



# SEAJCCM 2024

South East Asia-Japan  
Conference on Composite Materials

*“Composite Materials and Structures  
Toward Sustainable Future”*

**13-15 August 2024**  
Royale Chulan Hotel  
Kuala Lumpur

program  
book



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# Welcome to SEAJCCM 2024



Composites are widely used in aerospace, marine, transportation, civil and military applications because of their high strength to weight ratio, corrosion resistance, good energy absorption capability, high fatigue life, buoyancy, reduced electromagnetic and acoustic signatures, and lower maintenance cost as compared to traditional metallic structures. Thus, the **South East Asia-Japan Conference on Composite Materials 2024 (SEAJCCM 2024)** with theme of "*Composite Materials and Structures Toward Sustainable Future*" was held with aims to provide a platform for knowledge sharing in research and recent technology of composites in various aspects. It is a relevant platform for academics, researchers, policymakers and private companies to collaborate and to discuss issues related to research related to composite science and technology where more than 40 organizations and 13 countries participated including the Korea, Pakistan, Nigeria, Thailand, Japan, Singapore, China, Indonesia, Oman, Czechia, India, Brunei, and Malaysia. During this conference, the works about advanced manufacturing, applications, and recent developments on composite science and technology are presented. The presentations comprised different fields related to the composite science and technology including the natural fibres, mineral filler/recycling polymer composites, advanced metal matrix composites, fabric/film/rubber/polymer, and advanced polymer composites.

In the preparation of this conference, we have been helped by many colleagues and sponsors. We wish to acknowledge the supports given by our sponsors. In addition, we would like to thank all the SEAJCCM 2024 committee and volunteers, who have been sharing their time and strength in succeeding this conference from scratch. Last, but not least, we wish to thank the students, undergraduate, graduate, postdocs, researchers, and lecturers from various continents, who have joined our conference and shared their knowledge regarding their research activity with stimulating curiosity.



# Foreword

**Prof. Dr.**

**Mohd Yazid Yahya**

**Conference Chair SEAJCCM 2024**



Emeritus Professor, Professor, Associate Professor, Dr., ladies and gentlemen,

A warm welcome to everyone to the South East Asia-Japan Conference on Composite Materials 2024 (SEAJCCM 2024) with the theme of "Composite Materials and Structures Toward Sustainable Future", especially to all our distinguished guests, speakers, experts on composite materials, and conference participants.

SEAJCCM 2024 brings together participants from academia and industry who share an interest in composite materials. This conference is the fourth in the series after tremendous success in Singapore (2015), Tokyo, Japan (2017), and Bali, Indonesia (2019). This year, the conference is held by Centre for Advanced Composite Materials (CACM), Universiti Teknologi Malaysia (UTM) at Royale Chulan Hotel, Kuala Lumpur, Malaysia from 13<sup>th</sup> until 15<sup>th</sup> August 2024, is the forum for knowledge exchange on the recent accomplishments and the future trends in composite science and technology. I hope this conference will be a meeting point for composite specialists and newcomers alike and has long been a venue where researchers and industrialists meet and establish long-lasting collaborations. SEAJCCM 2024 includes plenary talks, keynote lectures, oral presentations, and exhibition for industry partners and sponsors. The event layout and schedule will provide many opportunities to network and share with colleagues from around the world.

We wish to acknowledge the dedication of the organization's personnel, program committee members, and reviewers who invested considerable effort in evaluating papers and providing authors with constructive feedback to enhance their contributions. Additionally, we express gratitude to the external reviewers for their invaluable assistance and support throughout the review process.

**Prof. Dr. Mohd Yazid Yahya**

Director of Centre for Advanced Composite Materials (CACM),  
Faculty of Mechanical Engineering,  
Universiti Teknologi Malaysia



# Foreword

**Prof. Ts. Dr.**

**Mohd Hafiz Dzarfan Othman**

**Advisor of SEAJCCM 2024**



The Name of Allah, Most Gracious, Most Merciful.

Dear Authors and Valued Readers,

We are honored to present the proceedings of the South East Asia-Japan Conference on Composite Materials 2024 (SEAJCCM 2024), themed 'Composite Materials and Structures Toward a Sustainable Future.' We believe these proceedings will be both informative and inspiring. The dynamic evolution and rapid progress of composite materials bring forth new challenges and opportunities, emphasizing the critical importance of exchanging innovative ideas and increasing awareness within this pivotal research field.

SEAJCCM 2024 aims to bring together academic scientists, engineers, and industry researchers to share insights and research findings on this expansive subject. These proceedings will serve as a valuable reference for scientists worldwide, fostering further exploration and investigation into sustainable composites across all related disciplines.

We extend our sincere appreciation to the numerous sponsors and co-organizers whose generous support has made this conference possible. Hosting an event of this magnitude has been a privilege for our team.

We also wish to acknowledge the dedication of the organization's personnel, program committee members, and reviewers, who invested significant effort in evaluating papers and providing authors with constructive feedback to enhance their contributions. Additionally, we express gratitude to the external reviewers for their invaluable assistance and support throughout the review process.

**Prof. Ts. Dr. Mohd Hafiz Dzarfan Bin Othman**

Faculty of Chemical and Energy Engineering,  
Universiti Teknologi Malaysia

# Foreword

**Assoc. Prof. Dr.**

**Shukur Abu Hassan**

**Advisor of SEAJCCM 2024**



The Name of Allah, Most Gracious, Most Merciful.

Dear Authors and Valued Readers

It is a great honour for us to present to you the South East Asia-Japan Conference on Composite Materials 2024 (SEAJCCM 2024) with the theme "Composite Materials and Structures Toward Sustainable Future". We hope you find it informative, exciting, and inspiring.

The ever-changing scope and rapid development of composites generate new problems and questions, necessitating the sharing of brilliant ideas and raising awareness of this important research field. SEAJCCM 2024's main goal and feature is to bring together academic scientists, engineers, and industry researchers to exchange and share their experiences and research results on this broad topic.

This conference will serve as an excellent reference book for scientists worldwide. I also hope that this will serve as a catalyst for further study and research in all areas related to sustainable composites.

A conference of this scale would not have been possible without the tremendous and generous support of the many sponsors and co-organizers who contributed to making it all possible. I would like to express gratitude to the organization's personnel, program committee members, and reviewers. They have put in a lot of effort assessing papers and offering authors helpful feedback on how to make their writing better. We would also like to thank all the participants for their contributions, and all attendees of SEAJCCM 2024 for an enjoyable scientific gathering.

**Assoc. Prof. Dr. Shukur Abu Hassan**

Faculty of Mechanical Engineering,  
Universiti Teknologi Malaysia

# Foreword

**Prof. Datuk Ir. Ts. Dr.  
Ahmad Fauzi bin Ismail**  
Vice-Chancellor,  
Universiti Teknologi Malaysia (UTM)



Assalamualaikum and good morning.  
Bismillahirrahmanirrahim,  
Alhamdulillahirabbilalamin,  
Wassolatuwassalamuala Saiyidina,  
Muhammadin Asyrafil Anbiya Iwalmursalin,  
Wa Ala Alihi Wasohbihi, Ajmain.

Emeritus Professor, Professor, Associate Professor, Dr., ladies, and gentlemen,

First, let me extend a warmest welcome to everyone, especially to all our distinguished guests, speakers, experts on composite materials, and conference participants from various countries and different parts of Malaysia to the South-East Asia-Japan Conference on Composite Materials 2024 (SEAJCCM2024) with the theme of "Composite Materials and Structures Toward Sustainable Future".

I would like to express my appreciation to the Centre for Advanced Composite Materials (CACM), Universiti Teknologi Malaysia (UTM) for organizing a programme that transcends academic and research development activities.

SEAJCCM2024 is an important platform for knowledge sharing and dissemination in research and technology of composites; research networking and collaboration; and even for networking. The discussions, dialogues, and networks built from this conference have the potential to not only bring benefit to UTM and the South-East Asia region, but also to the world. Your participation is a crucial part of this global movement.

I am confident that with the presence of distinguished researchers, this conference will be productive. Your contributions in sharing the state-of-the-art knowledge of composite and exchanging ideas on the latest developments in the advancement and exploitation of a wide range of composite materials and structures will be instrumental in the success of this event.

Thank you. In the Name of God for Mankind.

**Prof. Datuk Ir. Ts. Dr. Ahmad Fauzi bin Ismail**  
Vice-Chancellor  
Universiti Teknologi Malaysia

## PLENARY SPEAKER 1



### **Prof. Dr. Tomonaga OKABE**

Department of Aerospace Engineering,  
Tohoku University, Japan

**Tomonaga Okabe** is a Professor in the Department of Aerospace Engineering and Aeronautical Engineering at the Graduate School of Engineering, Tohoku University, Japan. He earned his doctoral degree in engineering from Keio University, Graduate School of Science and Engineering in 1999. In 2001, he joined the National Institute of Advanced Industrial Science and Technology (AIST) as a researcher and became an assistant professor at Tohoku University in 2002. Since 2007, he has been serving as an associate professor at Tohoku University. In 2012, he assumed the role of Director of the Next Generation Aircraft Research Center at the Graduate School of Engineering, Tohoku University. He has been a Professor at Tohoku University since 2014. His primary areas of research encompass fracture mechanics, damage mechanics, continuum mechanics, primarily focusing on composite materials. He serves as an editor for prestigious journals such as the International Journal of Solids and Structures, Composites Part A: Applied Science and Manufacturing (Editor for Asia and Australasia in Applied Science), Multiscale and Multidisciplinary Modeling, Experiments, and Design, among others. He has received numerous awards, including recognition from the Ministry of Education, Culture, Sports, Science, and Technology (Japan), the Japan Society of Mechanical Engineers (JSME), and the Japan Society for Composite Materials (JSCM). Currently, he holds positions as an interim member of the Industrial Structure Council at the Ministry of Economy, Trade, and Industry (Japan), serves as a Project Leader for the development of next-generation composite materials and molding technology under the New Energy and Industrial Technology Development Organization (NEDO), and is a fellow member of the Japan Society for Aeronautical and Space Sciences.

## PLENARY SPEAKER 2



### **Prof. Dr. Tong-Earn Tay**

Department of Mechanical Engineering,  
National University of Singapore (NUS), Singapore

**T.E. (Tong-Earn) Tay** is Professor at the Department of Mechanical Engineering, National University of Singapore (NUS). He has a PhD in Solid Mechanics from the University of Melbourne, Australia. He was formerly Head of Department of Dept of Mechanical Engineering, NUS, from 2011 to 2015, and Vice-Dean for Research for Faculty of Engineering, NUS, from 2009 to 2011. His current research interests are in progressive damage, failure, fracture, delamination, impact, and adaptive multi-fidelity and multi-scale computational analysis of fiber-reinforced composite materials and structures. He is an associate editor for the Journal of Reinforced Plastics & Composites, and editorial board member of the Journal of Composite Materials, International Journal of Damage Mechanics, Applied Composite Materials, Multiscale and Multidisciplinary Modeling Experiment and Design, and Journal of Multiscale Modeling. He served on a number of scientific advisory committees of international conferences on composites and presented several plenary, keynote and invited talks. He is the author or co-author of 190 international journal papers, 4 invited book chapters, 3 patents and 269 conference and seminar presentations. He obtained research funding from various agencies and industry, including Rolls-Royce, Airbus Germany, Haliburton Far East, Vestas, DSM Protective Materials, Maruhachi Corp., US Air Force Office of Scientific Research, A-Star Science & Engineering Research Council, Defence Science Organization, Marine Port Authority and Ministry of Education. He has reviewed proposals for The Swiss National Science Foundation, The Netherlands Organisation for Scientific Research (NWO), the Dutch Polymer Institute (DPI), the Australian Research Council's Centres of Excellence, the Research Grants Council of Hong Kong and the South African National Research Foundation. He is a recipient of JEC Life Achievement Award, a registered Professional Engineer (PE), Chartered Engineer (CEng), Founding Fellow of the Singapore Academy of Engineering (FSAE) and Council Member of the Asian-Australasian Association for Composite Materials.

## KEYNOTE SPEAKER 1



### **Assoc. Prof. Dr. Ryo Higuchi**

Department of Aeronautics and Astronautics,  
Graduate School of Engineering,  
The University of Tokyo, Japan

**Ryo Higuchi** is an associate professor at the Aerospace Innovative Structural Design Laboratory in the Department of Aeronautics and Astronautics, The University of Tokyo. He received a master's degree in 2015 and earned Ph.D. from the Department of Aerospace Engineering in 2017 from Tohoku University where he studied the high- and multi-fidelity modeling of progressive damage and failure of composite materials for the evaluation of reliability and damage tolerance of composite aerospace structures. His recent research focuses on the multiscale and multiphysics modeling of the fabrication of thermoplastic resin and CFRTP towards the reuse, recycling, and circular economy of CFRTP components. He published more than 50 papers within 10 years and won the Outstanding Paper Award from the Japan Society for Composite Materials in 2021 and 2023.



## KEYNOTE SPEAKER 2



### **Prof. Dr. Jung-il Song**

Department of Mechanical Engineering,  
Changwon National University, South Korea

**Professor Jung-il Song**, a distinguished expert in natural fibre composites with over 3 decades of experience, boasts a remarkable career spanning structural analysis, reliability testing of structures, and biomedical rehabilitation engineering. His current research focus lies in developing sustainable materials, including green/bio composites, flame-resistant polymers, bio-based thermoset resins, and self-healing/reinforced composites. He also explores advancements in polymer recycling, micro/nano/cellulose materials, 3D printing technologies, and PU foams. Professor Song's dedication extends beyond research. He has mentored over five doctoral and fifteen postdoctoral fellows, nurturing their academic careers. As a prolific author, he has co-authored and authored over 250 peer-reviewed papers in international journals, solidifying his position as a leading contributor to the field. His pioneering spirit is further evidenced by his 24 domestic and 6 international (US) patents. Professor Song's influence transcends research institutions. He actively shares his knowledge by delivering over 50 keynote speeches, plenary presentations, and invited lectures at international conferences and gatherings. He currently serves on the Editorial Advisory Boards of two domestic journals and contributes as a reviewer for over 350 international scientific journals. Professor Song's leadership extends to various academic positions. He has served as Professor at Changwon National University, Chief of the Mechanical Engineering Department, Dean of the Faculty School of Mechatronics, and Head of the 2nd Brain Korea 21 program (2006-2013) within the School of Mechatronics. Additionally, he has held positions on committees for the city province of Changwon and national projects with KOSEF and KRF. Professor Song's international experience includes a year as a Visiting Professor at the Department of Biomedical Engineering at Memphis University, USA. He also served as the Director of the Engineering Division in the National Research Foundation of Korea. Currently, he holds the prestigious position of Director at the Center for Advanced Materials Research (CAMR), funded by the National Research Foundation of the Republic of Korea.



## KEYNOTE SPEAKER 3



### **Mr. Danu Chotikapanich**

CEO of Cobra International Co., Ltd., Thailand

**Mr. Danu Chotikapanich** is the CEO of Cobra International Co., Ltd. COBRA, a privately held group of companies, is a Thailand based composites manufacturer with its core business in the Watersports market. COBRA is recognised as a world leader in the manufacture of high-quality composites products, renowned for premium Windsurf, SUP, Kite and Surf boards. Leveraging its technology and expertise in fiber-reinforced composites, COBRA has expanded its portfolio into a wide range of products and accessories for other recreational sports markets as well as into the automotive, architectural, transport, marine and luxury accessories sectors. The company's focus is on providing a one-stop shop for serial production of strong, light and beautiful composites products.

## KEYNOTE SPEAKER 4



### **Prof. Dr. Yasir Nawab**

National Center for Composite Materials,  
School of Engineering and Technology,  
National Textile University, Pakistan

**Yasir Nawab**, currently a professor (tenured), is a globally acknowledged researcher in the domain of composites materials. He did Ph.D. in Mechanical Engineering with a focus on fiber-reinforced composite materials from Université de Nantes, France, and Post-doc & HDR (Habilitation à Diriger des Recherches) from University of Le Havre Normandy, France. He is listed among top 2% scientists in the world by Elsevier in 2023. He has 19 years of research & industry experience gained while working with known national and international industries dealing with complete value chain of textiles and composite materials. He led development of several innovative technologies/ industrial solutions which are successfully licensed/transferred to industry for commercialization. He has experience to lead multidisciplinary projects involving cross-functional and multi-institutional teams. He has completed 24 funded R&D projects worth PKR. 158 million (One million USD), whereas 3 research projects worth PKR 231 million (1.8 million USD) are in progress. He is leading as a Principal Investigator, the grand challenge Fund project "Enhancement of Global Competitiveness of Pakistani Textile Export Value-chains By Capacity Building and Product Diversification ([www.knowtex.pk](http://www.knowtex.pk))" worth Rs. 207 million (Sponsored by World Bank and Higher Education Commission, Pakistan) executed by a consortium of 4 universities and more than 20 textile industries. 2 He is an expert on student-centered teaching and has experience in developing course curricula. He taught several courses at BS, MS and PhD level. He has experience of working in various administrative posts including Head of Department, Director of Graduate Studies & Research, etc. at National Textile University. He is the founding Director of National Centre of Composite Materials. He has authored over 150 peer-reviewed journal articles, 8 books, 10 (3 Accepted/ Granted) patents and 54 conference communications. Eleven Ph.D. and 55 MS engineering students have completed their degrees under his supervision. He has been awarded HEC's Best University Teacher Award in 2017 and Dice Leadership Award in 2018. He is fluent in English, French, and Urdu.

## KEYNOTE SPEAKER 5



### **Assoc. Prof. Dr. Michal Petrů**

Department of Machine Parts and Mechanisms,  
Faculty of Mechanical Engineering,  
Technical University of Liberec, Liberec, Czechia

**Michal Petrů** specializes in developing new parts, structures, and systems for mechanical engineering and other industrial sectors, focusing on reducing energy use and environmental impact. His work emphasizes modernizing technologies and systems, adopting new approaches in areas like lightweight and composite structures, smart mechanisms, industry 4.0, electromobility, autonomous systems, augmented reality, and AI-integrated structures. Dr. Petrů has authored over 200 publications, including more than 80 articles with an impact factor, and his works have received over 3000 citations. He holds 2 international patents, 8 national patents, 21 utility models, and has developed 12 prototypes and 3 technologies sold to industry. He has edited volumes for Elsevier and Springer, and currently serves as the editor of Emergent Materials at Springer. His numerous awards include a 2023 REGIOSTARS finalist recognition, a 2020 best presentation award at the FICC, and various other honours. Dr. Petrů led the ANTeTUL project, recognized among the EU's top projects in 2023.

## INVITED SPEAKER 1



### **Assoc. Prof. Dr. Jaromir Moravec**

Faculty of Mechanical Engineering,  
Technical University of Liberec, Liberec, Czechia

**Jaromír Moravec** studied at the Faculty of Mechanical Engineering of Czech Technical University in Prague Czech Republic. He obtained his Ph.D. in 2008 at the Technical University of Liberec, Faculty of Mechanical Engineering. Since 2019 he has been associate professor and the Department of Engineering Technology Head. Since 2022 Jaromír Moravec has occupied the post of the Dean at the Faculty of Mechanical Engineering of the Technical University of Liberec (FME TUL). In research and pedagogical work, he focuses on welding, soldering and heat treatment, low and high cycle fatigue of weld joints, and thermo-mechanical testing of materials using physical simulations. Assessment of the effect of temperature-stress cycles on the distribution of residual stresses and the possibility of their elimination, study of the kinetics of grain growth and diffusion processes in materials. As the principal investigator, he has solved 8 research projects on the national and international level. He is currently governing several study programs at the (FME TUL). He is a member of 6 scientific societies with international experience from several internships at partner universities in Europe, North America and Southern Asia. He is the author or co-author of 51 publications included in WoS and Scopus databases. Author or co-author of 5 professional books, university scripts, and more than 30 contributions published in peer-reviewed Czech journals and at domestic and international conferences. Author or co-author of 22 awarded industrial results (11 verified technologies, 1 semi-operation, 2 certified methodologies, 3 patents, 2 utility and 3 functional models and 2 prototypes.

## INVITED SPEAKER 2



### **Assoc. Prof. Dr. Mohamad Ridzwan bin Ishak**

Department of Aerospace Engineering,  
Faculty of Engineering,  
Universiti Putra Malaysia, Malaysia

**Mohamad Ridzwan Ishak**, known as MR Ishak, is part of the Department of Aerospace Engineering at Universiti Putra Malaysia (UPM). His research spans Biocomposite Materials, Natural Fibre Composites, Manufacturing Processes, and Aerospace Materials, among others. He leads the Aerospace Malaysia Research Centre (AMRC) and works as an Interim Researcher at UPM's Laboratory of Biocomposites Technology. Dr. Ishak has published over 241 works, with significant contributions recognized by a Scopus citation count of 11934 and an h-index of 60. He has played a pivotal role in the research and commercialization of sugar palm products, holding various trademarks and copyrights, and formerly presiding over the Society of Development and Industrialization of Sugar Palm Malaysia (PPIEM). Nationally, he has led projects like the "Design and Development of Motorised Adjustable Vertical Platform (MAVeP)" funded by the Malaysia Space Agency. His extensive contributions across academia, industry, and national projects highlight his dedication to advancing research and innovation.

### INVITED SPEAKER 3



#### **Dr. Riza Wirawan, M.T.**

Faculty of Mechanical and Aerospace Engineering,  
Institut Teknologi Bandung, Indonesia

**Riza Wirawan** is an Assistant Professor at the Faculty of Mechanical and Aerospace Engineering, Bandung Institute of Technology, Indonesia. He obtained his undergraduate degree in Materials Engineering (2001) and master's degree in Materials Science and Engineering (2004) from Institut Teknologi Bandung, Indonesia. Wirawan received his Ph.D in Mechanical Engineering from Universiti Putra Malaysia, Serdang – Malaysia (2011) after defending his thesis entitled "Thermo-mechanical Properties of Sugarcane Bagasse-filled Polyvinyl Chloride Composites" under the supervision of Professor S.M. Sapuan. He was appointed to the Department of Mechanical Engineering at Universitas Negeri Jakarta (2005-2019) and then joined the Faculty of Mechanical and Aerospace Engineering, Institut Teknologi Bandung (2019-now). His research interests are primarily in the areas of natural fiber composite materials, thermomechanical properties of materials, and composite materials for transportation applications.



## INVITED SPEAKER 4



### **Dr. Noor Zuhaira binti Abd Aziz**

Aerospace composite manufacturing Senior Engineer, Malaysia

**Noor Zuhaira Abd Aziz** holds a Ph.D. in Science with a specialization in Hybrid Composite from Universiti Teknologi Mara, where she also worked as a Postgraduate Teaching Assistant. Her professional experience includes roles as a Material & Process Engineer and Research & Technology Engineer, contributing significantly to projects in composite process development and materials analysis. Noor's work has led to successful cost optimization initiatives, and she has authored several publications in the field. She is actively involved in international conferences and holds a strong track record in research and technology development, particularly in thermoplastic composites.



**INVITED SPEAKER 5****Prof. Dr. Ryosuke Matsuzaki**

Department of Mechanical and Aerospace Engineering,  
Faculty of Science and Technology,  
Tokyo University of Science, Japan

**Ryosuke Matsuzaki** is a professor at the Tokyo University of Science, specializing in the 3D printing of composite materials. His academic path began at the Tokyo Institute of Technology, where he earned his Bachelor's, Master's, and Doctorate in engineering between 2003 and 2007. His career progressed from a research fellowship with the Japan Society for the Promotion of Science (JSPS), to an assistant professorship at the Tokyo Institute of Technology, and then to the Tokyo University of Science. Here, he served as a junior associate professor from 2011 to 2017, before becoming an associate professor from 2017 to 2022, and subsequently, a full professor starting in 2022.

## INVITED SPEAKER 6



### **Dr. Narongkorn Krajangsawasdi**

Aerospace Engineering Department, Kasetsart University, Thailand

**Narongkorn (Knight) Krajangsawasdi** is currently a lecturer at the Department of Aerospace Engineering, Kasetsart University, Thailand. He completed his Ph.D. in the Centre of Doctoral Training (CDT) program at the Bristol Composite Institute (BCI), University of Bristol. His doctoral thesis was the 3D printing of discontinuous fibre under the title of "Highly Aligned Discontinuous Fibre Thermoplastic Filaments as Feedstock for Fused Deposition Modelling: Production, Printing and Performance". It was a sub-project of the HiPerDiF (High Performance Discontinuous Fibre) Technology, aimed at enhancing the performance of recycled short fibres to match that of virgin continuous fibres. Since achieving his Ph.D. in 2023, Narongkorn has been actively involved in research and teaching in the field of aircraft structure, material, and manufacturing at Kasetsart University. His current research interests revolve around sustainable composite materials for aircraft, encompassing plant-based natural fibres, recycled fibre composites, and bio-based polymers.

**INVITED SPEAKER 7****Dr. Ma Quanjin**

School of System Design and Intelligent Manufacturing,  
Southern University of Science and Technology, China

**Quanjin Ma** works as Postdoctoral Fellow at School of System Design and Intelligent Manufacturing, Southern University of Science and Technology (SUSTech), China. He has received the MS.c and Ph.D. Degrees at Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA), Malaysia. He has published around 40 reputed journal articles (Mater. Today Commun., Int. J. Hydrogen Energy., Struct., Forces Mech.), 10 book chapters and 2 patents. He has reached h-index 19 and 1396 citations of Google Scholar within 4 years. His research interest are composite structure, sandwich structure, impact mechanism, finite element method, structural design manufacturing integration, high-performance electromagnetic wave absorption, dielectric properties, mechanical properties, multi-axis filament winding, additive manufacturing.

## INVITED SPEAKER 8



### **Dr. Koichi Mizukami**

Department of Mechanical Engineering,  
Ehime University, Japan

**Koichi Mizukami** received B. Eng. in 2013 from the Department of Mechano-Aerospace Engineering, Tokyo Institute of Technology (Japan), and Ph.D. in 2016 from the Department of Mechanical Science and Engineering, Tokyo Institute of Technology. Since 2016, he has been working as an assistant professor at the Department of Mechanical Engineering, Ehime University (Japan). His research areas include additive manufacturing and non-destructive testing methods (eddy current, ultrasonic, and thermal techniques) for fiber composite materials. In recent years, he has been working on the design and manufacturing of carbon fibre-reinforced functional composites/metamaterials for structural application. He is utilizing the design freedom of fibre composite 3D printing technique to produce stiff composite structures with unique vibration attenuation/damping properties that overcome limitations existing in conventional techniques.

**INVITED SPEAKER 9****Prof. Dr. Mohd. Nasir Bin Tamin**

Faculty of Mechanical Engineering,  
Universiti Teknologi Malaysia, Malaysia

**Mohd Nasir Tamin** is a distinguished academic and researcher in Mechanical Engineering and Applied Mechanics, with a Ph.D. from the University of Rhode Island. His career includes significant roles such as the Deputy Dean of Research and Innovation at Universiti Teknologi Malaysia (UTM) and the founder of the Computational Solid Mechanics Laboratory at UTM. His expertise spans across the mechanics of FRP composite laminates, advanced materials characterization, and the reliability of microelectronic components. Professor Tamin has contributed extensively to academia and industry through his research, securing numerous grants and publishing influential papers. He has also been actively involved in mentoring PhD students and hosting international scholars. His achievements are recognized globally, highlighted by his participation in prestigious visiting professorships and research programs in Europe and Asia.

## INVITED SPEAKER 10



### **Prof. Dr. Akinori Yoshimura**

National Composite Center, Nagoya University, Japan

**Akinori Yoshimura** is a professor in Department of Aerospace Engineering in Graduate School of Engineering in Nagoya University. He also serves as a Director of National Composites Center Japan (NCC) in Nagoya University. He has an extensive career highlighted by his work at the Japan Aerospace Exploration Agency (JAXA) from 2007 to 2017. Holding a Ph.D. from the University of Tokyo, his research focuses on advanced composite materials like CFRP, crucial for aerospace innovations. He has made significant contributions to the field through various research projects, including the application of CFRP in aerospace structures. Professor Yoshimura's work is recognized through several prestigious awards and numerous publications, reflecting his influence in aerospace material science. Recent research topics of Prof. Yoshimura and NCC include recycling technology of carbon fibre recovered from CFRP, and its application to the aerospace and automotive structures.

<b>DAY 1 (13<sup>th</sup> August 2024)</b>	
<b>Time</b>	<b>Events</b>
0800 - 0825	Participant's arrival and registration
0825 - 0830	Arrival of VIPs
	<b>Opening and MOU Exchange Ceremony (Tun Sri Lanang 1)</b>
	National anthem
	Welcoming speech by emcee
	Dua recitation
	Welcoming speech by Chairman of SEAJCCM 2024, Prof. Dr Mohd Yazid Bin Yahya
0830-0930	Speech by representative of Technical University of Liberec, Assoc. Prof. Dr. Jaromir Moravec
	Video montage presentation of SEAJCCM 2024
	Opening address and officiation by Vice-Chancellor of Universiti Teknologi Malaysia, Malaysia, Prof. Datuk Ir. Ts. Dr. Ahmad Fauzi bin Ismail
	MOU exchange Ceremony
	Photo session
<b>0930-1000</b>	<b>Tea break</b>



## Time

## Events

### Plenary Speaker 1 (Tun Sri Lanang 1)

**Prof. Dr. Tomonaga OKABE (Tohoku University, Japan)**

"Multiscale Modeling of Carbon Fiber-Reinforced Composites from Molecule to Structure"

Moderator: Ts. Dr. Muhammad Asyraf Bin Muhammad Rizal

1000 - 1030

### Plenary Speaker 2

**Prof. Dr. Tong-Earn Tay (University of Singapore, Singapore)**

"A Perspective on Multi-Fidelity and Machine Learning Modeling of Progressive Damage in Fiber-Reinforced Composites"

Moderator: Ts. Dr. Muhammad Asyraf Bin Muhammad Rizal

1030 - 1100

### Keynote Speaker 1

**Assoc. Prof. Dr. Ryo Higuchi (The University of Tokyo, Japan)**

"Multiscale and Multiphysics Modeling of Composite from Manufacturing to Design"

Moderator: Ts. Dr. Muhammad Asyraf Bin Muhammad Rizal

1100- 1130

### Keynote Speaker 2

**"Prof. Dr. Jung-il Song (Changwon National University, South Korea)**

"Sustainable Natural Fiber Polymer Composites: Recent Advancements"

Moderator: Ts. Dr. Muhammad Asyraf Bin Muhammad Rizal

1130-1200

Time	Events
1200-1215	<p><b>Sponsor</b>  <b>LabAlliance Sdn. Bhd.</b>                      "Expert Tools for Material Characterization"                      Moderator: Ts. Dr. Muhammad Asyraf Bin Muhammad Rizal</p>
1215-1230	<p><b>Sponsor</b>  <b>Atomic Solutions Sdn. Bhd.</b>                      "ChemiSEM Technology: SEM and EDS for materials characterizations"                      Moderator: Ts. Dr. Muhammad Asyraf Bin Muhammad Rizal</p>
1230-1245	Token of Appreciation Session for Sponsors, Plenary and Keynote Speakers
1245-1445	Lunch

Events	
Time	Parallel Presentation Session 1
1445 – 1500	<p><b>Room: Tun Sri Lanang 1</b> Chair: Prof. Dr. Tong-Earn Tay Co-Chair: Ts. Dr. Ahmad Ilyas bin Rushdan</p> <p><b>Invited speaker 1</b> <b>Assoc. Prof. Dr. Jaromir Moravec</b> <i>Technical University of Liberec, Liberec, Czechia</i> Possibilities for the Top Engineering Collaboration with a University in the Heart of Europe</p>
	<p><b>Room : Tun Sri Lanang 2</b> Chair: Prof. Dr. Akinori Yoshimura Co-Chair: Dr. Norhayani binti Othman</p> <p><b>Invited Speaker 2</b> <b>Assoc. Prof. Dr. Mohamad Ridzwan bin Ishak</b> <i>Universiti Putra Malaysia, Malaysia</i> Surface Interaction Strength Effects in Recycled PLA/PDA and Kenaf Fibre 3D Printing Filament Composites through Experimental and Finite Element Insights</p>
1500 –1515	<p><b>Room: Tun Sri Lanang 3</b> Chair: Prof. Dr. Song Jung-il Co-Chair: Dr. Nur Hafizah Ab Hamid</p> <p><b>Invited Speaker 3</b> <b>Dr. Riza Wirawan, M.T.</b> <i>Institut Teknologi Bandung, Indonesia</i> Mechanical Properties of a Biocomposite made of Ramie Fiber and a Natural Matrix</p>
	<p><b>ID-25</b> <b>Prof. Dr. Jun Koyanagi</b> <i>Tokyo University of Science, Japan</i> Numerical Simulation for Frequency Dependence on Fatigue Failure for a Polymer Material Based on Entropy Damage Criterion</p>
1500 –1515	<p><b>ID-89</b> <b>Abdul Razif Abdul Karim</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Thermal Energy Storage Features Nano-Enhanced Phase Change Materials: Comprehensive Review of Current Development, Functions, and Anticipated Challenge</p>
	<p><b>ID-28</b> <b>Dr. Ali Farokhi Nejad</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Investigation of Temperature Dependent Tensile Properties of Unidirectional Glass Fiber Reinforced Epoxy Composite Laminate</p>

## Time

## Events

Time	ID-61	ID-90	ID-72
1515 - 1530	<p><b>Ms. Hinako Shiozaki</b> <i>Tokyo University of Science, Japan</i> Establishment of 3-D Numerical Model of CFRP Rope (CFCC)</p>	<p><b>Assoc. Prof. Dr. Tuty Asma Binti Abu Bakar</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Role of Ceramic Particles on the Enhancement of Microstructure and Mechanical Properties of Al-20%Mg<sub>2</sub>Si Hybrid Composites</p>	<p><b>Dr. Pavel Srb</b> <i>Technical University of Liberec, Czechia</i> Optimization of the Welding Element of a Machine for the Production of Eco-Plastic Packaging</p>
1530 - 1545	<p><b>Ms. Yutong Li</b> <i>Tokyo University of Science, Japan</i> Numerical Durability Simulation of a Viscoelastic Material Subjected to Variable Loadings Fatigue Based on Entropy Damage Criterion</p>	<p><b>Mr. Rachmadi Norcahyo</b> <i>The University of Tokyo, Japan</i> Numerical Simulation on Residual Strength of Composite Laminates after Three-Point Bending Fatigue using Cohesive Zone Model and Continuum Damage Model</p>	<p><b>Prof. Ir. Dr. Mariatti binti Jaafar @ Mustapha</b> <i>Universiti Sains Malaysia (USM), Malaysia</i> Mechanical Properties and Flammability of Kenaf Short Fiber/Recycled Plastic Composites</p>
1545-1600	Tea break		

Time		Events	
<b>Parallel Presentation Session 2</b>			
	<b>Room: Tun Sri Lanang 1</b>	<b>Room: Tun Sri Lanang 2</b>	<b>Room: Tun Sri Lanang 3</b>
	Chair: Prof. Dr. Mohd. Nasir Bin Tamin Co-Chair: Dr. Shuhada Atika binti Idrus Saidi	Chair: Prof. Dr. Tomonaga Okabe Co-Chair: Dr. Nur Hafizah Abd Khalid	Chair: Assoc. Prof. Dr. Mohamad Ridzwan bin Ishak Co-Chair: Dr Muhammad Fauzi bin Abd. Rased
	<b>Invited Speaker 4</b>	<b>Invited Speaker 5</b>	<b>Invited Speaker 6</b>
	<b>Dr. Noor Zuhaira binti Abd Aziz</b> <i>Aerospace composite manufacturing Senior Engineer, Malaysia</i> Composites in Aerospace: Applications and Innovations	<b>Prof. Dr. Ryosuke Matsuzaki</b> <i>Tokyo University of Science, Japan</i> Optimizing Fiber Path for 3D Printing of Continuous Carbon Fiber-Reinforced Composites	<b>Dr. Narongkorn Krajangsawasdi</b> <i>Kasetsart University, Thailand</i> Initial Mechanical Property Assessment of Thai Plant-Based Fibre Composites for Sustainable Structural Applications
1600 -1615			
	<b>ID-32</b>	<b>ID-36</b>	<b>ID-82</b>
	<b>Ms. Maruri Takamura</b> <i>Tokyo University of Science, Japan</i> Size Dependence of Bond Strength in CFRP Single Lap Joints	<b>Junro Sano</b> <i>Tokyo University of Science, Japan</i> Elucidation of the Formability Enhancement Mechanisms in High Accuracy 3D Printing of CNT Yarns Using Machine Learning	<b>Mr. Hery Sunarsono</b> <i>Universitas Andalas Padang and Institut Teknologi Batam, Indonesia</i> Effect of Indonesian Bay Leaf Extract Preparation on the Barrier of Red Ray Transmission of Polyvinyl Alcohol Blend-Film
1615 -1630			

## Time

## Events

	ID-27	ID-96	ID-48
1630 - 1645	<p><b>Dr. Ali Farokhi Nejad</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Damage and Failure Analysis of Reinforced Thermoplastic Pipes under Combined Loading through Finite Element Modelling</p>	<p><b>Dr. Norhayani Othman</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Mechanical Properties of Recycled Poly(Ethylene Terephthalate) (rPET)/Recycled High Density Poly(Ethylene) (rHDPE) with Zinc Oxide</p>	<p><b>Dr. Muhammad Amin bin Azman</b> <i>Universiti Putra Malaysia, Malaysia</i> Mechanical Properties of Wollastonite/Kenaf Hybrid Bio-Composite</p>
1645 - 1700	<p><b>Dr. Mio Sato</b> <i>Japan Aerospace Exploration Agency, Japan</i> Analytical Consideration for the Probability Characteristics of Fiber Curvature and Orientation Angle in rCF Nonwoven Fabrics</p>	<p><b>Assoc. Prof. Dr. Muhammad Umair</b> <i>National Textile University, Pakistan</i> Nano-Clay Based Novel 3D Woven Hemp/Green Epoxy Composites</p>	<p><b>Dr. Khoo Pui San</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Enhancing Flexural Properties of Recycled Glass Fibre Reinforced Polyester with Eggshell-Derived Calcium Oxide</p>



## Time

## Events

Time	ID-15	ID-49	ID-26
1700 - 1715	<p><b>Prof. Dr. Toshio Nagashima</b> <i>Sophia University, Japan</i> Damage Propagation Analyses of CFRP lamination by XFEM using continuum shell elements</p>	<p><b>Mrs. Devita Amelia</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Development and Characterization of Thermoplastic Oil Palm Trunk Starch and Poly(Lactic) Acid Blend Composites via Melt Extrusion</p>	<p><b>Prof. Dr. Mototsugu Tanaka</b> <i>Kanazawa Institute of Technology, Japan</i> Evaluation on Hydrolysis Control Function of Fiber-Reinforced Photo-Dissociable Protecting Group Introduced PLA Composites</p>
1715 - 1730	<p><b>Mr. Takumu Sugiyama</b> <i>Tokyo University of Science, Japan</i> Numerical Simulation of Fracture of Plastic Materials Subjected to Heat Cycles Based on Entropy Damage Criterion</p>	<p><b>Ms. Nursyahmira Farhana Mohd Shah</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Propylene Glycol Monomethyl Ether as a Sustainable Substitute for Xylene in Epoxy Coatings for Corrosion Prevention in Marine Applications</p>	<p><b>Ts. Dr. Syed Mohd Saiful Azwan Syed Hamzah</b> <i>Universiti Malaysia Terengganu, Malaysia</i> Quasi-Static Indentation Fracture Behaviour of Sandwich Panel-Polypropylene Honeycomb Core</p>



## Time

## Events

	<b>ID-39</b>	<b>ID-55</b>	<b>ID-40</b>
	<p><b>Assoc. Prof. Dr. Vincent Tan</b> <i>National University of Singapore, Singapore</i> Multiscale Topology Optimization</p>	<p><b>Dr. Pradeep Kumar Krishnan</b> <i>National University of Science and Technology, Oman</i> Production and Characterization of Aluminum Metal Foam from Industrial Waste AL-6063 Cast Aluminum Alloy using CaCO<sub>3</sub> Foaming Agent</p>	<p><b>Ms. Amirah Ain Asyiqin Mohammad Sappa</b> <i>Universiti Teknikal Malaysia Melaka, Malaysia</i> Strength Performance of Pineapple Leaf Fibre Reinforced Poly(3-Hydroxybutyrate-Co-3-Hydroxyvalerate) Biocomposites for Packaging Application</p>
1730 - 1745			
	<b>ID-37</b>	<b>ID-85</b>	<b>ID-50</b>
	<p><b>Mr. Takumi Sekino</b> <i>Tokyo University of Science, Japan</i> Damage Assessment of CFRP Subjected to Cyclic Loading Based on Entropy</p>	<p><b>Assoc. Prof. Dr. Mohd Ruzaimi Mat Rejab</b> <i>Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia</i> Experimental Investigation of the Bullet-Proofing Capabilities of Fiber Metal Laminate (FML) under Ballistic Impact Loading</p>	<p><b>Dr. IGP Agus Suryawan</b> <i>Udayana University, Indonesia</i> Environmentally Friendly Crab Shell Powder Filled Polypropylene Composites: A Review</p>
1745 - 1800			
2000-2200	Dinner (Level 2, Poolside)		
2200	End of Day 1		

## DAY 2 (14th August 2024)

### Events

#### Time

0800 - 0830

Registration

### Parallel Presentation Session 3

#### Room: Tun Sri Lanang 1

Chair: Assoc. Prof. Dr. Ryo Higuchi  
Co-Chair: Dr. Mohammad Fikry bin  
Mohammad Jelani

#### Invited Speaker 7

**Dr. Ma Quanjin**

*Southern University of Science and  
Technology, China*

0830-0845

Effect of BaTiO<sub>3</sub> as Filler with Adjustable  
Dielectric Properties on Polymer  
Composites for 10 GHz Microstrip  
Antenna Design

#### Room: Tun Sri Lanang 2

Chair: Prof. Dr. Ryosuke Matsuzaki  
Co-Chair: Ts. Dr. Muhammad  
Asyraf Bin Muhammad Rizal

#### Invited Speaker 8

**Dr. Koichi Mizukami**

*Ehime University, Japan*

Design and 3D Printing of Carbon  
Fiber-Reinforced Functional  
Composite Structures for Controlling  
Elastic Wave Propagation

#### Room: Tun Sri Lanang 3

Chair: Dr. Riza Wirawan  
Co-Chair: Ts. Dr. Ahmad Ilyas bin  
Rushdan

#### ID-54

**Dr. Melbi Mahardika**

*National Research and Innovation  
Agency, Indonesia*

Novel Papain and Bacterial  
Cellulose/Alginate Biocomposites  
for Bioactive Wound Dressing

#### ID-12

**Sota Oshima**

*Tokyo Metropolitan University, Japan*

Relationship between Mesoscopic  
Damage Progression and R Curve  
during Transverse Cracking in  
Composite Laminates

0845-0900

#### ID-19

**Assoc. Prof. Dr. Wong King Jye**

*University of Nottingham, Malaysia*

Water Absorption Effects on Mode  
I and II Delamination of Carbon/  
Epoxy Composites

#### ID-29

**Ms. Yeo Yi Xuan**

*Universiti Malaysia Perlis, Malaysia*

Effect of Elevated Temperatures on  
Friction and Wear Properties of  
Pineapple Leaf Fibres- Reinforced  
Natural Rubber Composites with the  
Addition of Multi-Walled Carbon  
Nanotubes

## Time

## Events

	ID-53	ID-92	ID-94
	<p><b>Dr. Carla Canturri</b> <i>Cetim-Matcor, Singapore</i> Failure Analysis of Composites for Pressure Vessel Applications</p>	<p><b>Mr. Mastariyanto Perdana</b> <i>Universitas Andalas, Indonesia</i> Bioadhesive Materials Based on PVA/Tannin Acid/Nanocellulose: Simple Method and Effects of Mixing Time on Manufacturing Process</p>	<p><b>Ms. Siti Khairunisah Ghazali</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Thermal Stability and Dielectric Performance of Palm Oil-Based Polyurethane Polypyrrole-Montmorillonite Nanocomposite Foam</p>
0900-0915			
	ID-10	ID-42	ID-67
	<p><b>Mr. Namasivayam Sukumaar Vijayvignesh</b> <i>Universiti Putra Malaysia, Malaysia</i> Experimental and Numerical Investigation of Flexural Mechanical and Creep Properties of Sleeved PGFRP Composite Cross-Arm Used in Transmission Tower Application</p>	<p><b>Mr. Takayu Nishioka</b> <i>The University of Tokyo, Japan</i> The Effects of Molding Conditions on Fiber Waviness in CFRTP Laminates</p>	<p><b>Dr. Masaudu Adamu Kazaure</b> <i>Hussaini Adamu Federal Polytechnic, Nigeria</i> Evaluation of Physicomechanical Properties of Floor-Tile using Epoxy Resin Treated with Snail Shell Filler</p>
0915 - 0930			

## Time

## Events

0930 - 0945	<p><b>ID-11</b></p> <p><b>Dr. Xin Lu</b> <i>The University of Tokyo, Japan</i> Experimental and Numerical Study on Failure Mechanisms of Tapered Composite Laminates</p>	<p><b>ID-24</b></p> <p><b>Dr. Yeoh Kirk Ming</b> <i>National University of Singapore, Singapore</i> Effects of Ply Blocking on the Behaviour of Notched CF/Epoxy Thin-Ply Laminates</p>	<p><b>ID-104</b></p> <p><b>Ms. Nur 'Aisyah Ar-Raudhoh Mohammad Tahar</b> <i>Universiti Teknologi MARA, Malaysia</i> Effect of Nano-Palm Kernel Shell Biochar (n-PKSB) on The Cure, Swelling and Mechanical Properties of Natural Rubber Vulcanizates</p>
	<p><b>ID-17</b></p> <p><b>Assoc. Prof. Dr. Shigeki Yashiro</b> <i>Kyushu University, Japan</i> Variable Stiffness Composite Patch for Single-Sided Bonded Repair of Composite Structures</p>	<p><b>ID-46</b></p> <p><b>Rafif Zufarihsan</b> <i>Sepuluh Nopember Institute of Technology, Indonesia</i> Mechanical Behaviour of Low Carbon Engineered Cementitious Composite: Experimental Investigations and Finite Element Studies</p>	<p><b>ID-102</b></p> <p><b>Muhamad Haziq Bin Mohd Fadzli</b> <i>Universiti Teknologi MARA, Malaysia</i> The Effect of Nanoparticles Activated Palm Kernel Shell (N-APKS) as Bio-Filler on Mechanical Properties of Filled Natural Rubber Vulcanizates</p>
1000 - 1030	Tea Break		

Time

Events

## Parallel Presentation Session 4

### Room: Tun Sri Lanang 1

Chair: Dr. Narongkorn Krajangsawasdi

Co-Chair: Assoc. Prof. Dr. Rohah A. Majid

### Invited Speaker 9

**Prof. Dr. Mohd. Nasir Bin Tamin**

*Universiti Teknologi Malaysia, Malaysia*

Interlaminar Fatigue Damage Model of Fiber-reinforced Polymer Composite Laminates

1030 - 1045

### Room: Tun Sri Lanang 2

Chair: Prof. Dr. Yasir Nawab

Co-Chair: Dr. Norhayani binti Othman

### Invited speaker 10

**Prof. Dr. Akinori Yoshimura**

*Nagoya University, Japan*

Non-Destructive Evaluation of CFRP Microscopic Structure and Microscopic Defect by using Advanced X-Ray Devices

### ID-31

**Ms. Marina Inagaki**

*Tokyo Metropolitan University, Japan*

Effect of Lightning Current on Mechanical Properties of Adhesively Bonded Composite Joints

1045-1100

### ID-63

**Dr. M. J. Mohammad Fikry**

*Tokyo University of Science, Japan*

Inhibition of Interlaminar Damage in CFRP Laminates by Inserting Non-Woven Carbon Fiber Reinforced Layers

## Time

## Events

1100 - 1115	<b>ID-21</b> <b>Mr. Tian Kun</b> <i>National University of Singapore, Singapore</i> An Explicit Discrete Crack Method for Simulating Damage in Carbon Fiber Composites under Open Hole Compression and Low Velocity Impact	<b>ID-52</b> <b>Dr. Mizah binti Ramli</b> <i>Universiti Teknikal Malaysia Melaka, Malaysia</i> Analysis of Void Content in Thermoset CFRP Composite and Its Effects on Mechanical and Physical Properties
	<b>ID-33</b> <b>Ms. Pham Nguyen Hong Van</b> <i>National University of Singapore, Singapore</i> In-Plane Shear Characterization for Carbon Fiber Reinforced Thermoplastic Composites	<b>ID-47</b> <b>Dr. Shintaro Kamiyama</b> <i>Japan Aerospace Exploration Agency, Japan</i> Visualazation of Edge Glow on the CFRP Exposed to Lightning Current
1130 - 1145	<b>ID-41</b> <b>Assoc. Prof. Dr. Shuang Zhang</b> <i>Dalian Jiaotong University</i> Composition Design of (Zr, Ti)-Based Amorphous-Matrix Composites	<b>ID-91</b> <b>Assoc. Prof. Ir. Ts. Dr. Mohd Yuhazri Yaakob</b> <i>Universiti Teknikal Malaysia Melaka, Malaysia</i> Kenaf Core Reinforced Cement Slurry - Experimental Study on Mechanical Properties and Fire Performance
1145 - 1200	<b>ID-14</b> <b>Mrs. Adrina Rosseira Abu Talip</b> <i>Universiti Teknologi Malaysia, Malaysia</i> Exploring Temperature Influence: Accelerated CO <sub>2</sub> Curing on Cement and Carbide Lime Mortar	
1200 - 1400	Lunch break	



Time	Events
1400 - 1430	<p><b>Keynote Speaker 3 (Tun Sri Lanang 1)</b>  <b>Mr. Danu Chotikapanich (CEO of Cobra International Co., Ltd., Thailand)</b>                      "Current Status of Sustainable Material Applied in Mass Production of Water Sports Product"                      Moderator: Ts. Dr. Ahmad Ilyas bin Rushdan</p>
1430 - 1500	<p><b>Keynote Speaker 4</b>  <b>Prof. Dr. Yasir Nawab (National Textile University, Pakistan)</b>                      "Fatigue Properties of Aerospace Composites: Modelling, Testing and Improvement by Incorporating of Thermoplastic Fillers"                      Moderator: Ts. Dr. Ahmad Ilyas bin Rushdan</p>
1500 - 1530	<p><b>Keynote Speaker 5</b>  <b>Assoc. Prof. Dr. Michal Petrů (Technical University of Liberec, Liberec, Czechia)</b>                      "Development and Winding Optimization of Lightweight Composite Constructions"                      Moderator: Ts. Dr. Ahmad Ilyas bin Rushdan</p>
1530-1545	Tea break
1530 - 1600	<b>Closing ceremony (Tun Sri Lanang 1)</b>
	END OF DAY 2

## TENTATIVE OF POSTER PRESENTATION

DAY 1 (13<sup>th</sup> August 2024)

### Events

### Time

1445 - 1500

**ID-3**

**Dr. Nabilah Afiqah Mohd Radzuan**, *Universiti Kebangsaan Malaysia, Malaysia*  
Mechanical Properties of Polyamide Material using FDM Method

1500 - 1515

**ID-18**

**Assoc. Prof. Dr. Cun Lei Zou**, *Dalian Jiaotong University, China*  
A Nano-Micro Dual-Scale Particulate-Reinforced Copper Matrix Composite with High Strength, High Electrical Conductivity and Superior Wear Resistance

1515 - 1530

**ID-88**

**Ms. Nur Liyana Shafie**, *Universiti Teknologi Malaysia, Malaysia*  
Mercury Removal Units in Oil and Gas: Combating Toxicity, Corrosion, and Fire Hazards

1530 - 1545

**ID-97**

**Mr. Muhammad Adlan Azka**, *Universiti Putra Malaysia, Malaysia*  
Water Absorption Characteristic on Natural Fiber Reinforced Poly(lactic Acid) Composites: A Review

1545 - 1600

**ID-98**

**Dr. Vasi Uddin Siddiqui**, *Universiti Putra Malaysia, Malaysia*  
Effect of Graphene Nanoplatelets on Poly(lactic Acid) (GNP/PLA) Biocomposites

1600 - 1615

**ID-99**

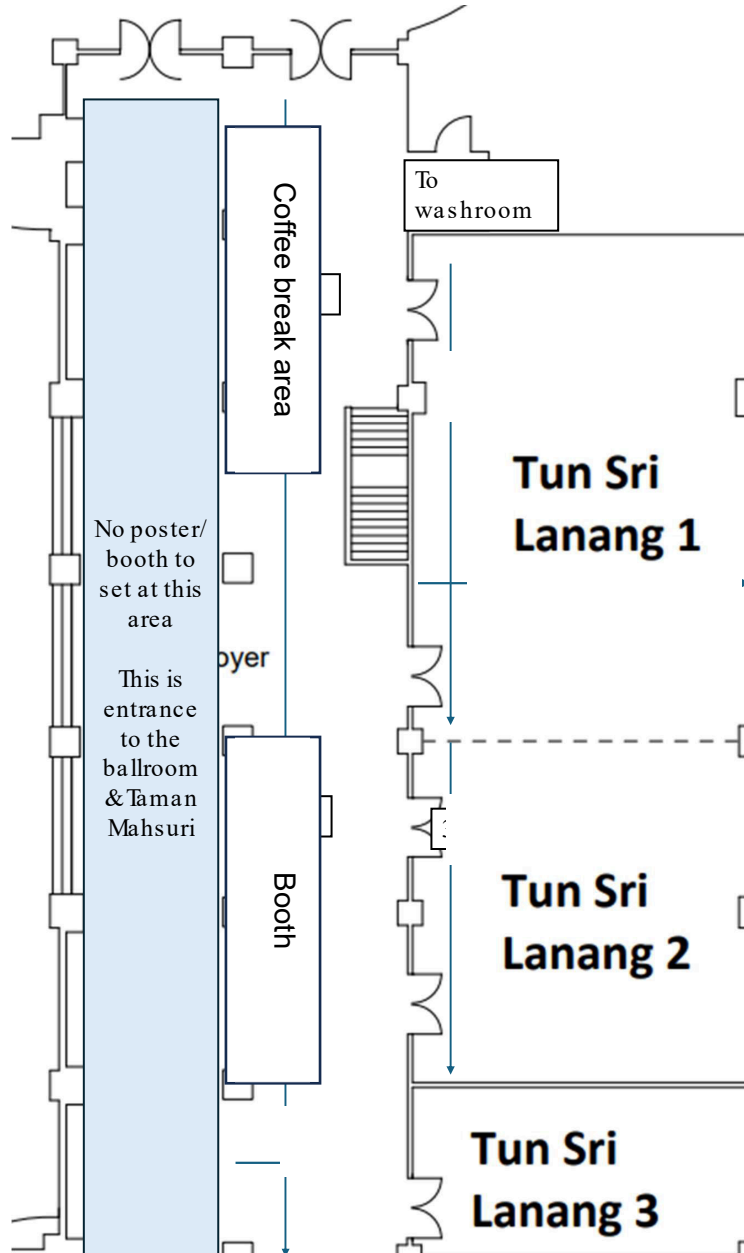
**Mr. Abdul Habib**, *Universiti Putra Malaysia, Malaysia*  
Utilization of Carbon Nanotube-Reinforced Arrowroot Starch Biopolymer Nanocomposites as Flexible Conductive Materials

**TECHNICAL VISIT TO MALACCA**

<b>Time</b>	<b>Tentative</b>
0830	Depart from Royale Chulan Hotel, Kuala Lumpur
1030 - 1230	Tour around Bandar Hilir, Melaka
1230 - 1345	Lunch
1430 - 1630	Technical visit session at CTRM Aero Composite Sdn Bhd, Batu Berendam, Melaka
1630 - 1830	To Putrajaya
1830 - 1930	**Drop off delegates at Putrajaya Sentral Sightseeing for the remaining delegates
1930	Return to Royale Chulan Hotel, Kuala Lumpur

*\*\*Drop off is only for the participants who have informed committees ahead.  
Please bring your luggage together during the trip*

## ROYAL CHULAN HOTEL LAYOUT



**INTERNATIONAL ADVISORY COMMITTEE  
SOUTH EAST ASIA-JAPAN CONFERENCE ON COMPOSITE  
MATERIALS 2024 (SEAJCCM 2024)**

- 1. Prof. Dr. Jun Koyanagi (Chair)**  
Tokyo University of Science, Japan
- 2. Prof. Dr. Shinji Ogihara**  
Tokyo University of Science, Japan
- 3. Prof. Dr. Masayuki Nakada**  
Kanazawa Institute of Technology, Japan
- 4. Prof. Dr. Shigeki Yashiro**  
Kyushu University, Japan
- 5. Prof. Dr. Toshio Nagashima**  
Sophia University, Japan
- 6. Assoc. Prof. Dr. Ryo Higuchi**  
The University of Tokyo, Japan
- 7. Dr. Mio Sato**  
Japan Aerospace Exploration Agency (JAXA), Japan
- 8. Dr. Shintaro Kamiyama**  
Japan Aerospace Exploration Agency (JAXA), Japan
- 9. Dr. Sota Oshima**  
Tokyo Metropolitan University, Japan
- 10. Dr. Yutaro Arai**  
Tokyo University of Science, Japan
- 11. Prof. Dr. Tay Tong Earn**  
National University of Singapore, Singapore
- 12. Dr. Noor Zuhaira Bt Abd Aziz**  
Aerospace Composite Manufacturing Senior Engineer,  
Malaysia

- 13. Prof. Dr. Sci Nguyen Dinh Duc**  
VNU Hanoi University of Engineering and Technology, Vietnam
- 14. Prof. Dr. Bambang Kismono Hadi**  
Institut Teknologi Bandung (ITB), Indonesia
- 15. Prof. Dr. -Ing. habil. Suchart Siengchin**  
King Mongkut's University of Technology North Bangkok  
(KMUTNB), Thailand
- 16. Prof. Dr. Sanjay Mavinkere Rangappa**  
King Mongkut's University of Technology North Bangkok  
(KMUTNB), Thailand
- 17. Prof. Dr. -Ing. Ir Hairul Abral**  
Andalas University, Indonesia
- 18. Dr. Denni Kurniawan**  
Universiti Teknologi Brunei, Brunei
- 19. Dr. Melbi Mahardikar**  
National Research and Innovation Agency (BRIN), Indonesia
- 20. Dr. Joddy Arya Laksmono**  
National Research and Innovation Agency (BRIN), Indonesia



**NATIONAL ADVISORY COMMITTEE  
SOUTH EAST ASIA-JAPAN CONFERENCE ON COMPOSITE  
MATERIALS 2024 (SEAJCCM 2024)**

- 1. Ts. Dr. Mohd Nazrul bin Roslan**  
Department of Mechanical Engineering Technology, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia
- 2. Prof. Ir. Dr. Mariatti binti Jaafar**  
School of Materials and Mineral Resources Engineering, Universiti Sains Malaysia
- 3. Assoc. Prof. Dr. Ridzuan bin Ishak**  
Department of Aerospace Engineering, University Putra Malaysia
- 4. Prof. Ir. Dr. Mohd Shukry bin Abdul Majid**  
Faculty of Mechanical Engineering & Technology, Universiti Malaysia Perlis (UniMAP), Malaysia
- 5. Assoc. Prof. Ir. Ts. Dr. Mohd Yuhazri bin Yaakob**  
Faculty of Mechanical and Manufacturing Engineering Technology, Universiti Teknikal Malaysia Melaka
- 6. Assoc. Prof. Dr. Mohd Ruzaimi bin Mat Rejab**  
Structural Performance Materials Engineering (SUPERME) Focus Group, Faculty of Mechanical & Automotive Engineering Technology, Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)
- 7. Prof. Dr. Mohd. Nasir bin Tamin**  
Faculty of Mechanical Engineering, Universiti Teknologi Malaysia
- 8. Assoc. Prof. Dr. Wong King Jye**  
University of Nottingham Malaysia
- 9. Dr. Ali Farokhi Nejad**  
Faculty of Mechanical Engineering, Universiti Teknologi Malaysia

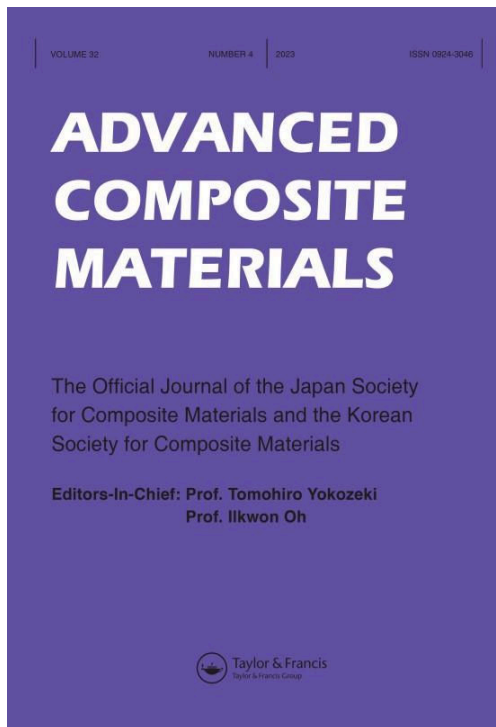
## ORGANIZING COMMITTEE SOUTH EAST ASIA-JAPAN CONFERENCE ON COMPOSITE MATERIALS 2024 (SEAJCCM 2024)

<b>Advisor I</b>	Prof. Ts. Dr. Mohd Hafiz Dzarfan bin Othman
<b>Advisor II</b>	Assoc. Prof. Dr. Shukur bin Hj. Abu Hassan
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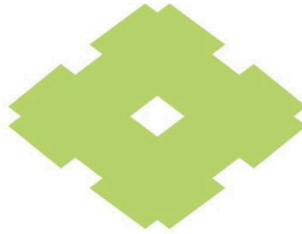
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