

International Conference on Multidisciplinary Research

ICMR-2025

Organized by



วิทยาลัยเทคโนโลยีสยาม
Siam Technology College
International Program

Siam Technology College

46 Charan Sanit Wong Rd, Khwaeng Wat Tha Phra, Khet Bangkok Yai,
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**International Conference on
Multidisciplinary Research**

ICMR-2025

Venue: Siam Technology College

Editors

Mr. Sumit Kumar Bhalla

Mr. Nanda Lal Banik

Ms. Chattriya Tanyakul

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Preface

Conference word and AR Research Publication is a fast-growing group of academicians in Engineering, Sciences, and Management. A R Research Publication is also known for its fast reply and zero-error work. The conference world has organized various conferences at renowned places namely Delhi University; New Delhi, Jawaharlal Nehru University; New Delhi, PHD Chamber of Commerce and industry New Delhi, YMCA New Delhi, India International Centre New Delhi, Sri Venknteswara College of Engineering and Technology, Andhra Pradesh, Vedant Engineering Kota and many more places across the country.

We are very pleased to introduce the proceedings of the International Conference on Multidisciplinary Research (ICMR-2025). The papers presented at the conference addressed the Recent Innovations & Development in field of Engineering and Technology. The level of Interest in the subject matter of the conference was maintained from previous events and over 52 suitable papers were submitted for presentation at the conference.

Papers were well represented at the conference to arouse a high level of international interest. The presented papers maintained the high promise suggested by the written abstracts and the program was chaired in a professional and efficient way by the session chairmen. The program was chaired professionally and efficiently by the session chairmen also highly gratifying, showing the high level of interest in the subject. This Proceeding provides a permanent record of what was presented. They indicate the state of development at the time of writing of all aspects of this important topic and will be invaluable to all authors in the field for that reason. Finally, it is appropriate that we record our thanks to our fellow members of the Technical Organizing Committee for encouraging participation from those areas. We are also indebted to those who served as chairmen, without their support, the conference could not have been the success that it was. We also acknowledge the authors themselves, without whose expert input there would have been no conference. Their efforts made a great contribution to its success.

About the College

Siam Technology College is one of the leading private higher education institutions in Thailand. Siam Technology College aspires to manage education to promote graduates, both undergraduate and postgraduate, with degrees that incorporate theoretical and practical skills from a variety of disciplines. By providing academic and professional training, students are better able to keep up with the rapid pace of changes in the technology industry. Moreover, the graduates of Siam Technology College leave with a set of highly desirable skill set that meet the needs of the labor market. Additionally, our graduates are well-prepared to help the country develop its economic and social potential.

As Thailand has been progressing towards becoming an industrialized country, it has continuously faced hardships due to a shortage of qualified personnel possessing both knowledge and appropriate skills. Realizing that Thailand was in dire need of people with industrial skills, Dr. Narong Mongkhonvanit took on the responsibility of resolving this shortage. In 1965, he established Thailand's first private vocational institution that could provide students with job-oriented training. He and named the new school: "siam institution of technology." From its inception, Siam Technology College has been regarded as one of the leading vocational institutions in Thailand. Through the growth of its structure as a leading and innovating institute, Siam Technology College has demonstrated a solid commitment to contribute back to Thai society and youth.

The year 2005 marked the 40th year anniversary of the institution, and the time arrived to take yet another new step. Aiming at advancing into a new level of educational development, Siam Technology College (Siam Tech) decided to establish a new institution simply called "Siam Technology College." Siam Technology College was opened its doors in 2006. The 800+ square meter campus is adjacent to (but distinctly separate from) Siam Technology College (Siam Tech). Initially, the goal of the new college was to provide an additional avenue of study for graduates from Siam Tech; however, Siam Technology College now features a growing list of degree programs for students interested in pursuing business and technology-related degrees. Enshrined in the college's curriculum are the fundamental principles of equality and continuity, focusing on educating students from all educational backgrounds throughout Thailand and asean.

About the Conference

The International Conference on Multidisciplinary Research is a platform that unites experts from diverse fields to tackle complex issues that cannot be solved within the confines of a single discipline. By integrating insights from various domains such as technology, health sciences, environmental studies, and social sciences, the conference aims to foster innovative solutions and new research directions. The event typically features keynote addresses by leading experts, panel discussions, workshops, and paper presentations, creating opportunities for attendees to share knowledge and collaborate across disciplines. It attracts a broad audience, including researchers, industry professionals, and students, all of whom benefit from the expanded perspectives and networking opportunities that arise from engaging with a variety of fields.

About IARDO

International Association of Research and Developed Organization (IARDO) is a leading organization in the field of academic research activities under the banner of India Educational Charitable Trust (Regd).

International Association of Research and Developed Organization (IARDO) is an apex body that promotes and encourages commendable achievements from all over the country. The organization under conference world regularly organizes national and International level conferences with the help of its members to promote socially responsible education practices and sustainable development in economic as well social front in India.

Organizing Secretary

Mr. Sumit Kumar Bhalla,

Director of Teaching and Learning Foreign Languages
Siam Technology College , Bangkok, Thailand

Speakers

Mr. Nanda Lal Banik,

Head of International Business Management Program
Siam Technology College, Bangkok, Thailand

Ms. Chattriya Tanyakul

Acting Head of Department of International Student Affairs
Siam Technology College, Bangkok, Thailand

Message



Mr. Sumit Kumar Bhalla

*Director of Teaching and
Learning Foreign Languages
Siam Technology College, Bangkok, Thailand*

Message from the Organizing Secretary

Dear Esteemed Guests, Distinguished Speakers, and Valued Participants,

It is with great honor and immense pleasure that I welcome you all to *The Noble Bond 2025 – Indo-Thai Paragon Awards* and the *International Conference on Multidisciplinary Research [ICMR-2025]*, hosted by Siam Technology College, Bangkok, Thailand. This event stands as a testament to our shared commitment to fostering academic collaboration, cross-cultural dialogue, and global partnerships in education and research. As the Director of Teaching and Learning Foreign Languages, I take pride in witnessing such an inspiring convergence of intellectuals, educators, and professionals from diverse disciplines and backgrounds.

The theme of this conference – *Multidisciplinary Research* – reflects the evolving nature of knowledge in our interconnected world. I am confident that the rich discussions, thought-provoking presentations, and invaluable networking opportunities over these days will leave a lasting impact on all of us. I would like to extend my deepest gratitude to all the organizing partners, keynote speakers, research contributors, and volunteers whose efforts have made this event possible. May this conference ignite new ideas, strengthen international collaborations, and celebrate the spirit of unity between India and Thailand.

Wishing you all a productive, enlightening, and memorable experience at ICMR-2025.

Warm regards,

Mr. Sumit Kumar Bhalla

Organizing Secretary

Director of Teaching and Learning Foreign Languages

Siam Technology College, Bangkok, Thailand

Message



Mr. Nanda Lal Banik

*Head of International
Business Management Program
Siam Technology College, Bangkok, Thailand*

Message from the Speaker

Dear Delegates, Scholars, and Friends,

It is a great privilege to be part of The Noble Bond 2025 – Indo-Thai Paragon Awards and the International Conference on Multidisciplinary Research [ICMR-2025], hosted at Siam Technology College, Bangkok.

As the Head of the International Business Management Program, I am thrilled to witness the coming together of brilliant minds from across the globe. This conference not only provides a platform for academic exchange but also strengthens the cultural and intellectual ties between our nations—Thailand and India.

In today's dynamic world, multidisciplinary research is no longer a choice but a necessity. The merging of ideas across fields—whether it be business, technology, education, or the humanities—has the power to create sustainable solutions and global impact. I believe each presentation and interaction at this conference will offer new perspectives, challenge conventional thinking, and inspire collaborations beyond borders. Let us take this opportunity to listen, share, and grow. Together, we can build a future driven by innovation, understanding, and mutual respect.

Wishing everyone a successful and enriching conference.

With warm regards,

Mr. Nanda Lal Banik

Speaker

Head of International Business Management Program

Siam Technology College, Bangkok, Thailand

Message



Ms. Chattriya Tanyakul

*Acting Head, Department of
International Student Affairs
Siam Technology College, Bangkok, Thailand*

Message from the Speaker

Dear Participants, Honored Guests, and Academic Colleagues,

It is with great joy and heartfelt enthusiasm that I welcome you to *The Noble Bond 2025 – Indo-Thai Paragon Awards* and the *International Conference on Multidisciplinary Research [ICMR-2025]*.

As the Acting Head of the Department of International Student Affairs at Siam Technology College, I am especially delighted to see such a diverse and vibrant gathering of minds from various fields and cultures. This event is more than just a conference—it is a celebration of global collaboration, innovation, and the enduring friendship between India and Thailand. Our theme of *Multidisciplinary Research* encourages us to look beyond traditional academic boundaries and embrace new approaches to solving the complex challenges of our time. It is my hope that this platform will inspire fresh ideas, promote international understanding, and spark meaningful connections among participants.

Let us use this opportunity to learn from one another, share our knowledge generously, and build bridges that last far beyond this conference.

Wishing you a fulfilling, insightful, and memorable experience at ICMR-2025.

Warmest regards,

Ms. Chattriya Tanyakul

Speaker

Acting Head, Department of International Student Affairs

Siam Technology College, Bangkok, Thailand

Message



Ms. Reshu Gupta,
CEO Conference World

It is with great enthusiasm that I welcome the upcoming **International Conference on Multidisciplinary Research**, scheduled to be held at **Siam Technology College, Bangkok, Thailand**, located at 46 Charan Sanit Wong Rd, Khwaeng Wat Tha Phra, Khet Bangkok Yai, Krung Thep Maha Nakhon 10600.

This global gathering is set to provide a vibrant platform for scholars, researchers, and professionals from diverse disciplines to come together and explore the frontiers of knowledge across various fields. The interdisciplinary nature of this event is bound to inspire innovative thinking, foster collaborative research, and open new avenues for impactful discoveries. I am certain that the conference will play a pivotal role in encouraging insightful dialogue and meaningful engagement among thought leaders and emerging scholars alike. Such initiatives are vital in nurturing a culture of academic synergy and shaping solutions to the complex challenges of our time.

Looking ahead, I envision this conference growing into a hallmark annual event that continues to spark curiosity, creativity, and collaboration across disciplines.

My sincere appreciation goes to the organizers for their efforts in orchestrating this important event. Wishing the **International Conference on Multidisciplinary Research** a resounding success!

Ms. Reshu Gupta,
CEO Conference World

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International Conference on Multidisciplinary Research (ICMR-2025) organized at Siam
Technology College 46 Charan Sanit Wong Rd, Khwaeng Wat Tha Phra, Khet Bangkok
Yai, Krung Thep Maha Nakhon 10600, Thailand. Total 97 papers were received for the
conference and 52 papers were shortlisted by the committee.

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