











—— Jointly Organised by ——

Manipal Academy of Higher Education, India
Universiti Putra Malaysia, Malaysia
Kyushu Insitute of Technology, Japan
Universiti Malaya, Malaysia
Universiti Teknologi MARA, Malaysia

—— Supported by ———



TRIBE LEGACY SARAWAK



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Overview of the Conference

In the present era of remarkable technological achievements in the computational domain new techniques have been applied in the engineering and health sciences domain. There is increased necessity to solve complex problems in computational domains and obtain better results from the simulations that will be helpful to clinicians. The proposed two day International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH-2023) serves the purpose of bringing together the computational scientists and engineers and medical fraternity from various interdisciplinary domains under a common forum. The latest technological advances shall be shared through a series of keynote lectures and parallel presentations. This is done to foster various types of academic collaborations. The theme of this conference will be broad (but not limited to) covering several analytical and numerical techniques, and novel applications of computational techniques to solve problems in engineering, health sciences, and other computational disciplines.

About the Universities

Manipal Academy of Higher Education (MAHE)

Manipal Academy of Higher Education got the deemed university status in 1993, the seeds for its magnificent growth were sown way back in 1953 with the setting up of the flagship Kasturba Medical College on what was then a barren hilltop. In the process, MAHE has created some of the country's best institutes/schools across several diverse streams like medicine, dentistry, nursing, engineering, pharmacy, hotel management, allied health, architecture and design, communication etc. MAHE has 16 undergraduate programs, 25 programs for both Masters and Doctoral research in all streams of Engineering and Sciences under 18 different departments. Moreover, MAHE also has collaborative research programs in association with premier research laboratories and institutes in India and abroad. These opportunities has geared to meet the same demanding standards to create great professionals and citizens by inspiring them in many ways. [www.manipal.edu]

Universiti Putra Malaysia (UPM)

Universiti Putra Malaysia (UPM) is a leading research university in Malaysia, which also well known as a world-renowned centre of learning and research. It also known as as a strategic gesture to portray the status of UPM as a centre of higher education capable of providing various fields of studies, including medicine and health science, economics and management, engineering, food science and technology, educational studies, design and architecture, computer science and information technology etc. Up-to-date, a total of 11 research cluster, 91 research programme and 241 research group across various disciplines has been established in UPM. These programmes also offered outbound scholars to postgraduate students to expose research experiences at other reputable universities overseas for building professional networks. On top of that, UPM is highly committed to the discovery of knowledge, which facilitates national development in the new millennium. [www.upm.edu.my]

Kyushu Institute of Technology (Kyutech)

Kyushu Institute of Technology (Kyutech) was originally founded as a private institution called the Meiji College of Technology (MCT) became a national university and was renamed the Kyushu Institute of Technology in 1949. The new Faculty of Computer Science and Systems Engineering (1986) and Graduate School of Life Science and Systems Engineering (2000) were founded in addition to the already established Faculty of Engineering. Research in Master Programme in Kyutech offers advanced specialization of various engineering field included information science center, instrumental analysis, spacecraft environment interaction engineering, biomedical informatics, power electronic, sociorobotic syntheses, eco-fitting technology and etc. Kyutech also offers variety of opportunities for international collaborations and attachments for enhanced competitiveness in education and research capabilities. For more than 100 years, KIT has produced world-leading professional engineers and contributed to industrial development in Japan and abroad through research and development for creating new technologies. [www.lsse.kyutech.ac.jp]

Universiti Teknologi MARA (UiTM)

Universiti Teknologi MARA (UiTM) is the largest comprehensive university in Malaysia providing innovative education with state-of-the-art infrastructure and technology within reach at its 34 campuses, 4 colleges of studies, 13 faculties, and 9 academic centres all over the country. UiTM offers over 500 academic programmes at Foundation, Pre-Diploma, Diploma, Bachelor's, Master's, and PhD levels, as well as Professional Programmes. It continues to expand access to higher education, playing its role in nation-building by unleashing potentials and shaping the future. Amongst its long list of recent accolades, UiTM is ranked 104th in the QS Asia University Rankings 2023, placed 651-700 in the QS World University Rankings 2023, and was ranked 361-380 for QS World University Rankings: Sustainability 2023 and 4th in Malaysia. Moreover, UiTM was in the 101-200th position in the Times Higher Education Impact Rankings 2022 and is the proud recipient of the 3G SDGs Championship Award 2022. In June 2022, UiTM received the Reader's Digest Trusted Brand Gold Award for the 12th time in the public university category and for the first time, UiTM was bestowed The BrandLaureateBestBrands Awards 2022 - the Nation's Pride Higher Education. The university ranked 128th in the UI GreenMetric (UIGM) World University Rankings 2021 and won gold for the Best International Print-Ads at the QS APPLE Creative Awards 2020. With over 900,000 alumni in science, technology, humanities, and entrepreneurship, UiTM offers opportunities to shape leaders at national, industry, and global levels and is well poised to become a globally renowned university by 2025.

Universiti Malaya (UM)

is the premier university in Malaysia, first established in 1957. Its 750-acres campus lies within the heart of Kuala Lumpur city and this strategic location is truly an advantage for international academic staff and visitors. UM is a comprehensive, intensive research university with more than 34,000 students and 2,000 academic staff (both local and international) across 17 faculties, from arts and humanities to science, engineering, and medicine. As with any reputable university, UM collaborates with the other universities and industries locally and abroad to share and capitalise on leading-edge research carried out by its researchers. Over 200 programmes are offered in UM, covering the whole spectrum of learning from Arts, Sciences, and Humanities. UM has achieved top 150 in 5 broad subject areas. Universiti Malaya leads all the universities in Malaysia with 32 listed subjects. UM is also granted the selfaccredited educational institutions by the Malaysian Qualifications Agency (MQA) since 2009. Our academic programmes are recognized world-wide including a number of courses that are accredited by international accreditation bodies such as Washington Accord (Engineering), and The Association of MBA (AMBA). Since 2002, the University of Malaya has maintained the MS ISO 9001:2000 certification, being the first Malaysian public higher education institution to receive a comprehensive certification for all its academic processes. With more than 500 international collaborative partners UM offered prestigious opportunities for its students whether through Student Mobility Programmes, Dual Degree, or Joint Research

Conference Topics/ Scope of the Conference

- Advanced Finite Element
 Difference/Volume Methods
- Advanced Numerical Algorithms Artificial Neural Networks
- Boundary Element Methods
- · Comparative Genomics
- Computational Biology and Medicine
- · Computational Fluid Dynamics
- Computational Grids
- Computational Heat Transfer
- Computational Mathematics
- Computational Mechanics for Solids and Structures
- Computational Meso/ Micro/ Nano Mechanics
- Computational Rheology
- Computational Techniques for Applications in Engineering Science and other disciplines
- Computational Uncertainties
- Computer Aided Drug Design
- Computational Fluid Dynamics in Agroenvironment

- Computation methods in Nanomaterials
- Data Intensive Computing Techniques
- Development of Software for Numerical Simulation
- Fuzzy Logic
- Health Monitoring
- High Performance Computing Techniques
- Inverse Problem Meshless/ Meshfree/ Particle Methods
- Modelling and Simulation of Complex Systems
- · Molecular and Quantum Methods
- Multi-scale Methods
- Multiphysics
- Optimization
- Parallel and Distributed Computing Protein Modelling
- · Sequence/Structure Pattern Recognition
- · Uncertainty Analysis
- · Validation and Verification

Call for Papers

Authors are required to send a **softcopy of the abstract** of original and unpublished research work through email to **iccmeh2023@gmail.com**, on or **before 30 June 2023**. The abstract should be limited to one A4 size page, which should include the objective, methodology, results and conclusion. The language of the conference will be English. Two types of copies of the full papers, one in MS word and the other in pdf format with single spacing (12 pt, Times New Roman) should be submitted. The authors should mention their affiliation with corresponding addresses, email, telephone and fax numbers. Submission of the abstract will be accepted only through email.

Upon acceptance, the authors have to submit the full paper as per conference format to be given later. The final acceptance of the paper for oral presentation will be based on peer review. Efforts are on to tie up with **scopus indexed conference proceedings**. Papers which are eligible for best paper award during the conference will have an opportunity for publication.

Important Dates

Date of Abstract Submission : 30 June 2023
Notification of Acceptance : 10 July 2023
Full Length Paper Submission : 1 August 2023
Registration for conference : 15 September 2023

Conference Dates : 2 & 3 October 2023

Organising Committee

MAHE Patron

Ltn. (Dr.) M D Venkatesh, Vice Chancellor, Manipal Academy of Higher Education (MAHE), India.

KIT Patron

Dr. Yasunori Mitani, Vice Chancellor, Kyushu Institute of Technology (KIT), Japan

UPM Patron

Dato Prof. Dr. Mohd Roslan bin Sulaiman, Vice Chancellor, Universiti Putra Malaysia (UPM), Malaysia

UM Patron

Professor Dato' Ir. Dr. Mohd Hamdi Bin Abd Shukor, Vice Chancellor, Universiti Malaya (UM), Malaysia

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Dr. Norkhairunnisa Mazlan, Associate Professor, Department of Aerospace Engineering, Universiti Putra Malaysia, Malaysia

Dr. Noorfaizal Yidris, Associate Professor, Head of Department, Department of Aerospace Engineering, Universiti Putra Malaysia, Malaysia

Dr Mohd Khairol Anuar b. Mohd Ariffin, Professor, Department of Aerospace Engineering, Universiti Putra Malaysia, Malaysia

Dr. Faizal Mustapha, Professor, Department of Aerospace Engineering, Universiti Putra Malaysia, Malaysia

Dr. Mohamed Thariq bin Haji Hameed Sultan, Professor, Department of Aerospace Engineering, Universiti Putra Malaysia, Malaysia

Dr Raj CN Thiagarajan, Managing Director, ATOA Scientific Technologies Pvt Ltd, Bangalore, India

Dr. Professor Panicos A Kyriacou, Director, Biomedical Engineering Research Centre, City University of London, London

Prof. Gopinath Chattopadhyay, Post Graduate Program Coordinator, Maintenance and Reliability Engineering, Federation University, Australia

Dr Mohd Zulkifly Abdullah, Professor, School of Mechanical Engineering, Universiti Sains Malaysia, Malaysia

Dr. Arpiruk Hokpunna, Assistant Professor, Department of Mechanical Engineering, Chiang Mai University, Thailand



Chairpersons

Prof. Dr. Raghuvir Pai, Department of Mechanical and Manufacturing Engineering, Manipal Academy of Higher Education (MAHE), India

Prof. Dr. Masaaki Tamagawa, Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology, Japan.

Prof. Ir. Dr. Haji Kamarul Arifin Ahmad, Department of Aerospace Engineering, Universiti Putra Malaysia (UPM), Malaysia.

Conveners Co-convenors

MAHE: Dr. S M Abdul KhaderMAHE: Dr. Mohammad ZuberUPM: Dr. Adi Azriff BasriUPM: Dr. Mohd Firdaus Bin Abas

UiTM: Dr. Margaret Chan Kit Yok
UiTM: Dr. Ling Siew Eng
UM: Dr. Ramesh T Subramaniam
UM: Dr. Ramesh Kasi

Registration Details

		Early before 15 August 2023	Regular before 15 Sept 2023
1	Academicians		
	Foreigners	USD 125	USD 200
	Malaysians	RM 500	RM 800
	Students		
	Foreigners	USD 100	USD 150
	Malaysians	RM 350	RM 500
2	Listeners/Additional Participants		
	Foreigners	USD 100	USD 150
	Malaysians	RM 250	RM 300
3	Spot Registration		
	Foreigners	USD 200	
	Malaysians	RM 800	

Venue: Riverside Majestic Hotel, Kuching, Sarawak, Malaysia

http://www.riversidemajestic.com/