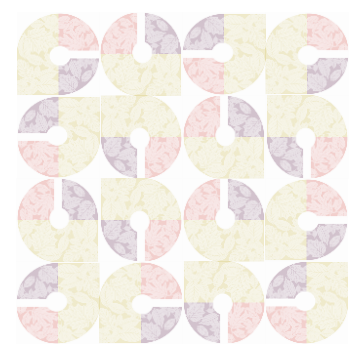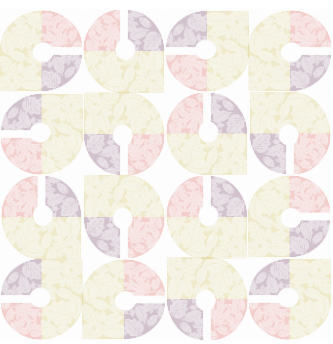| TIME	Track / Presenter / Paper Title
2.00 – 2.15	PID16: Design for Sustainability **Taufiq Hamdani** *Tigaponics - A New Farming System That Combines Hydroponic, Aquaponic, and Aeroponics Method for Growing Vegetables*
2.15 – 2.30	PID16: Design for Sustainability **Abdul Wafi bin Norfadilah** *Investigating Quadrupedal Robotics Learning in a Simulated Environment using Unity ML-Agent*
2.30 – 2.45	TED14: ZEB for sustainability in Building **Md Motiar Rahman** *Identifying Passive Lighting Features for Buildings*
2.45 – 3.00	TED05: Smart Design **Alya Darwisyah Hajizul** *Functional Sculpture: Pinball Machine*

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 2   2.00PM to 3.00PM
Lecture Theatre **LT2**
Moderators: Dr. Ali Raza Soomro & Dr. Mohd Zin Kandar

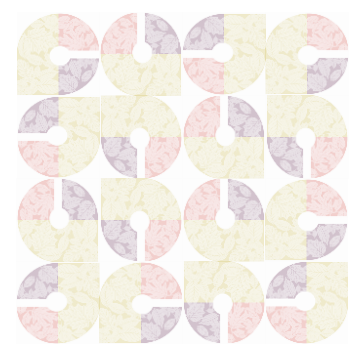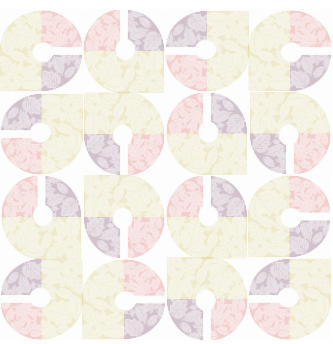| TIME	Track / Presenter / Paper Title
2.00 – 2.15	ARC03: Residential Design **Nur Basyirah Sa'adatul Hanan Noor Hazman** *Universal Design in Public Housing: Lessons and Best Practices from Post-Occupancy Evaluations*
2.15 – 2.30	**Melor Amran (Online)** *Awareness and Knowledge of Carpal Tunnel Syndrome Among Teachers Participants of Life-Long Learning Course*
2.30 – 2.45	ARC03: Residential Design **Mohammad Nor Adha Shah Sarugi** *Implementing Adaptive Reuse for Existing Buildings in Brunei Darussalam*
2.45 – 3.00	**Cyrelle Andrea (Online)** *Effectiveness of MeDiConsulo: Pharmacist-Dietitian Collaborative Counseling among Hypercholesterolemic Patients*

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 2   2.00PM to 3.00PM
Lecture Theatre **LT3**
Moderators: Dr. Saemah Yusof & Dr. Mohamed Rashid Embi

TIME	Track / Presenter / Paper Title
2.00 – 2.15	FDT16: Fashion Textile and Trend Forecasting **Nurul Syahida Mat Hussin** *Analyzing Gold Thread Embroidery of Kelingkan and Keringkam Motif into Classification Patterns and Its Values*
2.15 – 2.30	ARC01: Sustainable Design **Nur Amalina Kamaludin** *Kinetic Façade System as a Sustainable Tool for Improving Building Performance in Brunei Darussalam*
2.30 – 2.45	FDT20: Sustainable fashion technology **Hanna Syakira Saiful Rizal** *Sustainable Fashion Evolution: Streetwear and Eco-Conscious Practices in Brunei*
2.45 – 3.00	TED05: Smart Design **Noor Azwani Syasya Amirah Noor Azian** *Study on Forms of Fractals as Visual Stimulants & Spatial Enhancement*

PARALLEL SESSIONS SCHEDULE
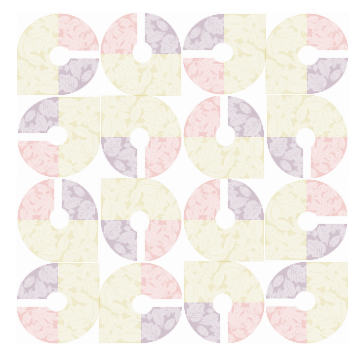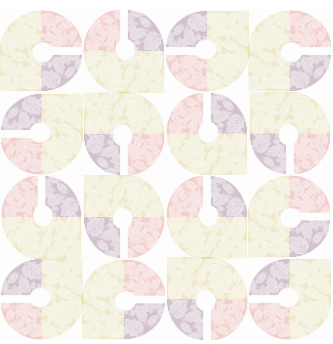## 21 August 2024

PARALLEL SESSION 3   3.15PM to 4.15PM
Lecture Theatre **LT1**
Moderators: Dr. Ahmad Syamaizar Haji Ahmad Sabli
                      Dr. Nor Aiman Sukindar

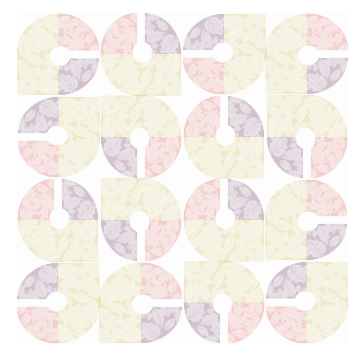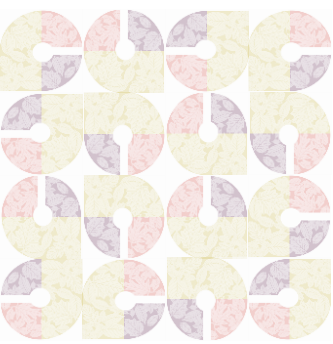| TIME	Track / Presenter / Paper Title
3.15 – 3.30	TED14: ZEB for sustainability in Building **Muhammad Arif Safwan Zalidin** *Exploring the Effectiveness of Green Wall and Roof Retrofitting Practices in Brunei Darussalam*
3.30 – 3.45	TED14: ZEB for sustainability in Building **Nurnajiibah Dollah** *Integration of solar panel in domestic household in Brunei Darussalam*
3.45 – 4.00	TED14: ZEB for sustainability in Building **Muhammad Nabil Dolrani** *Improving Thermal Comfort with Integration of Ceiling Fan, Air Conditioner & Motorised Shading System*
4.00 – 4.15	TED14: ZEB for sustainability in Building **Salma Farzana Moksin** *The Effectiveness of Windcatcher in Indoor Spaces*

PARALLEL SESSIONS SCHEDULE
21 August 2024

PARALLEL SESSION 3   3.15PM to 4.15PM
Lecture Theatre **LT2**
Moderators: Dr. Ali Raza Soomro & Dr. Mohd Zin Kandar

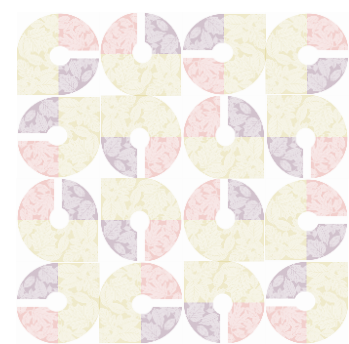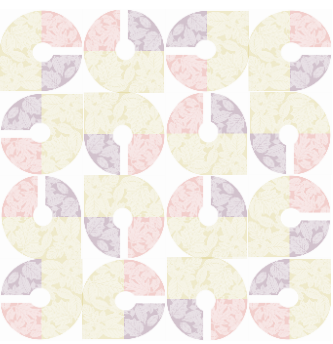| TIME	Track / Presenter / Paper Title
3.15 – 3.30	ARC17: Traditional House in Borneo and other countries **Haliza Jamal (Online)** *Local genius and environmental sustainability: a review on Malay traditional houses*
3.30 – 3.45	ARC13: Cultural and Architecture **Nur Amalina Kamaludin** *Cultural Consideration: Integrating Kinetic Facade Systems to Enhance the Aesthetic Value of Brunei Architecture*
3.45 – 4.00	FDT16: Fashion Textile & Trend Forecasting **Nabilah Jeffery (online)** *Cultural Preservation, Innovation and Challenges of Brunei's Traditional Handicrafts in The Contemporary World - A Study on Rural Longhouses in Brunei Darussalam*
4.00 – 4.15	FDT14: Textile Sustainability and Innovation **Rose Dahlina Rusli (online)** *Characterizing artistic bacterial cells attributes as new approach to antimicrobial resistance awareness through soft toys design*

PARALLEL SESSIONS SCHEDULE

PARALLEL SESSION 3   3.15PM to 4.15PM
Lecture Theatre **LT3**
Moderators: Dr. Saemah Yusof & Dr. Mohamed Rashid Embi

TIME	Track / Presenter / Paper Title
3.15 – 3.30	TED09: Product apps and mobile commerce **Nurwathiqah Ali** Analysis of Mobile Games: Evaluating Game Addiction Through Reviews and Surveys
3.30 – 3.45	TED14: ZEB for sustainability in Building **Md Motiar Rahman** Sustainable Building Design: A Brief Review
3.45 – 4.00	ARC14: Digital Technology and Smart System in Architecture **Abu Zaid bin Haji Harun** Mesh-O-LED
4.00 – 4.15	ARC18: Modularity & Adaptability **Nazirah Asnan** Modular Pop-Up Shops

CONFERENCE COMMITTEE MEMBERS

Chair:	Professor Dr. Ing. Yulfian Aminanda
Deputy Chair	Dr. Zulkefle Ismail
Secretariat:	Dr. Rozia Haji Adenan
	Dayang Rabiatul Adawiyah binti Begawan Mudim Haji Amran

Technical Committee:
- Dr. Ahmad Syamaizar Haji Ahmad Sabli
- Dr. Nor Aiman Sukindar
- Dr. Zulkefle Ismail
- Dr. Rozia Haji Adenan
- Dr. Mohamed Rashid Embi
- Dr. Ali Raza Somroo
- Dr. Mohd Zin Kandar
- Dr. Saemah Yusof
- Dr. Nurul Syahidah Mat Hussin

Souvenirs, Certificates and Exhibition Committee:
- Dr. Rozia Haji Adenan
- Dr. Nor Aiman Sukindar
- Denis Twinomugisha
- Afiq Mirza Azlan
- Mohd. Salim Haji Mohiddin
- Haji Kamis Haji Tuah

Logistics:
- Dr. Nor Aiman Sukindar
- Dr. Ahmad Syamaizar Haji Ahmad Sabli
- Dr. Rozia Haji Adenan

Students:
- Aiman Bin Roslan
- Muhammad Syafiq Hafiz Bin Mohammad Zaidi
- Irafan Iman Bin Mansor
- Mohammad Hamizan Bin Zaini
- Abdul Muizz Safiuddin Bin Sherin
- Omar Abdul Aziz Bin Razimi
- Mohammad Taufiq Hidayat Bin Harun
- Nureen Imanina Binti Hj Mohamad Raime
- Ammar Bin Samsul
- Muhd Aiman Naqiuddin Bin Muhd Nasif
- Muhammad Fathan Bin Ibrahim
- Ana Nazerah Binti Azrin
- Nur Farah 'Atiqah Binti Abdullah Muhammad Faisal
- Nur Syazwana Amani Bte Hj Suhaidi
- Nur Syafiqah Binti Japar
- Nur Hafizah Azyan Syahirunnisaa Binti Sofian
- Nur Izzati Hazirah Adriana Binti Muhammad Hadi
- Siti Nur'eliza Az-Zahra Bt Hj Azahar
- Dayangku Syahmina Nadhirah Binti Pengiran Johar Lela Ariffin
- Abdul Mu'id Al-Qawiy Bin Suhaili
- Siti Nur Zakirah Binti Shuhaimi
- Nurjalinah Binti Apol
- Nur Fatharani Husna Kaiyisah Binti Othman
- Nadhirah Binti Amir
- Nur Izzah Haziqah Binti Abd.Rahim