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Sustainable Creative Art: Inspiration from Nature

1ST Edition

A Book of Abstracts



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Sustainable Creative Art: Inspiration from Nature (SCIN) – 1st Edition

A Book of Abstracts submitted to the 1st edition of the international conference on **Sustainable Creative Art: Inspiration from Nature** 22-24 April 2025.



Acknowledgements

IEREK would like to express its appreciation to all members of the staff and scientific committee for their tremendous efforts and contribution to the growth of this institution and for making the first edition of the international conference on Sustainable Creative Art: Inspiration from Nature (SCIN). IEREK would like to thank the conference chairperson, Professor Paolo Caratelli, who is Associate Professor, Program Leader of Interior Design PG, Head of Research, Istituto Marangoni, Dubai. IEREK takes pride in being an institution that amasses a highly qualified and competent team who restlessly worked for months to make this conference what it is today in hopes of creating a well-rounded society. Last but not least, we cannot neglect the prominent role undertaken by our editors and reviewers who made it their duty to help this institution in spreading knowledge to the masses.

Foreword

Dr. Paolo Caratelli, Program Leader of Interior Design PG and Head of Research Istituto Marangoni Dubai

It is with great pleasure and sincere enthusiasm that I welcome you to the international conference Sustainable Creative Art: Inspiration from Nature (SCIN), held in Dubai from April 22 to 24, 2025. As Chair of this year's edition, I am honored to open a platform of such importance—one that seeks to investigate, celebrate, and critically discuss the rich intersection of art, architecture, design, fashion, and sustainability.

This conference arrives at a pivotal moment, where the urgency for ecological awareness meets the creative imperative to reimagine our future. Organized in collaboration between IEREK, Abu Dhabi University and Istituto Marangoni Dubai, SCIN was born from a shared conviction: that the creative disciplines bear not only a responsibility but also a unique opportunity to lead the transition toward sustainable futures. Across these three days, we gather to examine how nature, in its vastness and wisdom, continues to be both muse and mentor—offering not only inspiration but also solutions.

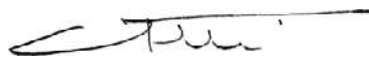
The program brings together a diverse community of scholars, designers, artists, architects, fashion professionals, and industry leaders. Through keynote lectures, panel discussions, research presentations, and case studies, we will explore how creative practices can align more harmoniously with the planet's needs. Themes will range from biomimicry in architecture and circular design models in fashion, to nature-inspired aesthetics and responsible visual storytelling in contemporary art.

We are particularly proud to host conversations that push the boundaries of traditional disciplines, highlighting the value of collaboration and the power of creative thinking in shaping sustainable narratives. Whether it is through a textile dyed with natural pigments, a building that breathes with its environment, or an image that challenges our perception of nature, each contribution to this conference is a testament to the transformative potential of conscious creativity.

I would like to extend my deepest gratitude to all participants and contributors whose insights and commitment have made this event possible. To our partners at IEREK, Dr. Mourad Amer and the whole staff, your collaboration and academic rigor have been invaluable. To Abu Dhabi University, and particularly Dr. Mohamed ElKaftangui and Dr. Hamdi Sheibani, we express our sincere appreciation for your meaningful collaboration and support. To the faculty, staff, and student volunteers at Istituto Marangoni Dubai and all other Istituto Marangoni campuses around the globe, your energy and dedication exemplify the spirit of innovation and excellence that defines our institution. And to all our distinguished speakers and attendees, thank you for joining us and for sharing your expertise, your perspectives, and your passion.

I invite you to fully engage with the sessions, connect with fellow creatives, and allow yourselves to be inspired by both the content and the context of this remarkable event. May these three days ignite new dialogues, spark meaningful collaborations, and contribute to a growing global movement toward sustainable creative futures.

Welcome to SCIN 2025. Let us be inspired by nature—and together, let us reimagine what creativity can achieve.



Dr. Paolo Caratelli

Chairman – SCIN 2025

Program Leader of Interior Design PG, Head of Research

Istituto Marangoni Dubai

Word from the Chairman of the Board of IEREK

It is my honor to be launching this conference on Sustainable Creative Art: Inspiration from Nature (SCIN) the 1st Edition of its kind.

IEREK- International Experts for Research Enrichment and Knowledge Exchange - is an institution that began pursuing its goal of reaching excellence in the research field in 2013, and since then has been connecting the world's scholars and providing them with a platform that would advance all their endeavors. Building international relationships with prestigious universities and institutes worldwide is one of IEREK's main goals, spreading knowledge and enhancing research around the world, along the way, through collaborating with trustworthy partners who share its same vision.

That said, IEREK continues to hope to present the world with a conference that positively contributes to its relative field and makes way for scholars to combine their ideas for the greater goal of discovering new and innovative solutions to the issue at hand, with the aid of our scientific committee comprised of distinguished professors and researchers from a variety of international, established universities.

Finally, I hope that the conference succeeds in delivering its message to the world of professionals in the various concerned disciplines in order for their work to be put into motion. I also declare our welcome to all audiences, from undergraduate to postgraduate students, and all who will benefit the most out of this conference. I am looking forward to meeting you all and collaborating within this successful experience.



Mourad S. Amer

IEREK CEO & Founder –
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WORD BY THE CONFERENCE CHAIRPERSON

Dr. Paolo Caratelli – Program Leader of Interior Design PG, Head of Research, Istituto Marangoni Dubai

As we come together for SCIN 2025 – Sustainable Creative Art: Inspiration from Nature, I find myself reflecting on the immense value of moments like this—where creativity, research, and purpose converge. In an age where sustainability is no longer a choice but a necessity, the role of art, design, and fashion becomes even more vital in shaping a new, more conscious cultural landscape.

This conference is more than a gathering of academics and professionals; it is a shared journey toward redefining how we create and why we create. Nature, in all its complexity and elegance, remains the most powerful teacher. Its forms, rhythms, and ecosystems have long inspired artists and designers—but now, more than ever, we are called to move beyond inspiration and into action.

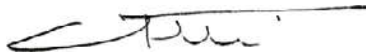
At Istituto Marangoni Dubai, we believe education must lead change, not simply follow it. That belief is reflected in this conference—co-organized with IEREK and supported by esteemed partners such as Abu Dhabi University—where thought leaders and emerging voices come together to explore how sustainability can be woven into the very DNA of creative practice.

I extend my heartfelt thanks to all those contributing to this event, especially the scholars, researchers, and students whose passion and dedication continue to shape the future of our fields. I am especially grateful to Dr. Mourad Amer of IEREK, Dr. Mohamed ElKaftangui of Abu Dhabi University and Francesco Fioretto of Istituto Marangoni HQ for their valued collaboration and engagement in this important dialogue.

May this conference spark new connections, ideas, and initiatives that will resonate far beyond these three days. Let us be reminded that every choice we make as creatives—every material, every line, every message—has the potential to contribute to a better world.

Thank you for being part of this important conversation. I look forward to the insights, the debates, and the inspiration we will share.

Warm Regards,



Dr. Paolo Caratelli

Chairman – SCIN 2025

Program Leader of Interior Design PG, Head of Research

Istituto Marangoni Dubai

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Re-Imagining Garment Cutting Waste through the Power of Negative Spaces

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Abstract:

The fashion industry generates a substantial amount of textile waste, accounting for 10-15% of the total fabric used solely during the garment cutting stage [1]. These offcuts are typically regarded as useless residues, but they can be reimagined as valuable resources for creating new products through an innovative approach that combines Otto von Busch's theory of fashion hacking [2] with the zero-waste design principles discussed by Timo Rissanen and Holly McQuillan [3], particularly as a tool for optimizing the cutting process. This contribution seeks to explore the application of the zero-waste design approach in fashion, specifically focusing on the offcuts from the cutting stage, referred to here as the "negative spaces" of both the pattern and the cut garment. The aim is to introduce a new perspective that views textile waste generated during the cutting process as "negative spaces"—"containers," according to artist Marion Baruch, interviewed by Torres [4]—that are rich in value and meaning. Instead of being discarded, these offcuts can be transformed into new textile products for the fashion industry or related sectors. In this context, the designer becomes a "transmuter" of waste, imbuing it with economic, social, cultural, and productive value through hacking operations within the design process. Waste material is thus interpreted with a renewed sensitivity, enabling us to discern "the various visible and invisible components of the cosmos" and to reshape and revalue "the remnants of something we no longer need or want in our lives" [5, p.6].

Keywords:

Negative Spaces, Fashion Hacking, Zero-Waste Design, Textile Waste, Garment cutting;

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