



# EXTENDED ABSTRACT



**InViCCAD 2025**  
1<sup>ST</sup> INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE  
ARTS & INNOVATIVE DESIGN IN TEACHING & LEARNING



# Design Innovation Academic Show 2025



Organized by



Fakulti  
Seni Lukis & Seni Reka  
Cawangan Kedah



اوسها تقوى موليا

Collaboration with



#perubahanluarbiasa  
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**EXTENDED  
ABSTRACT**

**Design  
Innovation  
Academic  
Show 2025**





DIAS 2025 (Design Innovation Academic Show) is all about "Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st Century Education." This vibrant program shines a spotlight on how creativity and innovation are reshaping modern education.

It consists of three key components. First up is the Mindareka Design Show, an exhibition that showcases students' final year projects and creative designs, giving them a chance to connect with industry professionals and the wider community. Next, we have the Northern Innovation Academic Tour (NIAT), which takes participants on an academic adventure to select institutions and innovation centers in the northern region, aimed at promoting knowledge sharing and building strong academic and professional networks.

Finally, there's the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID), a global competition that recognizes outstanding practices in teaching and learning by blending art, technology, and innovative design. But DIAS 2025 is more than just a talent showcase; it's a powerful platform for empowering both students and educators, while also strengthening collaborations between universities, creative industries, and global communities. With its inclusive and interdisciplinary approach, this initiative strives to spark relevant, competitive, and impactful ideas and innovations that truly benefit society and push the future of education forward.



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**D**esign  
*Innovation*  
**A**cademic  
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**Prof. Dr. Roshima Haji Said**  
Acting Rector  
UiTM Kedah Branch

# Rector's Message

I am delighted to extend my heartfelt congratulations to the College of Creative Arts, UiTM Kedah Branch, for bringing MINDAREKA 2024 - Unleashing Your Visual Creativity to fruition. The triumphs of past MINDAREKA editions undoubtedly fueled the organization of this year's event, making MINDAREKA 2024 a reality.

MINDAREKA 2024 - Unleashing Your Visual Creativity stands as a testament to the dedication of students at the College of Creative Arts, UiTM Kedah Branch, providing them with a platform to showcase their final art projects. Beyond serving as a space for the exploration of fresh, innovative, and entrepreneurial concepts, this exhibition is poised to connect aspiring talents with potential clients and employers.

I extend my sincere gratitude to all participants whose enthusiasm and support have contributed to the success of MINDAREKA 2024 - Unleashing Your Visual Creativity. Their unwavering belief and commitment have truly brought this event to life, marking it as a resounding triumph!





# Head of Faculty Message

It is an honour to introduce DIAS 2025 – Design Innovation Academic Show, held under the theme “Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st-Century Education.” This significant event reflects the faculty’s ongoing commitment to fostering a culture of innovation, critical thinking, and creative exploration among our students and academic community. As we navigate the complexities of the 21st century, it becomes increasingly clear that education must go beyond traditional boundaries to embrace multidisciplinary approaches that are both relevant and future-forward.

The three core components of DIAS 2025, Mindareka Design Show, Northern Innovation Academic Tour (NIAT), and the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID) which is serve as vital platforms to highlight the convergence of design, technology, and pedagogy. These initiatives not only empower our students to showcase their talents and ideas, but also create opportunities for engagement with industry leaders, academic peers, and global collaborators. The Mindareka Design Show celebrates student creativity and innovation through compelling final year projects. NIAT fosters knowledge sharing and institutional partnerships through academic visits and exchanges, while InViCCAID offers international recognition for excellence in integrating art and design into teaching and learning.

I would like to express my deepest appreciation to the organising committee, faculty members, students, and strategic partners who have worked tirelessly to bring this programme to life. Your dedication and collaborative spirit have made DIAS 2025 a reality and a reflection of our shared vision for transformative education. It is my hope that this platform will continue to inspire meaningful dialogue, cultivate groundbreaking ideas, and spark a new wave of innovation that enriches both education and society.



**Mohamat Najib Mat Noor**  
Head of Faculty  
Faculty of Arts & Design  
UiTM Kedah Branch





***Industrial  
Design  
(Diploma)***





## RANGKAH | NOMADIC SIDE CHAIR

Muhammad Hazman Syahmi bin Jasmin

Industrial Design Department,  
Faculty of Art and Design,  
Universiti Teknologi MARA (UiTM)  
[hazmanmade@gmail.com](mailto:hazmanmade@gmail.com)

### ABSTRACT

Rangkaian is a minimalist side chair designed for versatile use in dining and study settings. It draws inspiration from traditional Malay heritage, particularly through its upholstery, which features patterns reminiscent of vintage kebaya fabrics and dark, refined batik motifs. The name "Rangkaian" is derived from the Malay word rangka, meaning frame or structure, reflecting the chair's clean, lightweight, and sturdy build. While the form remains simple and modern, the use of classic textile patterns creates a balance between contemporary function and cultural nostalgia. Rangkaian is made with a steel frame for durability, paired with fabric upholstery that brings warmth and familiarity to any space. Rangkaian's design fits well in compact homes, cafes, or study areas that appreciate practical furniture with a cultural touch. By combining local heritage with modern design, Rangkaian aims to offer not just a seat but a subtle reminder of tradition within everyday living.

**Keyword:** Side chair, Nomadic Concept, Minimalist, Structure



## MATERIALS AND FABRICATING METHODS

Rangkah is constructed using a combination of steel pipes and rubber wood, selected for their durability, strength, and contrasting aesthetics. The frame is formed from metal steel pipes, which are bent and welded into a continuous, seamless structure. The entire frame is then spray-painted in matte black, providing a sleek, modern appearance while protecting the metal from corrosion and wear. The backrest and lower support are crafted from rubber wood, known for its sustainability and attractive natural grain.

These wooden components are sanded, rounded, and finished with a clear varnish to enhance their appearance and durability. For assembly, each wooden piece is milled using a router machine to create precise trenches that accommodate the metal frame. Metal brackets are integrated within these wooden parts, allowing them to be slotted and secured onto the steel pipes with stability. This method ensures the wood fits snugly against the frame, creating a solid connection without visible fasteners.

This construction approach enables the backrest and lower wooden support to be removable, allowing for easier transport, maintenance, and part replacement. The lower wooden brace specifically enhances the chair's structural stability by preventing the rear legs from splaying outward ('terkangkang') under pressure.



Figure 2 Rangkah Final Product

## RESULTS AND DISCUSSION/FINDINGS

The development of Rangkah began with a study of the Sustainable Development Goals (SDGs), particularly SDG 12: Responsible Consumption and Production and SDG 11: Sustainable Cities and Communities. These guided the focus on sustainability, material efficiency, and long-term usability in the design. I aimed to strip the chair down to its essential function, focusing on simplicity, durability, and portability, which is key to the nomadic concept. I studied existing nomadic designs that emphasised modularity and ease of movement, which influenced the form, material choices, and overall proportions of Rangkah. The final design combines a steel frame with removable rubber wood elements, making it easy to maintain, transport, and adapt. The lower wooden support reinforces the back legs to prevent splaying, ensuring structural stability while maintaining a minimalist aesthetic suitable for flexible living spaces.



Figure 1 Rangkah in environment

## CONCLUSION & RECOMMENDATION

Rangkah offers a minimalist and functional solution for modern, adaptable living. Designed with sustainability and practicality in mind, the chair balances durability, portability, and cultural subtlety. Its modular features, including removable wooden components, support easier maintenance and longevity, reducing waste over time. The integration of the nomadic concept ensures that Rangkah fits well in compact spaces and dynamic lifestyles. Moving forward, further exploration of materials or user customisation could enhance their appeal and adaptability for broader markets.



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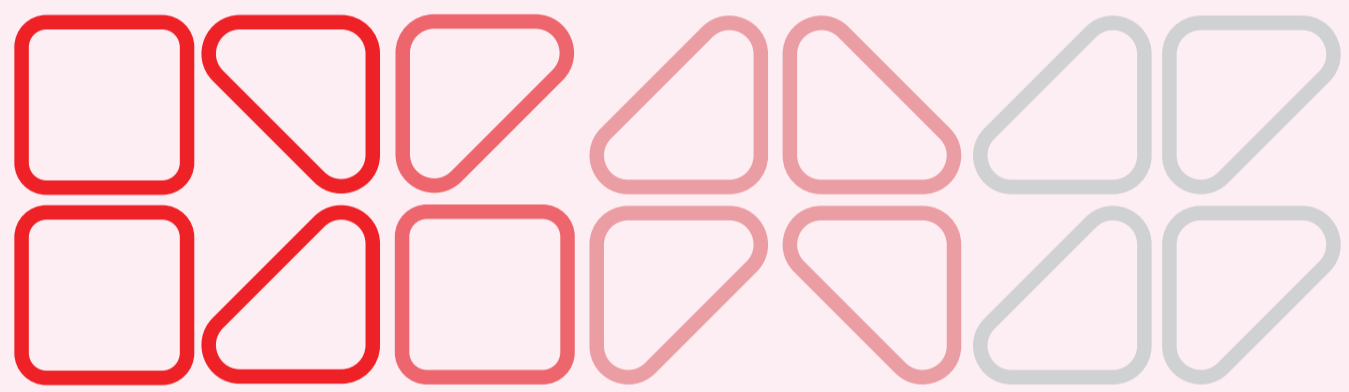
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