



EXTENDED ABSTRACT



InViCCAD 2025
1ST 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
#ADpilihanpertama



**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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Design
Innovation
Academic
Show 2025



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
(Bachelor)**





PLETENG | DUAL-PART PORTABLE TEA TUMBLER

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ABSTRACT

Malaysia's tea-drinking culture continues to thrive, reflecting both tradition and modern lifestyle habits. However, many tea-related products available in the market lack a strong cultural identity, often relying on generic designs that fail to represent the richness of local heritage. Previous studies highlight that cultural products are frequently designed with a primary focus on aesthetics, with limited attention to functionality, modularity, and user convenience. This issue underscores the importance of creating products that not only embody cultural values but also adapt to the practical needs of contemporary consumers. This project proposes the design of a dual-part portable tea tumbler that features two detachable compartments, enabling users to store both hot and cold beverages in a single, compact product. The tumbler integrates Tenun Pahang motifs, a traditional Malaysian weaving art, as a design element to reinforce local cultural identity and uniqueness. By combining traditional aesthetics with modern usability, the tumbler aims to offer both functional versatility and cultural storytelling in daily tea-drinking practices. The design aligns with Kraftangan Malaysia's mission to preserve and innovate traditional crafts, ensuring that local artistry remains relevant in the modern market. Through thoughtful integration of heritage motifs and contemporary design approaches, this product enhances user experience by addressing portability, heat safety, and long-term durability. This project demonstrates that traditional crafts can be effectively adapted to modern products, strengthening cultural appreciation while appealing to a wide range of urban consumers and lifestyle-focused markets.

Keywords: Portable Tumbler, Tea Culture, Tenun Pahang, Kraftangan Malaysia, Cultural Innovation

INTRODUCTION

Pleteng is a dual-part portable tea tumbler designed to merge Malaysian cultural heritage with modern functionality. Its name originates from the word “peleting,” a traditional tool used in Tenun Pahang weaving to wind threads on a loom. This cultural inspiration is translated into the product's form and surface design, where Tenun Pahang motifs serve as a key decorative element to highlight Malaysia's rich craft traditions.

However, many tea-related products, particularly those made from plastic, pose significant environmental challenges. As Amboro et al. (2022) The concept of Pleteng also responds to the issues raised by Liu & Cui (2020), who note that existing teapots and trays are “relatively lacking in novelty” and suffer from “product homogeneity”. Many cultural products only meet basic needs and fail to offer innovative or multifunctional features (Liu & Cui, 2020). To address this gap, Pleteng incorporates dual compartments for hot and cold beverages, enhancing usability, portability, and adaptability while maintaining aesthetic value.

This design also connects to the findings of (Kiew et al. 2021), who state that tea, especially milk tea, has become an integral part of Malaysian daily culture, enjoyed by all ethnic groups. By combining cultural identity and modern lifestyle needs, Pleteng aligns with Kraftangan Malaysia's mission to preserve and innovate traditional crafts, turning heritage into a practical product for today's users (Kraftangan Malaysia, 2021).

MATERIALS AND METHODS

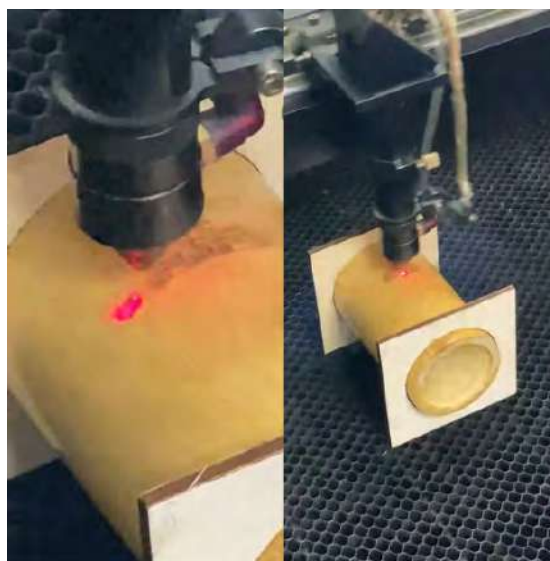


Figure 1 The picture of laser engraving



The Pleteng tea tumbler is designed with food-grade 304 double-wall stainless steel, a safe, non-toxic material that ensures both durability and health safety for users. This choice addresses concerns raised by Bolle et al. (2011), who found that many traditional metallic teapots leach toxic metals such as lead and nickel, which can pose serious health risks. By using stainless steel, *Pleteng* guarantees safe beverage storage while maintaining excellent insulation for both hot and cold drinks over extended periods. The lid is made from polypropylene (PP) with silicone seals, ensuring a leak-proof, user-friendly design. The bamboo outer layer not only provides a natural, sustainable finish but also features laser-engraved Tenun Pahang motifs, connecting modern tea culture with Malaysian heritage. Certain handcrafted elements reflect Kraftangan Malaysia's mission to preserve traditional craftsmanship while embracing contemporary design (Kraftangan Malaysia. (n.d.)). Inspired by the peleting, a weaving tool from Tenun Pahang, the tumbler's design process included cultural research, concept sketching, CAD modeling, and prototyping to create a dual-compartment structure that combines safety, portability, and cultural storytelling.

RESULTS AND DISCUSSION/FINDINGS

The development of *Pleteng* demonstrates the potential for merging cultural heritage with modern product design to create both functional and meaningful consumer goods. The integration of Tenun Pahang motifs provides a distinctive cultural narrative that sets the product apart from generic tea tumblers currently available in the market. This design choice strengthens cultural identity while contributing to the preservation and promotion of traditional Malaysian weaving arts.

Functionally, the dual-part structure of *Pleteng* with separate compartments for hot and cold beverages addresses the limitations of existing tea-related products, which often lack modularity and versatility. The design ensures practicality by incorporating durable materials, heat-safe construction, and ergonomic portability.

The findings suggest that heritage-inspired designs, when paired with user-centered features, can appeal to both urban consumers and cultural enthusiasts. This aligns with Kraftangan Malaysia's objectives to adapt traditional crafts for contemporary markets while maintaining cultural authenticity.

CONCLUSION & RECOMMENDATION

In conclusion, the *Pleteng* dual-compartment tea tumbler successfully bridges Malaysian cultural heritage with modern functionality by combining the elegance of Tenun Pahang motifs with a practical design suited for both hot and cold beverages. It highlights the potential of reinterpreting traditional craftsmanship for contemporary lifestyles while supporting Kraftangan Malaysia's mission of cultural preservation and innovation. The design not only addresses usability, portability, and durability but also elevates cultural appreciation in everyday tea-drinking practices. Moving forward, incorporating sustainable materials and expanding design variations could further enhance its relevance and strengthen its appeal in both local and global markets.



The picture of Environment (PLETENG)

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