



# Call for Papers

# ICBIR 2023

## Interdisciplinary Research Conference

### Honorary Chairs

Rungsun Lertnaisat TNI, Thailand  
President of Thai-Nichi Institute of Technology

Thanaruk Theeramunkong AIAT, Thailand  
President of Artificial Intelligence Association of Thailand

Pongsakorn Yuthagovit IEEE, Thailand  
Chair of IEEE Thailand Section, Thailand

Yoshikazu Miyanaga CIST, Japan  
President of Chitose Institute of Science and Technology

### General Chair

Ruttikorn Varakulsripunth TNI, Thailand  
Vice President, Thai-Nichi Institute of Technology

### General Co-chair

Krisana Chinnasarn BUU, Thailand

Kosin Chamnongthai KMUTT, Thailand

Virach Sornlertlamvanich MU, Japan

### Technical Program Chair

Warakorn Srichavengsup TNI, Thailand

### Technical Program Committee

Booncharoen Sirinaovakul KMUTT, Thailand

Apinunt Thanachayanont KMUTL, Thailand

Worapong Tangsrirat KMUTL, Thailand

Prayoot Akkaraekthalin KMUTNB, Thailand

Mana Sriyudthsak CU, Thailand

Chiranut Sa-ngiamsak KKU, Thailand

Saiyan Saiyod KKU, Thailand

Paritud Bhandhubanyong PIM, Thailand

Annop Monsakul PIM, Thailand

Chirawan Chaisuwan CMU, Thailand

Worarat Sangmanee KMUTL, Thailand

Tiwa Park DTC, Thailand

Pranee Jongsutjarittam KU, Thailand

Ekarat Rattagan NIDA, Thailand

Kuntpong Woraratpanya KMUTL, Thailand

Waree Kongprawechon SIIT, TU, Thailand

Watson Chansajcha BLS, Thailand

Samuel S. Chua LPU, Philippines

Tsutomu Konosu CIT, Japan

Akimitsu Hatta KUT, Japan

Hideki Hosoda Tokyo Tech, Japan

Kou Yamada GU, Japan

Tatsuhiko Aizawa SIT, Japan

Volodymyr Chernenko EHU, Spain

Sanghyuk Lee XJTLU, China

Manfred Glesner TU Darmstadt, Germany

Hitoshi Isahara OIDA, Japan

Hiroshi Tsunoda TOHTECH, Japan

KC Santosh USD, USA

Yasushi Kiyoki MU, Japan

Thatsanee Charoenporn MU, Japan

Takafumi Nakanishi MU, Japan

Kamfai Wong CUHK, China

Pikul Vejjanugraha TNI, Thailand

Ferdin Joe John Joseph TNI, Thailand

2023 8<sup>th</sup> International Conference on Business and Industrial Research  
ICBIR2023 : 18-19 May, 2023 Bangkok, Thailand

Organizers : Thai-Nichi Institute of Technology (TNI) , Technology Promotion Association (Thailand-Japan) (TPA) and Artificial Intelligence Association of Thailand (AIAT)

The 8<sup>th</sup> International Conference on Business and Industrial Research (ICBIR2023) is a multidisciplinary academic conference which includes research in science, engineering, informatics, modern business, social science and linguistics since 2010. ICBIR2023 will provide opportunities for the Researchers, Academicians, Industry persons and students to interact and exchange ideas, experience and expertise in the current trend and upcoming technologies. Besides this, participants will have the opportunity to meet people with similar research interests which can lead to future research cooperation. The need for a multidisciplinary conference is to make transdisciplinary collaboration among researchers from around the globe. The areas of research covered by ICBIR are the most disruptive technologies currently undergoing a massive transformation. This conference is planned as the offline conference to be conducted in the second quarter of 2023. Special sessions are also open for academicians and researchers to collaborate with like minded researchers to bring a theme under one umbrella and proposals are invited for the same. Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. Sightseeing opportunities also will be provided to participants. Registration benefits are available for IEEE members, AIAT members and partner universities' faculty and students.

### RESEARCH TOPICS (General Sessions)

**Track 1: Technology on Education, Language and Social Science:** Learning Management System (LMS), IT Application for Teaching and Learning, E-learning and Online Education, Computational Linguistic, Digital Technology for Social Development, Language Efficiency Improvement Strategy, Other related topics.

**Track 2: Information and Communication Technology:** Digital and Multimedia Technology, Computer Networks Performance, Networks and Cyber Security, Data Science and Analytics, Business Intelligence and Technology, Web Technology and Mobile Applications, AI and IoT, Natural Language Processing, Other related topics.

**Track 3: Sciences and Engineering:** Artificial Intelligence and Robotics, Computer Vision and Image Processing, Production and Automotive Engineering, Embedded System Architecture, Electrical Power Systems, Other related topics.

**Track 4: Modern Business Administration:** Digital Marketing, E-Logistics and Supply Chain, E-Business Management, Digital Innovation in Industrial Management, Banking & Risk Management Technology, IT Application for Finance & Accounting, Smart Tourism, Software System for Manufacturing, SAP/ERP, Other related topics.

### Important Dates

Deadline of Paper Submission: ~~January 31, 2023~~ February 15, 2023  
Notification of Acceptance: February 28, 2023  
Deadline of Camera Ready: March 24, 2023  
Early Bird Registration: January 27 - March 24, 2023  
Regular Registration: March 25 - April 7, 2023  
Conference Date: May 18-19, 2023

### Registration fee

Categories	Regular presenter		Student presenter		Audiences
	Early bird	Regular	Early bird	Regular	
Normal Participants	USD 300	USD 350	USD 200	USD 250	USD 100
Members of IEEE, AIAT and MOU	USD 270	USD 315	USD 180	USD 225	USD 90



icbir.tni.ac.th

Contact ICBIR Secretariat : [icbir@tni.ac.th](mailto:icbir@tni.ac.th) Website : [icbir.tni.ac.th](http://icbir.tni.ac.th)

Sponsoring Organizations













# Call for Paper of Special Session - 4 "Intelligent Systems for Medical and Industrial Applications"

Joint with  
2023 8<sup>th</sup> International Conference on Business and Industrial Research  
ICBIR2023: <https://icbir.tni.ac.th/>  
May 18-19, 2023, Bangkok, Thailand

In the recent years, artificial intelligent (AI) models have redefined the standards and scope of problem solving. The impact of AI in health care services and in industry has grown beyond our imagination. AI has opened up new transformative avenues in the field of medicine namely medical data & image analytics, disease detection / identification, disease classification, drug design, personalized drug prescription & delivery, prediction of treatment protocols, Robot-assisted surgery, Virtual medical assistants, chatbots, recommender systems, medical & health services management etc. The wake of Industry 4.0 & 5.0 has triggered the automation of the process, product and business of industry by harnessing the potentials of robotics, IoT, Bigdata coupled with AI models. The researchers working in these domains develop innovative and novel optimal solutions for medical and industrial applications. This session is designed to provide a forum for knowledge assimilation and dissemination on the advancements in artificial intelligence modeling that provides smart and viable computational solutions, specifically for medical, industrial and its allied domains.

## Special Session Chair

**Dr. Shanmugavadivu Pichai**,  
Dept. of Computer Science and Applications  
The Gandhigram Rural Institute  
(Deemed to be University), India  
[psvadivu67@gmail.com](mailto:psvadivu67@gmail.com)  
<https://orcid.org/0000-0003-2032-6115>

## Special Session Co-Chair

**Dr. Warakorn Srichavengsup**,  
Thai-Nichi Institute of Technology,  
Thailand

## Special Session Technical Program Committee:

**Dr.M.Mary Shanthi Rani**, The Gandhigram Rural Institute (DTBU), India  
**Dr.T.Kalaiselvi**, The Gandhigram Rural Institute (DTBU), India  
**Dr.Sachi Nandan Mohanty**, College of Engineering, Pune, India  
**Dr.PL.Chithra**, University of Madras, India  
**Dr.M.Sornam**, University of Madras, India  
**Dr.V. Sivakumar**, Asia Pacific University of Technology and Innovation, Malaysia  
**Dr.A. Saleem Raja**, University of Technology and Applied Science, Oman  
**Dr.Rajamohan Parthasarathy**, SEGi University, Malaysia

Development of new AI-based solutions, for the real-time applications of Medicine and Industry, using the following, but not limited to:

- ★ Bigdata
- ★ Bioinformatics
- ★ Block Chain Management
- ★ Cloud Computing and Cyber Security
- ★ Deep Learning
- ★ Edge Computing
- ★ Fuzzy Systems
- ★ Geoinformatics
- ★ Grid Computing
- ★ High Performance Computing
- ★ Industry 4.0 / 5.0
- ★ Internet of Things
- ★ Machine Learning
- ★ Mathematical Modeling
- ★ Meta-Heuristic Methods
- ★ Nano technologies
- ★ Natural Language Processing
- ★ Neural Networks
- ★ Parallel Computing
- ★ Recommender systems
- ★ Remote Sensing
- ★ Robotics
- ★ Soft Computing
- ★ Virtual / Augmented Reality
- ★ Wearable Device

Important dates  
Deadline of Paper Submission: ~~January 31, 2023~~ February 15, 2023

If you have any questions please contact secretariat:  
Email: [icbir@tni.ac.th](mailto:icbir@tni.ac.th)

Papers submission: <https://icbir.tni.ac.th/submission/>