



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.



Publisher

Universiti Teknologi MARA Kedah Branch,
Sungai Petani Campus,
08400 Merbok,
Sungai Petani,
Kedah,
Malaysia.

Copyright 2025 Faculty of Arts and Design,
Universiti Teknologi MARA Kedah Branch.

Copyright © is held by the owners/authors. The extended abstract is published in all rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form of any means electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher or author.

Perpustakaan Negara Malaysia
Cataloguing – in- Publication Data

Editor : Syahrini Shawalludin, Juaini Jamaludin, Normaziana Hassan, Fadila Mohd Yusof

Co-Editor : Shafilla Subri, Mohd Syazrul Hafizi Husin, Abu Hanifa Ab Hamid, Norarifah Ali, Zaidi Yusoff, Mohd Taufik Zulkefli, Mohd Hamidi Adha Mohd Amin, Ahmad Fazlan Ahmad Zamri, Abdullah Kula Ismail, , Suhaiza Hanim Suroya, Mohamad Hazmi Shoroin, Mohd Zamri Azizan, Mohamat Najib Mat Noor, Asrol Hasan, Azhari Md Hashim, Azmir Mamat Nawawi, Dinah Rakhim, Hasnul Azwan Azizan@ Mahdzir, Nazri Abu Bakar, Muhammad Aiman Afiq Mohd Noor, Nizar Nazrin, Nazirul Mubin Awang Besar, Qatrunnisa Shariff, Mohd Rozman Mohd Nasir, Wan Noor Faaizah Wan Omar

Design & Layout Editor: Syahrini Shawalludin, Nazirul Mubin Awang Besar, Mohd Rozman Mohd Nasir & Qatrunnisa Shariff

Language Editor : Normaziana Hassan & Juaini Jamaludin

DIAS 2025 : Extended Abstract

Perpustakaan Sultan Badlishah
e ISBN: 9 789 672 948 780

Printed By :
Universiti Teknologi MARA Kedah Branch,
Sungai Petani Campus,
08400 Merbok,
Sungai Petani,
Kedah,
Malaysia.





CONTENTS

Rector's Message
Head of College's Message

EXTENDED ABSTRACT

Diploma in Art & Design
(Graphic Design & Digital Media)

Page

1 - 174

Diploma in Art & Design
(Industrial Design)

175 - 575

Bachelor in Art & Design
(Industrial Design)

576 - 760

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)**





SERENISHELL | MINI WATERFALL



Nur 'Aisyah 'Awatif Binti Mohamad 'Ashri,

Dr. Wan Noor Faazizah Binti Wan Omar, Ahmad Fazlan Bin Ahmad Zamri

Industrial Design Department,
Faculty of Arts and Design,
Universiti Teknologi MARA (UiTM)
aisyahashri20@gmail.com

ABSTRACT

SereniShell is an eco-friendly mini waterfall designed to enhance well-being while promoting sustainable living. Made from recycled eggshell powder, a kitchen and food industry byproduct rich in calcium carbonate, this innovative product offers a creative alternative to conventional materials. The eggshells undergo a process of cleaning, drying, and grinding to form a fine powder, which is then blended with Plaster of Paris. This mixture results in a durable, natural-looking material suitable for molding and finishing. SereniShell brings the calming sound of flowing water into indoor environments, helping reduce stress and promoting mindfulness, particularly in urban settings. Its unique texture and earthy appearance demonstrate the value of biodegradable and repurposed materials in design. Compact and elegantly crafted, SereniShell suits homes, offices, and wellness spaces. With minimal water use and a low-energy pump, it is both environmentally and user-friendly. This project reflects the harmony between sustainability, functionality, and beauty—showcasing how even overlooked waste like eggshells can create meaningful, peaceful experiences in modern living.

Keywords: Eggshell powder, sustainability, eco-friendly design, mini waterfall, wellness.

SereniShell is a compact decorative waterfall designed to bring tranquility and eco-consciousness into everyday life. Crafted from recycled eggshell powder, it transforms food waste into a visually appealing and environmentally friendly home accessory. With soothing water flow and soft lighting, SereniShell encourages relaxation and stress relief, while fostering a deeper connection to nature. Its clean, modern form complements a variety of interior styles from minimalist to contemporary and serves as both a calming presence and a conversation piece. Through thoughtful design and sustainable materials, SereniShell encourages greener lifestyle choices while offering a sensory retreat.

MATERIALS AND METHODS



Figure 1.1 The picture of material and method

SereniShell is made from a sustainable mixture of eggshell powder and Plaster of Paris. The material is poured into custom-designed molds that shape the waterfall tiers. These molds are sun-dried for a full day to cure the structure naturally, without artificial energy input. Once dried, the parts are removed from the molds, cleaned, and assembled into a balanced form that facilitates smooth water flow. Each tier is carefully aligned for structural integrity and visual appeal. The final piece is polished, revealing a speckled, textured surface that highlights its natural, eco-friendly origin.



RESULTS AND DISCUSSION/FINDINGS

Tests were conducted to evaluate the water resistance and durability of the eggshell-based material. Since constant water exposure is expected, it was essential to confirm that the structure could withstand moisture over time. The combination of eggshell powder and Plaster of Paris produced a lightweight but solid ceramic-like texture. After sun-curing, water was circulated over the structure to monitor any signs of degradation, such as cracks or surface erosion. Results showed that the structure remained intact, confirming the material's suitability for long-term water use. This finding validates its application in functional, decorative water features.

CONCLUSION & RECOMMENDATION

SereniShell successfully merges sustainability, relaxation, and aesthetic appeal. Its use of recycled eggshell powder with Plaster of Paris forms a strong yet elegant structure, while the gentle water flow enhances mental wellness. This compact, visually calming piece is ideal for bedrooms, workspaces, and meditation areas. SereniShell goes beyond decoration it's a wellness item that integrates nature into indoor environments. For future improvements, the application of waterproof coatings and enhanced lighting features could further improve both durability and ambiance, ensuring greater usability and appeal.

REFERENCES

Yang, W., Wang, Y., & Liu, J. (2022). Optimization of the thermal conductivity test for building insulation materials under multifactor impact. *Construction and Building Materials*, 332, 127380. <https://doi.org/10.1016/j.conbuildmat.2022.127380>

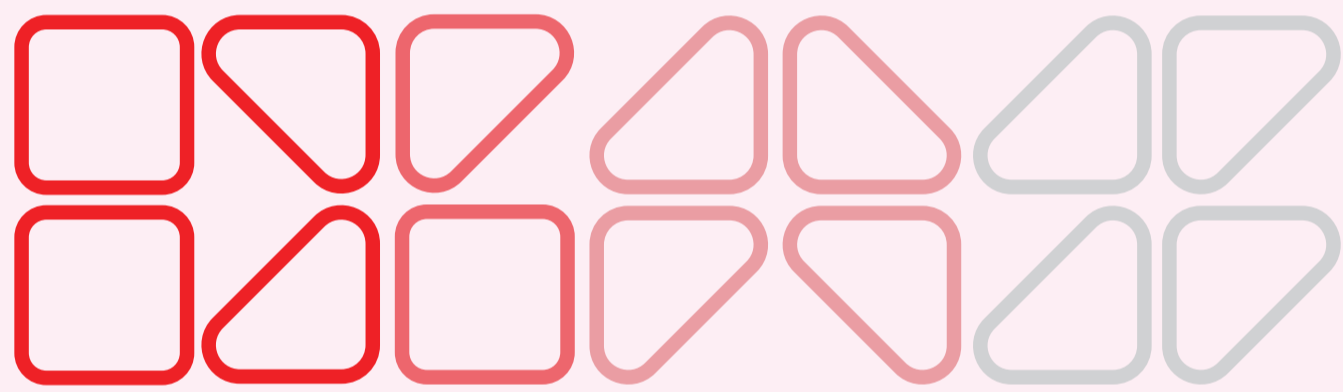
Jeff. (2024, December 11). *Are egg shells recyclable? Eggshell waste disposal insights*. GreenWashing Index. <https://www.greenwashingindex.com/eggshell-waste-recycling/>



King'ori, A. M. (2011). A review of the uses of poultry eggshells and shell membranes. *International Journal of Poultry Science*, 10(11), 908–912. <https://doi.org/10.3923/ijps.2011.908.912>

Awogbemi, O., Von Kallon, D. V., & Aigbodion, V. S. (2022). Pathways for sustainable utilization of waste chicken eggshell. *Journal of Renewable Materials*, 10(8), 2246–2265. <https://doi.org/10.32604/jrm.2022.019152>

Srinivasan, P., Sharma, A., Shahab, S., & Pandey, A. (2022). Sustainable use of eggshell powder in eco-friendly material applications: A review. *Environmental Technology & Innovation*, 28, 102904. <https://doi.org/10.1016/j.eti.2022.102904>



DMS



اَوْنِيُوْ تِيْكْنُوْلُوْجِي مَرَا
UNIVERSITI
TEKNOLOGI
MARA



9 789672 948780

