

































Adopting Innovation and Transformation to Achieve

Sustainable Development Goals

26&27 SEPT 2024





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- Track 5 Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context





































International Conference on Innovation and Technopreneurship (ICIT) is an annual event organized by INTI International University. The theme of ICIT 2024 is Adopting Innovation and Transformation to Achieve Sustainable Development Goals (SDG). The SDG is a global commitment towards a more sustainable, resilient, and inclusive development adopted by Malaysia with world leaders at the United Nations General Assembly in New York.

This year, ICIT 2024 consists of 5 tracks that are aligned with the SDG to attract researchers with the anticipation that the conference can be a beneficial platform to facilitate interaction and establish a network and partnership among the researchers.

The primary goal of ICIT 2024 is to allow researchers and scientists to share advances in innovation while embracing transformation. This platform could bring together researchers, scientists, and experts in sharing worldwide ideas as well as recent developments on Innovation and Technopreneurship while contributing to delivering ideas and experiences to all participants involved.

In our ongoing efforts to ensure the safety and well-being of our community, this conference will be held in 26 & 27 September 2024 in hybrid mode. The physical mode will be held at INTI International University and the virtual mode will be done through Microsoft Team. All virtual presentations must abide by the respective national health advisory and standard operation procedures (SOP).

On behalf of the ICIT 2024 organizing committee, I am honored and delighted to welcome you to join the 7th ICIT at INTI International University. We hope that all participants will gain fruitful discussions from your time with us.

Finally, on behalf of all the members of the Conference Organizing Committee, I extend our deepest gratitude to all those who have contributed to making our 7th annual conference a rousing success.

Prof. Ir. Dr. Malathy Batumalay, Conference Chair, ICIT 2024

































## Message from Pro -Vice Chancellor



Dear Ladies and Gentlemen,

It is my great pleasure to welcome you to the 7th International Conference on Innovation and Technopreneurship (ICIT 2024) at INTI International University. With the theme "Adopting Innovation and Transformation to Achieve Sustainable Development Goals (SDGs)", this conference comes at a critical time when addressing the SDGs is more urgent than ever. Global challenges such as climate change, inequality, and public health crises demand innovative and collaborative solutions across sectors, through multidisciplinary and transdisciplinary collaborations. That's a important reason that we specially designed ICIT 2024 with five tracks, to inspire crossdisciplinary discussions and foster partnerships that accelerate progress toward these goals.

We are proud to host this conference in a hybrid format on 26– 27 September 2024, offering both physical and virtual participation to ensure inclusivity that minimizes the limitation from time and space. I look forward to the meaningful discussions and innovative ideas that will emerge from our shared efforts to achieve the SDGs.

A special thanks to our keynote speakers, presenters, and participants from across the globe for contributing to this essential dialogue. I also extend my heartfelt gratitude to the organizing committee, led by Prof. Ir. Dr. Malathy Batumalai, for their dedication in making this event possible.

Thank you for being part of ICIT 2024. I wish you an inspiring and productive experience.

Prof. Dr. Wong Ling Shing **Conference Advisor** Pro Vice-Chancellor, INTI International University



# Programme

## Day 1: 26 September 2024 (Thursday)

Click Here: (26th Sep 2024)

7th International Conference on Innovation and Technopreneurship (ICIT 2024)

#### TIME (MYT\*)

#### **PROGRAMME**

| 0830 - 0900 | Participants Registration   |  |
|-------------|---|--|
| 0900 - 0915 | Opening Remarks by Prof. Ir. Dr. Malathy Batumalay, Conference Chair  |  |
| 0915 - 0945 | Welcome Speech by Prof. Dr. Wong Ling Shing, Pro-Vice Chancellor, INTI International University   |  |
| 0945 - 1015 | Keynote Address by Associate Prof Datuk Dr. Sabri Mohamad Sharif, Universiti Teknikal Malaysia<br>Melaka, Malaysia  |  |
| 1015 - 1045 | Keynote Address by Prof. Dr. Sher Afzal Khan - Abdul Wali Khan University Mardan, Pakistan  |  |
| 1045 - 1200 | Keynote Address by Dr. Arpita Roy - Sharda University, Greater Noida, India   |  |
| 1200 - 1300 | Break   |  |
| 1300 - 1600 | Parallel Sessions: Track 1: Integrating Health and Life Sciences for a Sustainable Future Track 2: Engineering Innovation and Invention Track 3: Next-Gen Horizons in Computing Track 4: Innovative Business and Management for a Sustainable Future Track 5: Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context |  |
| 1600 - 1630 | Break   |  |
| 1630 - 1800 | Parallel Sessions: Track 1: Integrating Health and Life Sciences for a Sustainable Future Track 2: Engineering Innovation and Invention Track 3: Next-Gen Horizons in Computing Track 4: Innovative Business and Management for a Sustainable Future Track 5: Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context |  |



# Programme

## Day 2: 27 September 2024 (Friday)

Click Here: (27th Sep 2024)
7th International Conference on Innovation and Technopreneurship (ICIT 2024)

| TIME (MYT*) | PROGRAMME   |  |  |
|-------------|---|--|--|
| 8.30 - 9.00 | Participants Registration   |  |  |
| 9.00 – 9.15 | Welcome Speech by Associate Prof. Dr. Deshinta Arrova Dewi, Deputy Conference Chair   |  |  |
| 0915 - 0945 | Keynote Address by Prof. Dr. Francis Onditi - Riara University, Nairobi, Kenya  |  |  |
| 0945 - 1015 | Keynote Address by Dr. Eddy Winarso - Universitas Jenderal Achmad Yani, Indonesia   |  |  |
| 1015 - 1200 | Keynote Address by Prof. Dr. Hani Abdallah AL-Rawashdeh - AL-Hussein bin Talal University, Jordan   |  |  |
| 1200 - 1430 | Break   |  |  |
| 1430 - 1600 | Parallel Sessions: Track 1: Integrating Health and Life Sciences for a Sustainable Future Track 2: Engineering Innovation and Invention Track 3: Next-Gen Horizons in Computing Track 4: Innovative Business and Management for a Sustainable Future Track 5: Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context |  |  |
| 1600 - 1630 | Break   |  |  |
| 1630 - 1800 | Parallel Sessions: Track 1: Integrating Health and Life Sciences for a Sustainable Future Track 2: Engineering Innovation and Invention Track 3: Next-Gen Horizons in Computing Track 4: Innovative Business and Management for a Sustainable Future Track 5: Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context |  |  |

\*Malaysia Time































#### **KEYNOTE PANELIST**



#### **Datuk Dr. Sabri Mohamad Sharif**

Associate Professor of Policy and Innovation Management, Universiti Teknikal Malaysia Melaka, Malaysia

Datuk Dr. Sabri Mohamad Sharif is an Associate Professor of Policy and Innovation Management at the Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka (UTeM). He graduated with a degree in Laws from the International Islamic University Malaysia. He later obtained his master's degrees in Policy, Science and Technology Management (M.Sc) with distinction from Malaya University and Master of Business Administration (MBA) from Ballarat (Federation) University Australia respectively. He completed his PhD at the Malaysia National University (UKM). His research interest includes areas related to policy, innovation management and intellectual property commercialisation, entrepreneurship, and innovation leadership.

He was a senior vice president (technology marketing and technical support) at Quantum Business Sdn. Bhd. and has been on secondment as a Senior Research Officer in the Prime Minister's Office and Advisor for policy, economy and innovation in the Chief Minister's Office as well as former Chief Executive Officer of Institut Tun Perak Melaka. He was appointed as Adjunct Professor at Lincoln University College Malaysia. He was an Academic Fellow at Universiti Melaka (UNIMEL). He was a member of Melaka Economy Action Committee and Melaka Unity Committee. He Was an Alumni Fellow of the Association for Oversea Technical Scholarship (AOTS), Japan. He continues to be actively involved in research and innovation as a consultant from industries. He was awarded Panglima Mahkota Wilayah (P.M.W) which carried the official title of Datuk, from Yang di-Pertuan Agong Malaysia (King of Malaysia).

He recently published two books on Policy for Melaka Big Data and Post Pandemic Nusantara Economic perspective. He has published over 15 books and has won 4 National Book Awards including the UNESCO Book Award. He has published more than 70 articles and journal papers focusing on various issues in several Malaysia newspapers, magazines and journals. He has also been invited as a keynote speaker in international conferences and symposium in Tangerang, Yogyakarta, Bogor, Bandung Indonesia etc. Currently, he is also a Deputy Vice Chancellor (Student Affairs & Alumni) UTeM. Under the Secretariat of the Deputy Vice Chancellor, he is the Chairman of the Council for Graduate Employability and Careers of Public Universities Malaysia (MyGRAD). He is also the Deputy Chairman of the Alumni Council of Public Universities Malaysia (MALUMNI).

































#### **KEYNOTE PANELIST**



Prof. Dr. Sher Afzal Khan

Professor, Abdul Wali Khan University Mardan, Pakistan

Prof. Dr. Sher Afzal Khan is working as Professor in the Department of Computer Science, Abdul Wali Khan Unversity Mardan (AWKUM). He obtained his PhD in Computer Sciences from Faculty of Information Technology, University of Central Punjab, Lahore, Pakistan. Title of his PhD Thesis: Formal Analysis of Safety Properties of Railway Interlocking System. His research was done at School of Information Technology and Electrical Engineering, University of Queensland, Brisbande, Australia. He has published 63 selected publications in HEC recognized Journals of the top category. His current research interests include machine learning, pattern recognition and bioinformatics. He successfully initiated the PhD program at Abdul Wali Khan University Mardan, expanding higher educational opportunities in the Department of Computer Sciences. He has presented and organized several International Conferences. He was also the editor of Research Journals accredited by the Higher Education Commission (HEC).

































#### **KEYNOTE PANELIST**



Dr. Arpita Roy

Assistant Professor, Biotechnology, Sharda University, Greater Noida, Uttar Pradesh, India

Arpita Roy, PhD, is working as an Assistant Professor in the Department of Biotechnology in the School of Engineering and Technology at Sharda University, Greater Noida, India. Her specialization is in plant biotechnology, nanobiotechnology, environmental biotechnology, and microbiology. She has been teaching graduate and postgraduate students of biotechnology. She has taught topics related to plant biotechnology, microbiology, bioprocess engineering, and solid waste management. She has edited 8 books and authored more than 100 scientific articles and 27 book chapters from international publishers.

She has been enlisted in the Top 2% of scientists worldwide for two consecutive years (Stanford University report published by Elsevier on 10th October 2022 and 4th October 2023). Her cumulative citation index is more than 4000. She has presented and participated in numerous state, national, and international conferences, seminars, workshops, and symposiums. She received a commendable research award for excellence in research during the years 2019, 2020, and 2021. She has served as an editorial board member and reviewer for several reputed international journals.





























#### **KEYNOTE PANELIST**



**Prof. Dr. Francis Onditi** 

Associate Professor of Conflictology, Head of Department, School of International Relations and Diplomacy, Riara University, Nairobi, Kenya

Francis Onditi is Associate Professor of Conflictology & Head of Department (HoD), School of International Relations and Diplomacy, Riara University, Nairobi, Kenya. An authority on the geography of African conflicts and their evolutionary nature, he is a distinguished research professor at the Institute for Intelligent Systems (IIS), University of Johannesburg, and was awarded the 2019 AISA Resident Fellowship by South Africa's Human Sciences Research Council (HSRC), Republic of South Africa.

He was recently ranked among the World's Top 2% scientists/researchers of the year 2022/2023 listed by the Stanford University, USA. He is Principal Investigator (PI) of the Conflictology Lab researching on a possibility of theory of 'invisibility' to explain conflict in microcosmic structures, hence, the viability of a unified global infrastructure for Peace (I4P) using interethnic border market (IEBMs) networks as a microcosm of the society. Having authored and edited 7 major volumes and over 100 articles and book chapters, in 2023, he was awarded the Erasmus Mundus Global teaching fellowship at Leipzig University, Germany.

































#### **KEYNOTE PANELIST**



Dr. Eddy Winarso

Faculty of Economic and Business Universitas Jenderal Achmad Yani, Indonesia

Dr. Eddy Winarso, holding multiple degrees including a Ph.D., is an experienced educator and researcher specializing in Accounting and Business Administration. He has taught various courses such as Professional Ethics, Accounting Information Systems, and Finance Management. In recent years, his research has focused on topics like Employee Stock Options, Student-Centered Learning, and the Influence of Intellectual Capital on Finance Performance. Eddy Winarso's academic journey spans prestigious institutions in Indonesia and the Philippines, reflecting his dedication to academia and research excellence.





























#### **KEYNOTE PANELIST**



## Prof. Dr. Hani Abdallah AL-Rawashdeh

Director of the Industrial Communication Department, AL-Hussein bin Talal University, Jordan

Director of the Renewable Energy Research and Development Center and Director of the Department of Communication with Industry.

Specialized in mechanical and industrial engineering. The most important research areas are Energy management, production line scheduling, lean production, Six sigma and total quality management. I have won many awards at international scientific conferences, and is the head and member of many local and international committees in various engineering fields. I have published a lot of research papers in international peer-reviewed scientific journals.



































Datuk Dr. Sabri Mohamad Sharif

Associate Professor of Policy and Innovation Management,

University Teknikal Malaysia

Disruptive innovation is crucial for transforming industries, reshaping marketplaces, and speeding progress. To maximize its potential, future leaders must foster innovative mindsets that embrace and drive change. This presentation delves into the '5C' core characteristics of disruptive innovation; Change, Compatibility, Complexity, Creativity, and Conscience, as essential characteristics for empowering future leaders to drive meaningful innovations. Firstly, Change emphasizes the dynamic nature of disruptive innovation, which necessitates leaders' adaptability and proactive navigation of shaping marketplaces. Compatibility addresses the requirement to align innovation with current systems, facilitating seamless integration and reducing resistance.

Complexity emphasizes the intricate issues that leaders encounter, requiring strong problemsolving and strategic thinking skills. Creativity is vital for developing new solutions and cultivating an innovative culture that transcends conventional limits. Finally, Conscience highlights leaders' moral and ethical obligations, ensuring that innovation benefits society, promotes sustainability, and encourages diversity. By focusing on these five vital characteristics, this presentation offers a framework for empowering future leaders who are not only competent to embrace disruptive innovation but are also prepared to navigate their businesses towards sustainability, ethics, and forward-looking aspirations.



































## **KEYNOTE ABSTRACT**



Prof. Dr. Sher Afzal Khan

Professor, Abdul Wali Khan University Mardan, Pakistan

The aviation system is safety-critical by nature, and any occurrence of an incident or accident can lead to the loss of human life and must be closely monitored. The International Civil Aviation Organization (ICAO) emphasizes that every flight must take off and land safely, a goal that is achieved more than 126,000 times per day. Despite significant advancements, aviation safety issues and risks within the air transportation system persist, underscoring the necessity of strong safety management systems. To address this, machine learning methods are employed to predict potential safety concerns based on historical data. This study utilizes an 80-year dataset of occurrence reports from TSB to fill the research gap in aviation incident and accident prediction. It identifies a significant research gap in predicting aviation safety occurrences by analyzing historical data. The main objective is to develop a predictive model that will accurately classify incidents and accidents, thus reducing risks, improving safety measures, and enhancing response strategies. Utilizing machine learning techniques, textual data was processed using Natural Language Processing (NLP) to analyze the dataset.

Three classifiers—Multinomial Naive Bayes, Random Forest, and Support Vector Machine (SVM)—were used with TF-IDF vectorization, and a 5-fold cross-validation was conducted to optimize model performance and accuracy. The developed models achieved over 90% accuracy in predicting incidents and accidents, with the SVM classifier performing best, achieving 98% accuracy in managing the dataset's complexity. This predictive capability is an important instrument for proactive aviation safety management. This research contributes to the field of aviation safety by providing a reliable, dependable prediction system for incidents and accidents, utilizing sophisticated machine learning techniques and historical data. These findings offer valuable insights for regulatory bodies and airlines, contributing to the enhancement of safety protocols, ensuring safer air travel, and ultimately leading to safer skies.



































Dr. Arpita Roy

Assistant Professor, Biotechnology, Sharda University, Greater Noida, Uttar Pradesh, India

Nanotechnology is a groundbreaking domain that facilitates the modification of matter at the nanoscale, holding vast potential for advancements in medicine, energy, electronics, and materials science. Over the past few decades, nanotechnology has gained momentum because of its potential to create a safer and healthier living environment using eco-friendly approaches. Green nanoparticle (NP) synthesis shows cost-effectiveness, biocompatibility, environmental friendliness, and scalability. Nanoparticles have potential applications and have gained considerable interest in different fields such as medicine, materials chemistry, information technology, agriculture, biomedical, optical, catalysis, electronics, environment, energy, and sensors. Plants, bacteria, fungi, and algae have lately been used to produce metals and metal oxide nanoparticles as an alternate method.

The development of alternative strategies to restrict the growth of hazardous bacteria, as well as the building of resistance by germs to various antibiotics, led to the introduction of nanoparticles as novel antimicrobial agents. It has been discovered that when metal oxides interact with a transporter's surface, oxide monolayer structures are created that are useful for drug administration. In recent times, metal oxide nanoparticles have gained prominence as biomedical materials. They find use in several fields such as immunotherapy, dentistry, regenerative medicine, wound healing, tissue repair, and biosensing. Ultimately, we aim to provide a strategy for "green" synthesis and associated components that will help researchers working in this area while also serving as a useful reference for readers interested in the subject in general.



































#### Prof. Dr. Francis Onditi

Associate Professor of Conflictology, Head of Department, School of International Relations and Diplomacy, Riara University, Nairobi, Kenya

The technological advancement is like a conveyor belt in a factory set up, it keeps on revolving around the spin without minding about what objects are being processed or which ones are being left behind. It is the factory technician who should ensure the Processing Plan is comprehensive enough to capture all the elements needed for the desirable outcome. Likewise, scholars, researchers and policy makers, alike, should strive to ensure the benefits of technology are made accessible to all equitably, share them and create hybrid knowledge systems to solve societal problems. Creating heterogenous societies through exchange programme and students' mobility is one avenue for breaking cultural barriers and racial prejudices. Positive contact among people of different ethnicity, race and religion leads to a peaceful and a stable world.

































## **KEYNOTE ABSTRACT**



## Dr. Eddy Winarso

Faculty of Economic and Business Universitas Jenderal Achmad Yani, Indonesia

The United Nations (UN) set Sustainable Development Goals in 2015, namely implementing sustainable development to meet current needs without sacrificing meeting the needs of future generations by implementing 17 goals with 169 targets. To harmonize the main elements, economic growth, social inclusion, and environmental protection.

In implementing SDGs in Indonesia, the legal basis was established so that it could be implemented truly, so Presidential Regulation No. 59 of 2017 and No. 111 of 2022 as well as implementing regulations with the issuance of the Minister of National Development Planning (BAPENAS) Regulation No. 7 of 2018.

This research only focuses on goal 7 Affordable and clean energy with 3 targets and goal 13 with 3 targets through 3 approaches, namely eco-efficiency, carbon emission disclosure, and green innovation. Eco-efficiency is a concept of environmental sustainability carried out by companies to reduce environmental impact due to company operational activities by minimizing company operation costs. Carbon emissions are the release of carbon into the atmosphere related to greenhouse gas emissions, a major contributor to climate change, measurement using the GRI-305 standard and Green innovation, is a new modified technique, practice, system, and production process to reduce the impact of the environment damage.

This research was conducted on manufacturing companies in the basic materials company sub-sector listed on the Indonesian stock exchange with 17 companies in the observation years from 2018 to 2022. By using descriptive statistics, it only examines how eco-efficiency, carbon emission disclosure, and green innovation have developed. The results show that eco-efficiency in the year of observation has decreased. Carbon emission disclosure shows a significant decline and green innovation experiences minimal growth. Overall very influential on the government's target of reducing global warming due to the greenhouse effect and environmental pollution so that the government's target for goal 7 and goal 13 can be achieved.

































#### **KEYNOTE ABSTRACT**



#### Prof. Dr. Hani Abdallah AL-Rawashdeh

Director of the Industrial Communication Department, AL-Hussein bin Talal University, Jordan

A great number of universities worldwide are having their education interrupted, partially or fully, by the spread of the corona virus (COVID-19). Consequently, an increasing number of universities have taken the steps necessary to transform their teaching, including laboratory and workshops into an online or blended mode of delivery. Irrespective of the measures taken, universities must continue to maintain their high academic standards and provide a high-quality student experience as required for delivery of learning outcomes associated with each degree program. This has created a challenge across the higher education landscape, where academics had to switch to remote teaching and different approaches to achieving laboratory delivery. As a result, students have not been receiving face-to-face teaching, and access to laboratory facilities has been limited or nearly impossible. In this paper we are seeking to develop the heat exchanger laboratory and make it remotely by using the MATLAB and Simulink tool using the artificial neural network (ANN) method instead of using the conventional way of modelling and simulating the system.











### Track 1: Integrating Health and Life Sciences for a Sustainable Future



AP Dr. Chang Sook Keng



AP Dr. Jayanthi Barasarathi

#### Synopsis:

Integration of health and life sciences in our everyday life has been deemed as crucial in facing global challenges such as climate change, population growth, environmental issues and increasing health concern. It is undeniable that health and life sciences have escalated to be impactful approaches in human welfare ranging from food and beverages processing, production of antibiotics, vaccines and other medically useful products, diagnosis of various diseases to protecting the environment in ensuring consumption of clean water and utilization of clean energy. In the new era of healthcare, natural products have been the focus of interest of healthcare professionals and practitioners in protecting and maintaining health as well as disease control. Besides, emerging trends like virtual reality (VR), telerehabilitation, wearable devices and so on have enhanced the quality of human life throughout the world. This conference emphasizes innovative solutions to address the current global health challenges, and it calls for research and collaboration from healthcare professionals, clinical therapists, academicians and researchers to share their valuable insights in promoting health and sustainability

































#### **KEYNOTE ADDRESS**



#### Dr. Senthilkumar Rajagopal

REVA University India

#### Bio-Revolution - Significance of Multidisciplinary Science on Society

A confluence of advances in biological sciences —which have been in the making for decades—and the accelerating development of computing, automation, AI, and data analysis are fueling a wave of innovation that the McKinsey Global Institute (MGI) has named the Bio Revolution. This Bio Revolution could have significant impact on economies and our lives, from health and agriculture to consumer goods, and energy and materials. Each new scientific advance became a media event designed to capture public support, and by the 1980s, biotechnology grew into a promising real industry. Biotechnology in medicine-Methods of application of biotechnology is used for increasing the production of Antibiotics, Hormones (such as Interferons & Insulin), Enzymes, Vitamins, Toxoids, etc. It is also used for the diagnosis of genetic diseases. Biotechnology has been instrumental in the rapid development of vaccines, as demonstrated during the COVID-19 pandemic. Techniques like recombinant DNA technology and mRNA-based platforms allow for the swift creation of vaccines against various infectious diseases.

Artificial Intelligence (AI) is an advanced area of research to identify the mechanistic details of Viral-Host interaction at cellular level, which will be useful to develop the novel drugs and advanced vaccines and treatments against infectious agents. For the last three decades the extensive research has been carried out in the field of virus—host cell interaction and generated massive genetic information at molecular level and that information has preserved in the form of database which is being transformed in Machine Learning (ML), a subset of AI. The combination of computational biology and ML substantiate the discovery and development of antiviral drugs through AI, which is also lead to discover and overall profound to understand of viral pathogenesis and future emerging threats by viruses. The AI technologies shall take a lead in the viral discovery as a sustainable technology in the field of applied sciences at global level. During the next 25 years, the range of conditions and treatments these techniques will be able to address is likely to grow, including printing of tissues and the creation of genetically tailored animals to produce human organs compatible for transplantation.

































#### **KEYNOTE ADDRESS**



Prof. Dr. Prathap Suganthirababu

Saveetha College of Physiotherapy, Saveetha Institute of Medical and Technical Sciences, Saveetha Nagar, Thandalam, India

#### Technological Trends in Stroke Rehabilitation

Physiotherapy and technology are revolutionizing stroke rehabilitation, enhancing recovery outcomes and improving the quality of life for survivors. Advanced technologies, such as Virtual Reality (VR) and Augmented Reality (AR), Robotics and wearable sensors, Artificial Intelligence (AI) and Machine Learning (ML), Telehealth and mobile apps are being integrated into physiotherapy practices to create personalized, engaging, and effective rehabilitation programs.

These technologies enhance motor skill recovery through immersive and interactive exercises which provide real-time feedback and data analysis for precise progress tracking. These technological advancements offer accessible and convenient therapy options for remote or home-based rehabilitation and also facilitate early intervention and prevention of secondary complications.

Physiotherapists can leverage technology to Create customized therapy plans tailored to individual needs, monitor progress and adjust treatment strategies accordingly. Encourage patient engagement and motivation through gamification and rewards. Physiotherapists also can Collaborate with other healthcare teams and share data for comprehensive care.

The fusion of physiotherapy and technology in stroke rehabilitation has the potential to Improve functional outcomes and independence, reduce healthcare costs and length of hospital stays Enhance patient satisfaction and experience and also can advance research and evidence-based practice.

As technology continues to evolve, the future of stroke rehabilitation holds much promise. By embracing innovation and collaboration with sustainable goals, physiotherapists can unlock new possibilities for optimal recovery and improved lives.



































Dr. A.K.Kathireshan

Vels Institute of Science, Technology & Advanced Studies, India

# Biocontrol Potential of Actinomycetes Against Tea Pests and Diseases: A Sustainable Approach for Enhancing Tea Cultivation

Tea is mass-produced from young shoots of the tea plant hence, the leaf diseases are of great concern. The blister blight incited by the fungus Exobasidium vexans Massee is the most serious leaf disease in all tea-growing areas. Grey blight (Pestalotiopsis sp.) and brown blight disease (Glomerella sp) is the second important foliar disease in tea. These major diseases are generally controlled through agrochemicals. Continuous use of agrochemicals results in environmental pollution. Use of biological agents becomes alternate method to eradicate these diseases in an eco-friendly manner. Actinobacteria are a gram-positive bacterium that play a significant function in the soil ecosystem. Six possible actinobacteria, namely AAS2, AAS7, APSA1, APSA4, APSA5, and CAS4, were recovered from soil samples of the Anamallais and Coonoor. These Six specific strains were selected for their plant growth promotion, antifungal, and acaricidal properties.

Among these, CAS4 and AAS7 strains showed strong antifungal effects against blister blight and effectively controlled RSM. CAS4 was particularly noted for 100% mite mortality and its ability to inhibit the spore germination of E. vexans. The study concluded that vermiwash-based formulations of these bacteria enhanced tea plant growth.



# Track 1: Integrating Health and Life Sciences for a Sustainable Future

**Date: 26<sup>th</sup> – 27<sup>th</sup> September 2024** 

Track Chair: Assoc. Prof. Chang Sook Keng

Moderator: Assoc. Prof. Dr. Jayanthi Barasarathi; Ms. Nadia Abdul Shukor,

Ms. Leong Wai Ching

Click Here: Track 1 (26th Sep 2024) - Integrating Health and Life Sciences for a Sustainable Future

| Parallel Ses | Parallel Session (Day 1, 26 <sup>th</sup> September 2024): 1300 – 1800 |   |  |
|--------------|--|---|--|
| 1300 – 1320  | Prof. Dr. Prathap<br>Suganthirababu                                    | Track Keynote: Technological Treads in Stroke Rehabilitation  |  |
| 1320 – 1330  | Asst. Prof. Dr. Manjula S.   | Effects of Neuroplasticity Based Brain Gym<br>Exercises on Attention Among College<br>Students  |  |
| 1330 – 1340  | Ms. R. Siva Anandhi  | Compare the Effect of Dynamic Taping and Rigid<br>Taping on Shoulder Function in Individuals with<br>Subacromial Impingement Syndrome   |  |
| 1340 – 1350  | Ms. Priya Accal Thomas   | Effectiveness of Breath Hold Technique in Bronchial Asthma Patients to Improve Pulmonary Functions  |  |
| 1350 – 1400  | Ms. Shyni M.   | Impact of Fall Risk on Mental Well-being of<br>Institutionalized Care Geriatric Population - A<br>Population Based Cross Sectional Study  |  |
| 1400 – 1410  | Asst. Prof. Dr. Amudha<br>Parthasarathy                                | Biosynthesis of Silver Nanoparticles Using <i>Enhalus</i> acoroides Extract as Green Approach and Evaluation of Their Cytotoxicity Against Cervical Cancer HeLa Cell Lines                  |  |
| 1410 – 1420  | Asst. Prof. Dr. Vidya R.   | Evaluation of Anticancer Efficacy of <i>Cucumis melo</i> ( <i>L</i> ) Fruit Extract and Its Silver Nanoparticles Against Diethylnitrosamine Induced Hepatocellular Carcinoma In Wistar Rats |  |
| 1420 – 1430  | Asst. Prof. Dr. Sudharsan<br>Kasirajan                                 | Extraction of Xyloglucans from Agriculture Waste and Synthesis of Bio-programmed Seed Balls   |  |
| 1430 – 1440  | Asst. Prof. Dr. N. Preethi<br>Magesh                                   | Microbial Exposure to Metro Commuters Through Escalator Rails   |  |
| 1440 – 1450  | Prof. Dr. Udaya Prakash<br>Nyayiru Kannaian                            | Combating Airborne Microbe Using Nanotechnology   |  |
| 1450 – 1500  | Asst. Prof. Dr. Kiresee<br>Saghana P. R.                               | In Silico Analysis on G Protein-coupled Receptors (GPCRS) – Hormonal Protein  |  |
| 1500 – 1510  | Asst. Prof. Dr. S.<br>Shanmugavani                                     | A Study on Biocompatibility and Biodegradability of Collagen Using Cross-Linked Agent   |  |































| 1510 – 1520  | Asst. Prof. Dr. R. Priya            | Insilico Analysis of Polycystic Kidney Disease (PKD)  |  |
|--------------|-------------------------------------|---|--|
| 1520 – 1530  | Ms. Remya M. Nair                   | The Effect of Aerobic Exercise on Cognition and Self-Esteem Among Medical Students – A Pilot Study                            |  |
| 1530 – 1540  | Asst. Prof. Dr. J.<br>Manjunathan   | Medicinally Important Bioactive Compounds from Cultivable Indigenous Edible Mushroom <i>Lentinus Tuberregium (Fr) Fr.</i>     |  |
| 1540 – 1550  | Prof. Dr. Komala M.                 | Polyherbal Transdermal Patches for the Treatment of Pediatric Acute Bronchitis  |  |
| 1550 – 1600  | Assoc. Prof. Dr. Anitha A.          | Role of Biofeedback Training on Hand Function Among Zone II Flexor Tendon Repair.   |  |
| 1600 – 1630  |                                     | Break   |  |
| 1630 – 1640  | Dr. Andrew Anbarason J. P.          | Effect of Eccentric Muscle Training in revolutionizing the Field of Sports and Fitness - An Evidence Based Review             |  |
| 1640 – 1650  | Assoc. Prof. Dr. Lavanya<br>Prathap | 3D Cadaver Printing Technology in Medical Education   |  |
| 1650 – 1700  | Asst. Prof. Dr.<br>Senthilkumar N.  | Effectiveness of Vestibular Stimulation on Early Preterm Infants  |  |
| 1700 – 1710  | Dr. Madhanraj S.                    | The Effectiveness of Virtual Reality (VR) Therapy on Balance and Mobility in Elderly Patients - A Randomized Controlled Trial |  |
| 1710 – 1720  | Prof. Dr. Kamalakannan M.           | Exploring the Impact of Artificial Intelligence on Physiotherapy in Rehabilitation - A Comprehensive Study                    |  |
| 1720 – 1730  | Dr. Vignesh Srinivasan              | Effect of Vagal Nerve Stimulation on Sexual<br>Dysfunction in Stroke Patient  |  |
| 1730 – 1740  | Dr. Priyadharshini Kumar            | Comparative Analysis of Traditional vs. Mobile App-<br>Based Hand Function Rehabilitation Post-MCA<br>Stroke                  |  |
| 1740 – 1750  | Dr. Dhanusia S.                     | Efficacy of Extracorporeal Shockwave Therapy in<br>Enhancing Functional Recovery in Median Injured<br>Rats                    |  |
| 1750 – 1800  | Ms. Vanitha Jayaraj                 | Immersive technology in Neuro-Rehabilitation – A<br>Literature Review   |  |
| End of Day 1 |                                     |   |  |
|              |                                     |   |  |



# Track 1: Integrating Health and Life Sciences for a Sustainable Future

Date: 26th – 27th September 2024

Track Chair: Assoc. Prof. Chang Sook Keng

Moderator: Assoc. Prof. Dr. Jayanthi Barasarathi; Ms. Nadia Abdul Shukor,

Ms. Leong Wai Ching

Click Here: Track 1 (27th Sep 2024) - Integrating Health and Life Sciences for a Sustainable Future

| Parallel Session (Day 2, 27 <sup>th</sup> September 2024): 1430 – 1800 |  |   |
|--|--|---|
| 1430 – 1450  | Assoc. Prof. Dr.<br>Senthilkumar Rajagopal | Track Keynote:  Bio-Revolution – Significance of  Multidisciplinary Science on Society  |
| 1450 – 1510  | Prof. Dr. A.K.<br>Kathireshan              | Track Keynote: Biocontrol Potential of Actinomycetes against Tea Pests and Diseases: A Sustainable Approach for Enhancing Tea Cultivation |
| 1510 – 1520  | Dr. S. Aasha Nandhini                      | Augmented Intelligence-based Assistive System for Cervical Cancer Detection   |
| 1520 – 1530  | Dr. Luh Putu Eka<br>Sriwijayanti           | Implications of Therapeutic Communication for Avoiding Lawsuits in Health Services  |
| 1530 – 1540  | Dr. Anak Agung Made<br>Widiasa             | Perception of Healthcare Providers on Physician-<br>assisted Suicide and Euthanasia   |
| 1540 – 1550  | Ms. Misbah Shahid                          | DFT Study, Molecular Docking, Synthesis and Anticancer: Evaluation of o-vanilin and L-Valine Derived Molecules against PANC-1 Cell Lines  |
| 1550 – 1600  | Mr. Dhanush Kumar T.                       | RNA-Seq Driven Discovery of Tumor-Associated Antigens in Triple-Negative Breast Cancer  |
| 1600 – 1630  | Break                                      |   |































|                |  | Transforming Fish Waste into Collagen                             |
|----------------|--|---|
| 1630 – 1640    | Mr. Abdul Aziz Jaziri                    | Hydrolysate - An In Vitro Appraisal of Wound                      |
|                |  | Healing Potential   |
|                |  | Pig Farm Liquid Waste Processing Technology and                   |
| 1640 – 1650    | Dr. Putu Edi Yastika                     | Its Utilization in Cacao Plants                                   |
|                | Ma Citi Nagarbagling Digiti              | Prevalence and Association of Low back pain with                  |
| 1650 – 1700    | Ms. Siti Noorhaslina Binti<br>Mohd Zaidi | Disability and Quality of life among P-hailing Riders in Malaysia |
| 1700 – 1710    | Dr. R. Sundar                            | GSR Sensor based Prisoners' Stress Level Monitor                  |
| 1700 – 1710    | Dr. N. Guridai                           | CON Sensor based i risoriers Stress Lever Mornton                 |
| 1710 – 1720    | Assoc. Prof. Dr. Vettriselvan            | Sustainable Healthcare - Integrating Life Sciences                |
| 1710-1720      | R.                                       | and Medicine for Global Well-being                                |
|                |  | Synthesis and Characterization of Layered Double                  |
| 1720 – 1730    | Mr. Javohir Abdusalomov                  | Hydroxide Two Dimensional Nanostructures Using                    |
|                |  | the Hydrothermal Method for Drug Delivery                         |
| 1730 – 1740    | Mr. Mukhriddin Suyundikov                | Synthesis and Characterization of a Nano-based                    |
| 1730 - 1740    | Wii. Wakiiilaalii Sayailakov             | Carrier as a Promising Delivery System                            |
| End of Track 1 |  |   |



#### Track 2: Engineering Innovation and Invention



AP Ts. Dr. Lee Hoong Pin



AP Dr. Low Wen Pei

#### **Synopsis**

From Neil Armstrong's historic moonwalk to the latest advancements in Al and smart engineering, the field of engineering continues to drive innovation and invention, shaping the world as we know it. In the ever evolving landscape of technology, creativity, ingenuity, and courage are essential ingredients for engineering success. As we enter the 2020s, the pace of technological progress accelerates, fueled by breakthroughs in artificial intelligence, smart engineering solutions, and other cutting-edge technologies. The twentieth century witnessed remarkable technological achievements that have seamlessly integrated into our daily lives, from electricity generation and distribution to renewable energy solutions and advanced materials like carbon fibers. These innovations have not only enhanced accessibility and prosperity but have also transformed industries, economies, and societies worldwide. In this era of rapid technological advancement, the Engineering Innovation and Invention track provides a platform for engineers, innovators, and researchers to showcase their groundbreaking work. Whether in traditional engineering disciplines or emerging fields, such as Al and smart engineering, your contributions are vital in driving progress and shaping the future. Join us at the Engineering Innovation and Invention conference to share your research, collaborate with peers, and contribute to the collective advancement of engineering science. Together, let us explore the endless possibilities of innovation and invention in engineering and pave the way for a brighter, smarter future.

































#### **KEYNOTE ADDRESS**



**Dr. T. Sasilatha**AMET University, Chennai, India

# Pioneering Underwater Exploration: Revolutionizing Marine Research with Artificial Intelligence and Technology

From pioneering underwater exploration to integrating Artificial Intelligence (AI) in marine science, the field of marine and its resource management is experiencing significant advancements through the fusion of innovation and technology. Dr.T.Sasilatha's keynote at the International Conference on Innovation and Technopreneurship 2024 will explore the development of a sophisticated automated vision-based framework for underwater research. This framework enhances data processing, species identification and characterization that represents a substantial advancement in marine research. The keynote will also address the essential role of fisheries and aquaculture in global food security with a focus on the Indian Ocean and will emphasize the transformative impact of the Blue Economy. Dr.T.Sasilatha will discuss how AI contributes to precise species identification that supports effective resource management and conservation efforts. Besides the session will cover the experimental preparations for geo-exploration of the submerged Poompuhar using cutting-edge underwater technologies such as ROVs, sub-bottom profilers and multi-beam echo sounders. The talk will also include the integration and analysis of data using advanced software tools and the establishment of a dedicated marine exploration data portal for future use. Join us to explore how the convergence of innovation and technology is reshaping underwater exploration and advancing sustainability in marine resource management.































#### **KEYNOTE ADDRESS**



Prof. Dr. D.Lakshmi, AMET University, India

#### Smart Grids and SDGs: A Blueprint for Sustainable Energy Solutions

Smart grids represent a transformative approach to managing energy systems, leveraging advanced technologies to enhance efficiency, reliability, and sustainability. Here we explore the critical role of smart grids in achieving the United Nations Sustainable Development Goals (SDGs), particularly those related to affordable and clean energy, climate action, and sustainable cities. By integrating renewable energy sources, enabling real-time energy management, and supporting decentralized power generation, smart grids provide a blueprint for transitioning to a sustainable energy future. We can also discuss the challenges and opportunities associated with implementing smart grids globally, highlighting how they can drive progress across multiple SDGs while fostering economic growth, social equity, and environmental stewardship. Some of the objectives of "Smart Grids and SDGs: A Blueprint for Sustainable Energy Solutions" are as follows:

Analyse the Role of Smart Grids in Sustainable Development
Evaluate the Integration of Renewable Energy Sources
Explore Technological Innovations
Identify Challenges and Opportunities
Policy Recommendations
Assess Economic, Social, and Environmental Impacts
Scalability and Adaptability
Empowering Consumers
Resilience Against Climate Change
Economic Opportunities
Global Cooperation and Knowledge Sharing
Long-Term Sustainability
Inclusivity and Equity
Environmental Benefits Beyond Energy

Thus, Smart grids are emerging as a vital component in the global transition to sustainable energy systems, directly contributing to the achievement of several United Nations Sustainable Development Goals (SDGs). By integrating renewable energy sources, enhancing energy efficiency, and enabling real-time energy management, smart grids offer a robust framework for addressing the challenges of climate change, energy accessibility, and urbanization. This discussion has demonstrated that smart grids not only provide technical solutions for modern energy demands but also act as enablers of broader sustainable development, fostering economic growth, social equity, and environmental protection. However, realizing the full potential of smart grids requires overcoming significant challenges, including technological, financial, and policy barriers. Strategic investments, supportive regulatory frameworks, and international cooperation are essential to scale up smart grid implementations globally. As the world strives to meet the SDGs by 2030, smart grids will play a crucial role in creating a resilient, sustainable, and inclusive energy future.

































#### **KEYNOTE ADDRESS**



Prof. Dr. Eng. Ir. Ni Nyoman Pujianiki,

Udayana University, Indonesia

#### FADS: Flotilla Abrasion Defense System

FADS are coastal protection made artificially to imitate mangrove roots which function to protect the beach and can also function to retain sediment. As we know, getting strong and large mangrove roots takes quite a long time. Innovation has been found to create artificial mangrove roots so that the function of mangrove roots can be obtained immediately. FADS is made from environmentally friendly materials that are durable for 12 years. Testing and implementation have been carried out on sandy beaches and muddy beaches in Thailand and the results show that FADS can work well.



#### **Track 2A: Engineering Innovation and Invention**

Date: 26th - 27th September 2024

Track Chair: Assoc. Prof. Ts. Dr. Lee Hoong Pin

Moderator: -

Click Here: Track 2A (26th Sep 2024) - Engineering Innovation and Invention

| Parallel Session (Day 1, 26th September 2024): 1300 – 1800 |  |  |
|--|--|--|
| 1300 – 1320  | Prof. Dr. Eng. Ir. Pujianiki, Ni<br>Nyoman, Udayana University,<br>Indonesia | Track Keynote 1 Fads: Flotilla Abrasion Defense System   |
| 1320 – 1340  | Dr. T. Sasilatha, Amet<br>University, Chennai, India                         | Track Keynote 2  Pioneering Underwater Exploration: Revolutionizing Marine Research with Artificial Intelligence And Technology                                    |
| 1340 – 1350  | Dr Jegadeeswari G  | EII01: Renewable Energy Based 8/6 Srm Driven Marine Propulsion System Using Intelligent Controllers  |
| 1350 – 1400  | Dr G Jegadeeswari  | EII02: Metaheuristic Algorithm Based Switched Reluctance Motor Driven Marine Propulsion System   |
| 1400 – 1410  | Dr G Jegadeeswari  | EII03: A Novel High Gain Modified Sepic Dc To Dc<br>Boost Converter For Ship Propulsion System   |
| 1410 – 1420  | Dr R Elavarasi   | EII04: Performance Enhancement Of Pv Powered<br>Switched Reluctance Motor Driven Marine Propulsion<br>System Using Intelligent Controllers And Power<br>Converters |
| 1420 – 1430  | Dr R Elavarasi   | EII05: Pv Integrated High Gain Improved Boost<br>Converter Fed 8/6 Switched Reluctance Motor Based<br>Marine Drive With Vector Controller                          |
| 1430 – 1440  | Dr Karthickmanoj<br>Ravichandran   | EII06: Optimized Ai-lot Solution For Real-Time Pest Identification In Smart Agriculture  |
| 1440 – 1450  | Dr Karthickmanoj<br>Ravichandran   | EII07: Digital Vision Assistance System For Individuals With Visual Impairments  |































| 1450 – 1500 | Associate Professor Ngakan<br>Ketut Acwin Dwijendra | EII0F8: Blending Tradition With Technology: Innovative Architectural Solutions For Sustainable Development In Bali   |
|-------------|---|--|
| 1500 – 1510 | Professor I Dewa Gede Agung<br>Diasana Putra        | EII09: Net Zero Energy Building Concept In Balinese<br>Homestays   |
| 1510 – 1520 | Dr Hendrix Yulis Setyawan                           | EII010: Experimental Investigation On The Stability Of Rice Husk Pyrolysis Oil For Renewable Fuel  |
| 1520 – 1530 | Mr Balasubramaniam<br>Muniandy                      | EII011: Flood Prevention System Using lot  |
| 1530 – 1540 | Dr R Elavarasi                                      | EII012: Performance Enhancement Of Pv Powered Switched Reluctance Motor Driven Marine Propulsion System Using Intelligent Controllers And Power Converters |
| 1540 – 1550 | Dr R Elavarasi                                      | EII013: Pv Integrated High Gain Improved Boost Converter<br>Fed Switched Reluctance Motor Based Marine Drive With<br>Vector Controller                     |
| 1550 - 1600 | Ms Padmashini Rajesh Kumar                          | EII014: Power Quality Improvement In A Pv Fed Grid Tied<br>System Using Five Level Mmc   |
| 1600 - 1630 |   | Break  |
| 1630 - 1640 | Professor Lakshmi D                                 | EII015: Leveraging Light Fidelity For Data Transmission Onboard Ships  |
| 1640 – 1650 | Ms Rajasree R R                                     | EII016: Reactive Power Compensation In Hybrid Power System Using Unified Power Quality Conditioner   |
| 1650 - 1700 | Ms Rajasree R                                       | EII017: Enhancing Renewable Energy Integration In Weak<br>Grid Systems Using Facts Devices   |
| 1700 – 1710 | Mr Manikandan Karuppasamy                           | EII018: E-Commerce Site Payment Fraud Detection Using Machine Learning Technique   |
| 1710 – 1720 | Dr D Lakshmi  | EII020: Modelling And Simulation Of Hybrid Solar And<br>Wind Turbine Based Dc Microgrid  |
| 1720 - 1730 | Dr D Lakshmi  | EII021: Differential Evolution – Flower Pollination Algorithm Based Multilevel Inverter For Marine Drives  |
| 1730 – 1740 | Dr D Lakshmi  | EII022: Advanced Secured Design Strategies For<br>Enhancing Efficiency In Last-Mile Communication Within A<br>Holistic Smart Grid Model                    |
| 1740 – 1750 | Dr P Gajalakshmi                                    | EII023: Internet Of Things For Home Automation And Energy Management   |
|             | <u> </u>  | l<br>End of Day 1  |



#### **Track 2B: Engineering Innovation and Invention**

Date: 26<sup>th</sup> – 27<sup>th</sup> September 2024

Track Chair: Assoc. Prof. Dr. Low Wen Pei

Moderator: -

Click Here: Track 2B (26th Sep 2024) - Engineering Innovation and Invention

| Parallel Session (Day 1, 26 <sup>th</sup> September 2024): 1300 – 1800 |  |  |
|--|--|--|
| 1300 – 1320  | Prof. Dr. D.Lakshmi,<br>Amet University, India | Track Keynote 1 Smart Grids And SDGs: A Blueprint For Sustainable Energy Solutions   |
| 1340 – 1350  | Dr R Elavarasi                                 | Ell024: Smart Life Jacket: Advanced Technique For Safety Of Seafarers  |
| 1350 – 1400  | Dr D. Lakshmi                                  | EII025: Literature Survey Of Coordination Of<br>Renewable Energy System In Weak Grid   |
| 1400 – 1410  | Professor Dr.Muthuraman V                      | EII026: Performance Evaluation Of Cryogenic Liquid<br>Nitrogen Coolant On Surface Finish And Chip<br>Morphology In Machining Of Lm 28 Aluminium Silicon<br>Alloy Composite And Comparison With Conventional<br>Coolant |
| 1410 – 1420  | Dr M Monisha                                   | EII027: Spectrum Access Algorithm For The Improvement Of Quality Of Service In Cognitive Radio Networks  |
| 1420 – 1430  | Dr M Meena                                     | EII028: Energy Efficient Based Spectrum Allocation In Cognitive Radio Network  |































| Dr Rubini B                               | EII029: Innovative Use Of The Research Surface  |
|---|---|
| DI Rubiii D                               | Methodology In Sequence-Based Diagnostic Testing For Distribution Transformers  |
| Dr Arunkumar S                            | EII030: Development Of Co-Extruded Al-Ti Bimetal<br>Composite With Improved Interfacial Bonding,<br>Mechanical And Tribological Properties  |
| Mr Muhammad Maheswara<br>Aryasatya        | EII031: Coastline Change Along Pebuahan Beach In<br>Jembrana Bali   |
| Professor Pugazhenthi R                   | EII032: The Mechanical And Microstructural<br>Characterization Of Dissimilar Welded Aa 7075 And<br>Aa6101 By Fsw Process  |
| Dr V Sridevi                              | EII033: Artificial Neural Network (Ann) Based Active Disturbance Rejection Control Strategy For Single Phase Ac To Ac Converter In Wind Energy Conversion System  |
| Dr Madona B Sahaai                        | EII034: Parkinson Disease Identification Using Hybrid Bat Algorithm   |
| Associate Professor Vinod<br>Kumar T      | EII035: Development Of Ni-P-Tio2 Coating On Ah36<br>Steel Using Electroless Plating Process   |
| Professor Dr. K.<br>Karunakaran Kuppusamy | EII036: Synergistic Effects On Enhancing<br>Microstructures And Mechanical Properties Of Ash Of<br>Waste Bamboo Reinforced Aa7075-T651 Hybrid<br>Composites   |
| Dr Arunkumar S                            | EII037: Development Of Co-Extruded Al-Ti Bimetal<br>Composite With Improved Interfacial Bonding,<br>Mechanical And Tribological Properties  |
| Break                                     |   |
| Rashmi M. R                               | EII038: Upqc Compensation For The Intelligent Islanding Microgrid   |
| Dr Vijaya Priya<br>Ramachandran           | EII0F9: Driver Sleep Detection And Emergency Word<br>Spotting Using Similarity Map And Bi-Lstm  |
| Associate Professor Muchelule Yusuf       | EII0F40: Cost And Monitoring Scheduling On<br>Performance Of  |
|   | Mr Muhammad Maheswara Aryasatya  Professor Pugazhenthi R  Dr V Sridevi  Dr Madona B Sahaai  Associate Professor Vinod Kumar T  Professor Dr. K. Karunakaran Kuppusamy  Dr Arunkumar S  Rashmi M. R  Dr Vijaya Priya Ramachandran  Associate Professor |







1750 - 1800





Ms Seema Vanjire













EII0F47: Ips- Intelligent Parking System Enhancing









|             | 177                              |  |
|-------------|----------------------------------|--|
| 1700 – 1710 | Dr Sasilatha T                   | EII0F41: Exploring The Effects Of Sea-Level Change On An Ancient Port City Through Archaeological Discoveries-Poompuhar          |
| 1710 – 1720 | Mr Radek Oborny                  | EII0F42: Low Cost lot Devices For Water Resources Monitoring In Bali   |
| 1720 - 1730 | Dr Karthickmanoj R               | EII0F43: Design Of Multiband Antenna For Full<br>Screen Smartphone Using Ansys Hfss  |
| 1730 – 1740 | Dr Amit Kumar Roy                | EII0F44: Design And Validation Of A Three Axis<br>Mechanical Solar Tracker At Laboratory Scale Using<br>Low-Cost Microcontroller |
| 1740 – 1750 | Mr I Nyoman Aribudiman           | EII0F45: Analysis Of Shallow Foundation Planning On Clay Contaminated With Organic Matter  |
| 1750 - 1800 | Professor Ni Nyoman<br>Pujianiki | EII0F46: Potential Of Tabas Stone Waste As<br>Additional Material Of Concrete For Coastal<br>Protection Structures               |

End of Day 1

Security With Ai



#### **Track 2A: Engineering Innovation and Invention**

Date: 26th – 27th September 2024

Track Chair: Assoc. Prof. Ts. Dr. Lee Hoong Pin

Moderator: -

Click Here: Track 2A (27th Sep 2024) - Engineering Innovation and Invention

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|--|--|---|--|
| PARALLEL SESSION (DAY 2, 27 <sup>TH</sup> SEPTEMBER 2024): 1430 – 1600 |  |   |  |
|  |  |   |  |
| 1430 – 1440  | Dr K.Bharathi -  | EII0F48: Effect Of Flc Based Pid In                   |  |
| 1430 – 1440  | Di K.Bilalatili -  | Bidirectional Converters                              |  |
|  |  |   |  |
| 1440 - 1450  | Da Olasathi Danahanan nan  | EII0F49: Battery Charging Using Novel Predictive      |  |
| 1440 - 1450  | Dr Shanthi Pandurangan   | Control Algorithm Based 3-Ф Pwm Boost Converter       |  |
|  |  |   |  |
| 1450 4500  | Dr Sasilatha T   | EII0F50: Exploring The Coastal Dynamics Of South      |  |
| 1450 - 1500  |  | India Port-An On And Offline Perspective              |  |
|  |  | ·   |  |
| 1500 - 1510  | Associate Professor Satish   | EII0F51: Charging Of Electric Vehicle: A Quantitative |  |
|  | Kumar S  | Study For Sustainable Ev Policy In India              |  |
|  |  |   |  |
| 1510 – 1520  | Mr Ong See Khin Chong  | EII0F52: The Application Of Roof Turbine Ventilator   |  |
|  | Wen Jun  | To Rotate A Ceiling Fan                               |  |
|  |  | ١   |  |
| End Of Track 2A  |  |   |  |
|  |  |   |  |



### **Track 2B: Engineering Innovation and Invention**

Date: 26th – 27th September 2024

Track Chair: Assoc. Prof. Ts. Dr. Low Wen Pei

Moderator: -

Click Here: Track 2B (27th Sep 2024) - Engineering Innovation and Invention

| PARALLEL SESSION (DAY 2, 27 <sup>TH</sup> SEPTEMBER 2024): 1430 – 1600 |                     |  |
|--|---------------------|--|
| 1430 – 1440  | Dr Padmapriya J     | EII0F53: Optimization of Weed Detection in Paddy Fields: A Comprehensive Case Study on Performance Assessment through Transfer Learning Techniques |
| 1440 - 1450  | Mr Guangyang Pan    | EII054: Enhancing Acrophobia Treatment Outcomes through Virtual Reality  |
| 1450 - 1500  | Mr Atabek Babojanov | EII055: Physical-Mechanical Properties Of Soil And<br>Carrot Seed  |
| 1500 - 1510  | Ms Dorothy R        | EII0F56: Comparative Analysis of PDMS and PDMS/MTMS superhydrophobic coating for porcelain Insulator flash over protection                         |
| End Of Track 2B  |                     |  |



### Track 3: Next-Gen Horizons in Computing



#### **Synopsis**

"Next-Gen Horizons in Computing" theme specifically tailored for academics, researchers, and professionals operating at the vanguard of technological innovation within the domain of computing. The objective of this track is to explore the profound impact of emerging technologies on the future of digital environments. The attendees will have the opportunity to interact with state-of-the-art studies, novel approaches, and the most recent developments in computing that are reshaping established paradigms. Featuring groundbreaking developments in artificial intelligence, quantum computing, and blockchain applications, this track provides a forum for the exchange of notions that will influence the development of future computing technologies. "Next-Gen Horizons in Computing" extends an invitation to all individuals engaged in the exploration of the socio-technical ramifications of emerging computing technologies, technological innovation, or the development of disruptive technologies to contribute to and draw inspiration from the dynamic discourse that moulds the future of technology























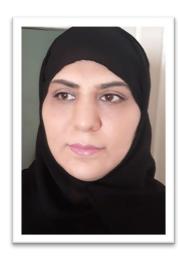












Asso. Prof. Dr. Shabana Habib

Qassim University Saudi Arabia

#### The Internet of Things (IoT); The Technology of The Future

The Internet of Things (IoT) represents a paradigm shift in the way we interact with technology, embedding intelligence into everyday objects and enabling unprecedented levels of connectivity. The 5G and beyond will enhance IoT capabilities by providing higher speeds, lower latency, and increased device density. This will enable more sophisticated applications, from real-time remote control to immersive augmented reality experiences. To address latency and bandwidth challenges, edge computing will become increasingly integral. By processing data closer to the source, edge computing will facilitate quicker decision-making and reduce the reliance on centralized cloud infrastructure. As IoT devices become more ubiquitous, ensuring robust security and privacy will be paramount. Innovations in cryptography, decentralized authentication, and AI-driven threat detection will play crucial roles in safeguarding data and preventing breaches. IoT systems will increasingly leverage artificial intelligence and machine learning to analyze vast amounts of data generated by connected devices. This will lead to smarter automation, predictive maintenance, and personalized user experiences. In summary, the future of IoT promises to revolutionize industries, enhance daily life, and address global challenges through interconnected, intelligent, and efficient systems. As these advancements unfold, a focus on security, sustainability, and user experience will be essential to harness the full potential of IoT technologies.

































#### **KEYNOTE ADDRESS**



Prof. Dr. M. Lakshmi
SRM Institute of Science &
Technology, India

# Gamification in Healthcare using AI: Enhancing Patient Engagement through Game-Based Interventions

Gamification, the use of game design elements in non-game contexts, has emerged as a promising strategy to enhance patient engagement and adherence in healthcare settings. We have explored how game-based interventions can be employed to improve patient outcomes, increase adherence to treatment plans, and foster a more engaging healthcare experience. By integrating principles of game design with healthcare practices, gamification aims to motivate patients, enhance their commitment to health regimens, and ultimately improve overall health outcomes. The following

Types of Game-Based Interventions can be adopted:

Behavioral Health: Games designed to support mental health, stress management, and behavioral therapy.

Chronic Disease Management: Games aimed at improving adherence to treatment plans for chronic conditions such as diabetes and hypertension.

Rehabilitation and Physical Therapy: Games used in physical therapy to motivate patients and enhance the rehabilitation process.

The games where designed and the AI used to in backend to analyse the patient's healing process. Incorporating game-based interventions into physical therapy has emerged as an innovative approach to enhance patient motivation and improve rehabilitation outcomes. By leveraging engaging game mechanics and interactive technologies, these interventions aim to make physical therapy more enjoyable and effective.

































#### **KEYNOTE ADDRESS**



**Dr. N. Duraimutharasan**REVA University, India

#### ZKP - an overview in the context of transaction

Zero-Knowledge Proofs (ZKPs) are a breakthrough in cryptography, offering a way for one person (the prover) to convince another (the verifier) that they know something is true—without giving away any details about the information itself. First introduced by researchers Goldwasser, Micali, and Rackoff in the 1980s, ZKPs have become crucial for protecting privacy in technologies such as secure authentication and blockchain systems. Unlike traditional methods that may require sharing sensitive data, ZKPs focus solely on proving that a claim is correct while keeping everything else confidential. The foundation of ZKPs is built on three important properties: completeness, soundness, and zero-knowledge. Completeness means that if the prover truly knows the information, the verifier will be convinced of its accuracy. Soundness ensures that a dishonest prover cannot trick the verifier into believing something false. Finally, the zero-knowledge property ensures that the verifier doesn't learn anything beyond the fact that the claim is true. To help explain how ZKPs work, familiar examples such as the Ali Baba Cave analogy are often used. In this scenario, there are two types of ZKPs: interactive and non-interactive. Interactive ZKPs require ongoing back-and-forth communication between the prover and verifier, while non-interactive ZKPs (NIZKs) allow the prover to send a single proof that can be verified using cryptographic tools like hash functions. This shift from interactive to non-interactive methods has opened up new possibilities, especially in decentralized systems like blockchain.

ZKPs have become increasingly important in modern cryptography and cybersecurity. They are particularly useful in blockchain technology, identity verification, and secure multi-party computations. One of the key advancements in this field is ZK-SNARKs (Zero-Knowledge Succinct Non-Interactive Arguments of Knowledge), which improve privacy and scalability in decentralized systems such as Zcash and Ethereum. These platforms use ZKPs to protect user privacy while ensuring the security and integrity of the underlying data. Beyond blockchain, ZKPs are also being used in secure authentication, allowing individuals to verify their identity without exposing personal information like passwords.

Despite their advantages, implementing ZKPs comes with challenges, such as managing computational complexity and efficiency. There's also a growing concern about the potential impact of quantum computing, which could weaken many current cryptographic systems. As a result, research in post-quantum cryptography is driving the development of ZKP protocols that can withstand the threats posed by quantum technology, ensuring their relevance in the future. Looking ahead, there's a focus on improving the efficiency of ZKPs, particularly in reducing the time and resources required to generate and verify proofs. At the same time, ZKP applications are expanding into new fields like cloud computing, privacy-preserving machine learning, and secure data sharing in industries like healthcare and finance. As concerns about data privacy continue to grow in an increasingly interconnected world, ZKPs offer a promising way to balance security, privacy, and scalability, making them an essential tool for the future of digital privacy and security.



### Track 3A: Next-Gen Horizons in Computing

Date: 26<sup>th</sup> – 27<sup>th</sup> September 2024

Track Chair: Dr. Nur Fatin Liyana Mohd Rosely

Moderator: Prof. Ts. Dr. Siti Sarah Maidin

Click Here: Track 3A (26th Sep 2024) - Next-Gen Horizons in Computing

| Parallel Session (Day 1, 26 <sup>th</sup> September 2024): 1300 – 1700 |   |  |
|--|---|--|
| Farallel Session (Day 1, 20 September 2024). 1300 – 1700               |   |  |
| 1300 –<br>1320   | Dr. M. Lakshmi<br>SRM Institute of Science &<br>Technology, India | Track Keynote 1 Gamification in Healthcare using AI: Enhancing Patient Engagement through Game-Based Interventions |
| 1320 –<br>1340   | Yusuf Muchelule   | Cloud Analytics Practices and Performance of Micro-Lending Institutions In Kenya                                   |
| 1340 –<br>1350   | Jordan Taylor   | Optimizing Maritime Operations Through Reasoning and Action (React)  |
| 1350 –<br>1400   | K.Shantha   | Dynamic Region-Aware Fine-Tuning (Draft): A Method for Reducing Geographic Bias in Large Language Models           |
| 1400 –<br>1410   | K.Mudit   | Diabetic Retinopathy Detection Model using Hybrid of U-Net and Vision Transformer Algorithms.                      |
| 1410 –<br>1420   | Ganesh R  | Bridging the Gap in Maternal Healthcare Through Al-<br>Powered Solutions : The '9 & Beyond' Mobile<br>Application  |
| 1420 –<br>1430   | Arathi Boyanapalli  | ClearCharity Network using Blockchain  |
| 1430 –<br>1440   | Thrupthi C.P  | Automated System for Detecting Cyber Bot Attacks In 5g Networks  |
| 1440 –<br>1450   | Venkatesh S.D   | GIS-Enhanced Crop Yield Modeling with Machine<br>Learning  |
| 1450 –<br>1500   | Saketha N   | Enhancing Travel Recommendations Through Attraction Preference Standardization                                     |































| 1500 –<br>1510 | Sim Qing Rong                    | Muscle Weakness Detection and Injury Prediction Using Machine Learning Techniques  |
|----------------|----------------------------------|--|
| 1510 –<br>1520 | Tan Zi Qin                       | Machine Learning Driven Stress Level Detection System: Slim Down the Potential of Insomnia   |
| 1520 –<br>1530 | Lum Tristan Yao Yue              | Integrate Virtual Cloth Try-On System for E-<br>Commerce Using Viton Technology and Body<br>Detection  |
| 1530 –<br>1540 | Sew Chia Xuan                    | Enhancing Halal Food Traceability and Control Through NFC-Enabled Mobile Technology: A Sustainable Approach To Supply Chain Transparency With Load Balancer Implementation For System Reliability. |
| 1540 –<br>1550 | Sew Chia Rong                    | Intelligent Rain-Activated Vehicle Windshield Wiper<br>System Using Vibration Motor Technology: IOT-<br>Enhanced Data Analysis   |
| 1550 -<br>1600 | Ku Yin Ee                        | Cloud Based Flood-Sense App: Enhancing Flood<br>Alert Systems in Malaysia Using Smart Geofencing<br>and Firebase Cloud Messaging   |
| 1600 -<br>1630 |                                  | Break  |
| 1630 -<br>1640 | Padmashini Rajeshkumar           | PSO Fuzzy Optimized Reduced Switch Multilevel Inverter for Hybrid Marine Propulsion System   |
| 1640 –<br>1650 | A. Ananthi Christy<br>Arokiasamy | Enhancing Offshore Wind Farm Installation Techniques   |
| 1650 -<br>1700 | Yong Yi Heng                     | Smart IoT Fire Detection System using SMS Sending and Real Time Monitoring   |
| End of Day 1   |                                  |  |



### Track 3B: Next-Gen Horizons in Computing

Date: 26<sup>th</sup> – 27<sup>th</sup> September 2024

Track Chair: Ms Shiney John

Moderator: -

Click Here: Track 3B (26th Sep 2024) - Next-Gen Horizons in Computing

| Parallel Session (Day 1, 26 <sup>th</sup> September 2024): 1300 – 1700 |   |  |
|--|---|--|
| 1300 –<br>1320   | Dr. M. Lakshmi<br>SRM Institute of Science &<br>Technology, India | Track Keynote 1 Gamification in Healthcare using AI: Enhancing Patient Engagement through Game-Based Interventions |
| 1320 –<br>1340   | Akshaya A.  | Breast Cancer Detection Using Image Processing and Machine Learning  |
| 1340 –<br>1350   | Annapoorna C.M  | Enhancing Campus Communication: Advanced ML Techniques for College Chatbots  |
| 1350 –<br>1400   | Arpan Chakraborty   | Churn Prediction Portal  |
| 1400 –<br>1410   | Gurumurthy M.   | Email Phishing Detection Model   |
| 1410 –<br>1420   | Hariprasad U.S.   | Implementation Of Health Monitoring System for<br>Patients Using Machine Learning Algorithms                       |
| 1420 –<br>1430   | Keerthan N  | Automatic Textile Stain Detection Using Yolo Algorithm   |
| 1430 –<br>1440   | Keerthana G.  | Prediction Of Air Quality Using RNN And LSTM   |
| 1440 –<br>1450   | Lohith E  | Efficient Parking: A Smart System For Optimized Urban Mobility Using lot   |
| 1450 –<br>1500   | Sanjay Aswath K.S.M   | Predicting Parkinson's Disease Using Machine Learning Model  |
| 1500 –<br>1510   | Yashaswini Kini   | Hate Speech Recognition on Twitter Using Machine Learning  |































| 1510 –<br>1520 | Divya N.K      | Aquatic Vision: Underwater Image Recognition   |
|----------------|----------------|--|
|                |                |  |
| 1520 –         | Meghana H.V    | Enhanced Semantic Image Segmentation Through   |
| 1530           |                | Convolutional and Atrous Convolution Techniques  |
| 1530 –         | Nandan S       | Comparison Of Utility-First CSS Framework  |
| 1540           |                |  |
| 1540 –         | Padmini Y      | Guardian Of Cybersecurity: Unveiling The Tactics   |
| 1550           |                | In Phishing Website Detection  |
| 1550 -         | Rakesh R Awati | Predictive Rainfall Modeling with ML   |
| 1600           |                | , and the second |
| 1600 -         |                | Break  |
| 1630           |                |  |
| 1630 -         | Rakshitha K    | Smart Home Security Using Facial Authentication  |
| 1640           |                |  |
| 1640 –         | Ravikiran Y    | Diabetic Retinopathy Prediction  |
| 1650           |                |  |
|                |                | End of Day 1   |



### **Track 3: Next-Gen Horizons in Computing**

Date: 26th – 27th September 2024

Track Chair: Dr. Nur Fatin Liyana Mohd Rosely

Moderator: Prof. Ts. Dr. Siti Sarah Maidin

Click Here: Track 3 (27th Sep 2024) - Next-Gen Horizons in Computing

|             | Assoc. Prof. Shabana               | Track Keynote 2                                 |
|-------------|------------------------------------|---|
| 1430 – 1450 | Habib                              | The Internet of Things (IoT); The               |
| 1100 1100   | Qassim University, Saudi<br>Arabia | Technology of The Future                        |
|             |                                    | Track Keynote 3                                 |
| 1500 – 1520 | Dr. N. Duraimutharasan             | ZKP - an overview in the context of             |
|             | REVA University                    | transaction                                     |
| 1530 – 1540 | Shabana Habib                      | Covid-19 And Its Effects on Education Field:    |
| 1530 – 1540 |                                    | Literature Review                               |
|             |                                    | A Review on Detection of Covid-19 Cases from    |
| 1540 – 1550 | Shabana Habib                      | Medical Images Using Machine Learning-Based     |
|             |                                    | Approach  |
| 1550 – 1600 | He Yongfu                          | Ese And Transfer Learning for Breast Tumor      |
| 1330 – 1000 | Tie Toligiu                        | Classification                                  |
| 1600 – 1630 | Break                              |   |
|             |                                    | Big Data Analytics: A Machine Learning Model to |
| 1630 – 1640 | Ann Sara Isaac                     | Enhance Academic Performance and Learning       |
|             |                                    | Experience of University Students               |
| 1640 – 1650 | Abirami Roshinee Kamalan           | The Emergence of Big Data Analytics and Its     |
| 1040 – 1030 | ADITATIII NOSHIIIGG NAMAIAI        | Impact on Accounting Education in Malaysia      |
|             | En                                 | d of Track 3                                    |



# Track 4: Innovative Business and Management for a Sustainable Future



Dr. Tee Mcxin



Dr. Annie Wang Pei Ling

#### **Synopsis**

In today's world, growing climate concerns, resource scarcity, social inequality, environmental degradation, technological disruption, and regulatory pressures emphasise the urgent need for innovative business and management practices geared towards sustainability. Embracing sustainability isn't just about addressing present challenges; it's also about ensuring long-term viability and resilience in an interconnected and uncertain world. This track serves as a hub for exploring cutting-edge approaches to fostering innovation within businesses and management while promoting sustainability. Topics can include sustainable business models, CSR, green behaviour, the circular economy, organisational innovation, sustainable finance, organisational resilience, ethical leadership, innovation ecosystems, etc. Join us in advancing our understanding of how innovative business and management practices can drive a sustainable future.



































Dr. Syed Far Abid Hossain

BRAC University, Dhaka,

Bangladesh

#### Media Entrepreneurship in the Contemporary Era: Threats & Challenges

Digital transformation after 21st century drastically replaced the way of traditional entrepreneurship into digital forms. This study empirically investigates the threats & challenges of social media dependence. The study found that a significant number of entrepreneurs depend heavily on social media, more specifically; they depend on a few specific popular social media to promote their business and focus weakly on traditional entrepreneurship setting. Adopting the technology acceptance model (TAM) paradigm, the study investigates the common threats and challenges that may affect negatively on business growth and reputation. We conducted a person-administered survey on 251 entrepreneurs from different industries. The survey is analyzed using structural equation modeling (MPlus). The findings indicate high risk of social media dependency in terms of business development. Result also shows that the entrepreneurship growth should not be limited to any specific social networking system such as Facebook. The data was collected from a specific region that may affect the generalizability. The study has a significant impact on sustainable entrepreneurial development.



































Prof. Dr. Ir. Imam Santoso
Universitas Brawijaya,
Indonesia

# Universities' Role in Developing Talent and Innovation for Sustainable Business and Management

Universities play a critical role in addressing the global demand for sustainable business and management practices by cultivating talent and fostering innovation. This paper investigates how universities are strategically positioned to develop the next generation of leaders and innovators while contributing to sustainable business transitions. Drawing on analytical data from surveys and comprehensive reports on universities' innovation ecosystems, this study highlights significant gaps in talent management and innovation capacity within higher education institutions. At Universitas Brawijaya (UB), over 85% of students transition into the labor force within six months of graduation. However, a disparity persists between students' aspirations and the institutional support necessary to cultivate talent for sustainable business leadership.

As an entrepreneurial university, UB has increasingly become a key driver of sustainable transitions by integrating research, education, and entrepreneurship into its core mission. UB has embedded innovation strategies within its mission, focusing on technology transfer, interdisciplinary collaboration, and industry partnerships. Nonetheless, a persistent challenge remains in fostering entrepreneurial mindsets among students, as only a minority currently benefit from entrepreneurial training and initiatives. To address these gaps, universities must strengthen their innovation ecosystems through enhanced partnerships, increased funding, and improved governance with more agile and adaptive management. By strategically managing both talent and innovation, universities are well-positioned to play a transformative role in developing future business leaders and driving global sustainability initiatives.



### Track 4: Innovative Business and Management for a Sustainable Future

Date: 26<sup>th</sup> – 27<sup>th</sup> September 2024

Track Chair: Dr Mcxin Tee & Dr Annie Wang

Moderator: -

Click Here: Track 4 (26th Sep 2024) - Innovative Business and Management for a Sustainable Future

| Parallel Session (Day 1, 26 <sup>th</sup> September 2024): 1300 – 1700 |                               |  |
|--|-------------------------------|--|
| 13:00 -<br>13:12   | Prof Dr Imam Santoso          | Keynote 1 Universities' Role in Developing Talent and Innovation for Sustainable Business and Management                               |
| 13:12 -<br>13:24   | Saizal Pinjaman               | The Impact of Governance, Innovation, and Macroeconomic Factors on Renewable Energy Generation in ASEAN: A Bayesian Approach           |
| 13:24 -<br>13:36   | Krithiga Kandasamy            | Transforming Private Higher Education towards Environmental Sustainability: A Successful Implementation of a Student Recycling Program |
| 13:36 -<br>13:48   | Muhamad Firdaus Bin<br>Yaacob | Investigating the Intersectional Factors Influencing University Students' Choice of Career Path in Private Institution in Malaysia     |
| 13:48 -<br>14:00   | Yao Wang                      | Artificial Intelligence Boosts the Sustainable Development of Small and Medium-sized Enterprises (SMEs) in China                       |
| 14:00 -<br>14:12   | K.Shantha Kumari              | Decentralized Agricultural Data Marketplace: Leveraging Machine Learning and IoT for Smarter Sustainable Farming                       |
| 14:12 -<br>14:24   | Sharon Elsen Abraham          | Building a Sustainable Future: Understanding<br>Generation Z's Purchasing Intentions toward<br>Green Insurance in India                |
| 14:24 -<br>14:36   | Riska Nuraini                 | Challenges in Implementing Quality Education at INTI International University: An Examination of Human Resource Management Practices   |

































|         | 1                        | 1  |
|---------|--------------------------|--|
|         |                          |  |
| 14:36 - | Alrazi Haque             | Shattering Technological Parriers for Asian Waman              |
| 14:48   |                          | Shattering Technological Barriers for Asian Women in Corporate |
| 14:48 - |                          |  |
| 15:10   |                          | Break  |
|         | Dr Syed Far Abid Hossain | Keynote 2  |
| 15:10 - |                          |  |
| 15:24   |                          | Media Entrepreneurship in the Contemporary Era.                |
|         |                          | Threats & Challenges   |
| 15:24 - | Syed Adnan Hussainy      | Optimizing Urban Mobility through a Subscription-              |
| 15:36   |                          | based Shared Cab Service Platform - RozKa                      |
| 45:00   | Taufiq Ismail            | Social Media Content and Destination Quality for               |
| 15:36 - |                          | Destination Branding Enhancement of Jatim Park                 |
| 15:48   |                          | Group's Amusement Parks  |
| 15:48 - | Md. Safaet Hossain       | The Impact of Digital Transformation on Industry               |
| 16:00   |                          | 4.0: A Comprehensive Analysis                                  |
| 40.00   |                          | Leveraging Digital Twins and IoT for Sustainable               |
|         | Bello Mohammed Magaji    | Urban Development: Innovations and Impacts on                  |
| 16:12   |                          | SDG 11 (Sustainable Cities and Communities)                    |
|         | Gu Lizhan                | Investigating Management Models of Industry-                   |
| 16:12 - |                          | Education Integration in Enhancing Medical                     |
| 16:12 - |                          | Vocational College Students' Employability:                    |
| 10.24   |                          | Enterprise Support as a Mediator in Guangdong                  |
|         |                          | Province, China  |
| 16:24 - | Rouban A. S.             | Employee Engagement in Sustainability Practices                |
| 16:36   |                          | for a Sustainable Future                                       |
| 40:00   |                          | Bridging the Gap: Analysing the Influence of                   |
|         | He Han                   | Adaptive Leadership Styles on Performance in                   |
| 16:48   |                          | Multicultural International Teams                              |
| 16:48 - | V V-ii-                  | Board Gender Diversity in Firm Performance -                   |
| 17:00   | Yao Yujia                | Bibliometric Analysis of Current and Future Trends             |
|         |                          | End of Day 1   |



### Track 4: Innovative Business and Management for a Sustainable Future

Date: 26th – 27th September 2024

Track Chair: Dr Mcxin Tee & Dr Annie Wang

Moderator: -

Click Here: Track 4 (26th Sep 2024) - Innovative Business and Management for a Sustainable Future

| Parallel Session (Day 2, 27 <sup>th</sup> September 2024): 1430 – 1700 |                   |  |
|--|-------------------|--|
| 14:30 -<br>14:42   | Liu Xiaorong      | Factors Influencing the Intention to Use E-Wallets in Malaysia   |
| 14:42 -<br>14:54   | Benyapha Sae-Lu   | The Role of Work-Life Balance, Work Engagement, and Job Satisfaction in Predicting Job Performance among Work Adults in Malaysia   |
| 14:54 -<br>15:06   | Jiang Yujing      | Analysing the Impact of Marketing Strategies, Performance Appraisal Systems, and Service Quality on Organisation Performance   |
| 15:06 -<br>15:18   | Lu Liangyan       | The Impact of Capital Structure and Stakeholder Pressure on SMEs' Organizational Performance in the Agriculture Industry in Yunnan Province, China: The Mediating Role of Green Innovation |
| 15:18 -<br>15:30   | Hu Mei            | Work Environment, Training, Work Flexibility and Employee  |
| 15:30 -<br>15:42   | Naeema Al Maashri | Leadership Styles and SMEs Performance   |
| 15:42 -<br>15:54   | Xiao Hongzhi      | Exploring Effects of Short Videos in Influencing Intention in Intangible Culture Heritage Tourism: The Case of Sichuan, China  |
| 15:54 -<br>16:06   | Zhang Jie         | Research Trends of Logistics and Professionals<br>Education 2004–2024: Topic Modelling Analysis  |
| 16:06 –<br>16:10   | Closing           |  |
|  |                   | End of Track 4   |



# Track 5: Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context



Dr. Nurul Fatehah Aziz



AP Phawani Vijayaratnam

#### **Synopsis**

Well into the third decade of the twenty-first century, contemporary culture is underlined by the trinity of crises in politics, the economy, and fossil fuel-based industrial activities. These crises have intensified due to the interdependence and complex linkages between societies, cultures, economies, and institutions, enabled by advanced information and communication technology. Against this backdrop, education is often disrupted by emergent crises such as natural disasters and Covid-19, making it harder for school children and mature learners alike to gain access and remain in enrolment. This precarious condition calls for a sustainable education system that nurtures resilient educators and learners of diverse and divergent needs to develop and adapt to crisis-sensitive teaching and learning plans. Under this system, schools are equipped with backup infrastructure and trained teachers who can support psychosocial needs in the face of a future of threat, uncertainty, and surprise. This conference track invites papers by experienced and early career researchers exploring current challenges, crisis-oriented methods, and the socioeconomic implications of these emerging practices within sustainable education.

































#### **KEYNOTE ADDRESS**



Dr. Sri Tiatri
Universitas Tarumanagara,
Jakarta, Indonesia

# Awareness of Diversity and Setting Priorities Based on Needs: Considerations for Achieving Sustainable Education

In this disruptive era, the direction of societal development is challenging to predict. Technological advancements have led to an array of changes, including in the field of education. One of the known shifts is the trend toward digital learning. Besides its positive impacts, there are negative effects of digital-based education. In terms of mental health, social isolation may increase stress among students and teachers. The overly individual nature of digital learning also hinders students from developing their communication and social skills. Our research has shown that the COVID-19 pandemic has increased internet usage, which risks elevating internet addiction among teenagers. In relation to the above, the authors and team have conducted research on students' behaviour in using technology, learning systems aimed at improving students' reading and thinking abilities, as well as training teachers in using technology for STEM education. Based on our findings, there are at least two things to consider when we think about sustainable education, whether in stable times or in crisis-prone situations. First, education cannot detach itself from the inevitability of diversity. Every context has different needs, so despite the existence of general education, opportunities for differences in education for specific skills must still be available. Similarly, each educational level has different standards. Second, because of this diversity, in sustainable education, priorities must to be set according to needs. In setting these priorities, adequate risk management is required.



































#### Dr. Subashini K.Rajanthran

LASALLE College of Arts
University of Arts,
Singapore

#### Resilient Education in Crisis – Building Sustainable and Adaptive Teaching Strategies

In light of ongoing global crises, from pandemics to environmental disasters, the need for a transformative approach to education has become increasingly evident. This presentation focuses on how higher education institutions can proactively build sustainable, crisis-resilient systems that safeguard learning continuity during periods of uncertainty.

The presentation will address core strategies for developing flexible, crisis-sensitive curricula that seamlessly adapt across in-person, online, and hybrid modalities. A central theme will be the role of adaptive infrastructure, including cloud-based learning management systems (LMS), which can ensure uninterrupted educational access even when campuses are physically closed. The importance of integrating these technologies into academic structures, while maintaining pedagogical integrity, will be emphasized.

Recognizing that educators are pivotal to this transformation, the discussion will explore professional development opportunities that equip faculty with expertise in crisis-responsive teaching, trauma-informed pedagogy, and effective crisis communication. These skill sets will enable educators to not only maintain academic standards but also address the psychosocial needs of students during times of disruption.

Additionally, the presentation will delve into innovative assessment methodologies that account for the complexities of online and hybrid learning environments, while fostering equity and access for students from diverse backgrounds.

Finally, the value of global collaboration and knowledge-sharing across universities will be highlighted, encouraging academics to engage in a cooperative approach that strengthens the overall resilience of education systems on a global scale. By fostering a culture of shared learning and innovation, higher education institutions can better prepare for the challenges of an increasingly crisis-prone world.



### Track 5: Sustainable Education: Resilient Educators and Learners in a Crisisprone Context

Date: 26<sup>th</sup> – 27<sup>th</sup> September 2024

Track Chair: Dr Nurul Fatehah

Moderator: -

Click Here: Track 5 (26th Sep 2024) - Sustainable Education: Resilient Educators and Learners in a Crisis-prone Context

| Parallel Session (Day 1, 26 <sup>th</sup> September 2024): 1300 – 1800 |   |   |  |
|--|---|---|--|
| 13:05-<br>13:15  | Dr Subashini K. Rajanthran<br>Lasalle College of Arts,<br>University of Arts,<br>Singapore  | Keynote 1 Resilient Education in Crisis – Building Sustainable and Adaptive Teaching Strategies                               |  |
| 13:15-<br>13:25  | Dr Sri Tiatri Universitas Tarumanagara, Jakarta, Indonesia  | Keynote 2  Awareness of Diversity and Setting Priorities  Based on Needs: Considerations for Achieving  Sustainable Education |  |
| 13:35-<br>13:45  | S. Ramaraju, AP Dr. C.<br>Vairavan (AMET University,<br>India); Dr. K. Manigandan<br>(Mohan Babu University,<br>India)  | Crisis-Sensitive English Language Teaching and Learning: Pathways to Achieving Sustainable Development Goals in Education     |  |
| 1 1.7.4.7  | Jonathan Bryce, Hariharan<br>N. Krishnasamy (INTI IU);<br>Suriamurthee Moonsamy<br>Maistry (University of<br>KwaZulu-Natal, South<br>Africa); and Blanka Klímová,<br>(University of Hradec<br>Kralove, Czechia) | Examining Asynchronous Video Lessons' Role in<br>Improving Spoken English for Online English<br>Proficiency Exam Preparation  |  |
| 13:55-<br>14:05  | He Zejun, Nurien Hidayu bt<br>Muhamad Rusly (INTI IU)   | The Influencing Factors on Students' Usage of Chatbot in EFL Learning in Guizhou colleges, China.                             |  |































| 14:05-<br>14:15 | K. Shoba, Dr. S. Krishna<br>(AMET University, India)                               | Resilience and Sustainable Education in Crisis-<br>Prone Environments: A Study of Buchi Emecheta's<br>Novels  |
|-----------------|--|---|
| 14:20-<br>14:30 | Yao Chang Hong (INTI IU)   | The Positive Impact of the Reform of Higher Vocational Education in China   |
| 14:30-<br>14:40 | AP Dr. Bermadee Opal<br>McKenzie-Briscoe (The Mico<br>University College, Jamaica) | A Critical Analysis of an Approach to Sustaining Quality Education for Probable Futures through a Tertiary Institution                                      |
| 14:40-<br>14:50 | Nur Nadhirah Norizan (INTI<br>IU)  | Metadiscourse markers and student resilience in ESL writing lessons   |
| 15:00-<br>15:10 | P. Kamalesh Kumar, AP Dr.<br>C. Vairavan (AMET<br>University, India)               | Enhancing Learner Adaptability through Differentiated Instruction and Trauma-Informed Practices in Crisis-Prone Educational Contexts: A Mixed-Methods Study |
| 15:10-<br>15:20 | Xiyue Zhao (INTI IU)   | A Bibliometric Analysis of Mobile-Assisted English<br>Learning  |
| 15:20-<br>15:30 | Prof. Dr. Vincenzo Nunzio<br>Scalcione (University of<br>Basilicata, Italy)        | Education for sustainability: design and evaluation of learning environments through digital tools  |
| 15.30-<br>16.00 |  | Break   |
| 16:30-<br>16:40 | Dr. R. Muraliraja  | Electroless coating process on AH36 steel to protect from erosion and its parameter optimization through machine learning                                   |
| 16:40-<br>16:50 | Nivedhitha M   | Modelling New Pandemic Pedestrian Level Of Service(P-Plos) For Metropolitan Cities In India   |



| 16:50-<br>17:00 | Abinaya Ishwarya G K | Towards Zero Waste: Sustainable Approaches in Civil Engineering Projects with Use of Al/ML |
|-----------------|----------------------|--|
| 17:05-          | Dr.S.Durgalakshmi    | Investigation of Pavement Quality Concrete with  |
| 17:15           |                      | Partial Replacement of Steel Slag  |
| 17:15-          | Dr G Sharmilaa       | Air Pollution Studies In Chennai – A Survey  |
| 17:25           |                      | ,  |
| 17:25-          | Dr. S. Pradeep Kumar | An Overview of Driver State Detection Using AI   |
| 17:35           |                      | Techniques   |
|                 |                      | End of Track 5   |



# Co-organisers













































