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**Industrial Engineering and Operations Management Society International** 

# Welcome to the 4<sup>th</sup> Asia Pacific Conference on Industrial Engineering and Operations Management in HCMC, Vietnam

### To All-Conference Attendees:

On behalf of the IEOM Society International, we would like to welcome you to the 4<sup>th</sup> Asia Pacific International Conference on Industrial Engineering and Operations Management in Ho Chi Minh City, Vietnam, during September 11-14, 2023. The host and venue is CFVG-HCM, University of Economics Ho Chi Minh City. Co-Hosts are the University of the West of England, UK, Birmingham City University, UK and Universitas Sebelas Maret, Indonesia. This unique international conference provides a forum for academics, researchers, and practitioners from many industries to exchange ideas and share recent developments in the fields of industrial engineering and operations management. This diverse international event provides an opportunity to collaborate and advance the theory and practice of major trends in industrial engineering and operations management. There were more than 320 papers/abstracts submitted from 30 countries. After a thorough peer-review process, more than 240 have been accepted for presentation and publication. The program includes many cutting-edge topics in industrial engineering and operations management.

This conference will address many of the issues concerning the sustainable data-driven supply chain, and continuous improvement of quality and service. IEOM Society is delighted to have the following keynote speakers at the 4<sup>th</sup> Asia Pacific Vietnam Conference:

- 1. Prof. Dr. Vikas Kumar, Associate Dean for Research Innovation and Enterprise, Faculty of Business, Law and Social Sciences, Birmingham City University, Birmingham, UK
- 2. Ms Thao Nguyen, Main investor and manager Phu My 3, Thanh Binh Phu, Vietnam
- 3. Prof. Siwarit Pongsakornrungsilp, Walailak University, Thailand
- 4. Dr. Ir. Wahyudi Sutopo, Professor, Industrial Engineering Dept., Universitas Sebelas Maret (UNS), Surakarta, Indonesia
- 5. Mr Stan Weonsuk Lee, General Director at DAEHONG Communications Vietnam (LOTTE Group), HCMC< Vietnam
- 6. Prof. Fabien De Geuser, Director, CFVG, French Vietnamese School of Management, HCMC, Vietnam
- 7. Professor Jose Arturo Garza-Reyes, Professor of Operations Management and Head of the Centre for Supply Chain Improvement, Derby Management School, University of Derby, Derby, United Kingdom (UK)
- 8. Ms Jen Vu Huong, Senior Practitioner Coaching level by EMCC European Mentoring and Coaching Council, Vietnam
- 9. Dr. Linh Duong, Sr. Lecturer in Operations Management, Bristol Business School, University of the West of England, UK
- 10. Prof. Arvind Upadhyay, Professor of International Trade, Supply Chain and Logistics, University of Stavanger, Norway
- 11. Dr. Fitra Lestari, Vice Dean for Academic Affairs in Faculty of Science and Technology and Professor in Industrial Engineering Department, Universitas Islam Negeri Sultan Syarif Kasim Riau, Riau, Indonesia
- 12. Professor Alain Chong, Co-editor in chief of Industrial Management & Data Systems
- 13. Mr Nguyen Thanh Nha, General Director of Tan Cang SCT Human Resource Development LLC.
- 14. Dr. Sabri Bin Mohamad Sharif, Deputy VC Student and Alumni Affairs, Universiti Teknikal Malaysia (Melaka), Malaysia
- 15. Prof Chandan Chowdhury, Senior Associate Dean and Practice Professor, Indian School of Business (ISB), Hyderabad
- 16. Prof. Dr.-Ing. Savas Tumis, Professor in Marketing and Entrepreneurship at CFVG, Vietnam
- 17. Prof. Yigit Kazancoglu, Full professor and Head, Logistics Management Department, Yasar University, Turkey
- 18. Dr. Abdul Talib Bon, Professor, Dept. of Production and Operations Management, Universiti Tun Hussein Onn Malaysia
- 19. Dr. Kinnaleth VONGCHANH, Senior Lecturer / Research and Head of Thermal Lab, Department of Industrial and Mechanical Engineering (GIM), Institute of Technology of Cambodia (ITC), Phnom Penh, Cambodia
- 20. Dr. Pimlapas Pongsakornrungsilp, Assistant Professor of Tourism Management, Walailak University, Thailand
- 21. Dr. Anabela Soares, Senior Lecturer, University of the West of England, Bristol, UK
- 22. Dr. Ozlem Bak, Senior Lecturer in Operations Management, Brunel Business School, Brunel University UK
- 23. Professor Qile He (Horace), Professor of Strategy and Performance Management, University of Derby, UK

At this conference, IEOM Society will hold its plenary sessions on Global Engineering Education, Industry Solutions, Global Supply Chain and Logistics and panel sessions including Data Analytics, Women in Industry and Academia, Supply Chain, Sustainability, Engineering Education, Industry 4.0, Diversity & Inclusion sponsored by Ford Motor Company and Lean Six Sigma.

The IEOM Society would like to express our deep appreciation to our sponsors, university partners, organization partners, authors, reviewers, keynote speakers, panelists, track chairs, advisors, the local committee, and the many volunteers who have given so much of their time and talent to make this unique IEOM European international conference an overwhelming success.

Our conference host, CFVG-HCM, University of Economics Ho Chi Minh City would like to extend a warm welcome to all participants in HCMC, Vietnam. Our very best wishes to all of you for great learning and memorable experiences in Vietnam.



Dr. Tu Van Binh
Conference Chair
Co-Director of CFVG HCMC and
Associate Professor of Finance and
Vice Dean, Graduate School,
University of Economics Ho Chi
Minh City, Vietnam



Dr. Vikas Kumar Conference Co-Chair Associate Dean Research, Innovation and Enterprise and Professor of Operations and Supply Chain Management, Birmingham City University, UK



Dr. Linh N.K. Duong Conference Co-Chair Senior Lecturer Bristol Business School University of the West of England, UK



Dr. Ir. Wahyudi Sutopo Conference Co-Chair Professor, Industrial Engineering Department Universitas Sebelas Maret (UNS), Surakarta, Indonesia



Dr. Ahad Ali
Conference Co-Chair,
Executive Director – IEOM
Society and Associate
Professor and Program
Director of IE at Lawrence
Tech University, MI, USA



Professor Don Reimer Chief Operating Officer IEOM Society Adjunct professor at Lawrence Technological University, Southfield, Michigan, USA

# **Keynote Speakers**

# Tuesday, September 12, 2023

Welcome Address: Tuesday, September 12, 2023, 9:30 – 9:40 am



**Dr. Su Dinh Thanh**President
University of Economics Ho Chi Minh City (UEH)
Vietnam

Keynote I: Tuesday, September 12, 2023, 9:40 - 10:20 am



**Prof. Dr. Vikas Kumar**Associate Dean for Research Innovation and Enterprise Faculty of Business, Law and Social Sciences
Birmingham City University
Birmingham, UK

Prof Vikas Kumar is an Associate Dean for Research Innovation and Enterprise at the Faculty of Business, Law and Social Sciences, Birmingham City University, UK. He is also a Professor of Operations and Supply Chain Management. Prof Kumar has over a decade of teaching and research experience. Prof Kumar holds the title of Chartered Management Business Educator (CMBE) and is fellow of HEA. Prior to joining BCU, he was Director of Research and Scholarship at Bristol Business School, University of the West of England. Prof Kumar has also worked in India, Ireland and Hong Kong.

Prof Kumar is a leading researcher in the operations and supply chain management field. He has published more than 250 papers in leading journals and international conferences of high repute. Prof Kumar serves on the editorial board of several international journals, including the Journal of Business Logistics, the International Journal of Physical Distribution and Logistics Management, and the International Journal of Mathematical, Engineering and Management. He has guest-edited special issues in high-impact ABS 4/ 3\* journals.

Prof Kumar works very closely with industries and has generated over £1 million in research funding from various research agencies such as Innovate UK, EPSRC, British Council, British Academy, Newton Fund, and Science Foundation of Ireland. He has worked on several international collaborative projects with researchers from UK universities and from Brazil, Vietnam, Thailand, Indonesia, India, Mexico, Taiwan, Jordan, Columbia, Peru, Costa Rica, and Turkey. Specialties: Sustainability, Circular Economy, Operations Management, Meta-Analysis, Lean and Agile Systems, Green Supply Chain Management, Process Modelling, Structural Equation Modelling, Service Operations, Operations Strategy, Healthcare Management, Supply Chain 4.0.C++, LISREL, AMOS, SPSS, MINITAB, HTML, iGRAFX, MS-Office, MS-VISIO, Mix 1.7, SIMUL8



Keynote II: Tuesday, September 12, 2023, 10:20 – 11:00 am

**Prof. Fabien De Geuser**Director
CFVG, French Vietnamese School of Management
HCMC, Vietnam

Prof. Fabien DE GEUSER is an associate professor of management control systems. He is dean of CFVG Business School, the Vietnamese and French business school. He is part of ESCP Business school faculty (Paris) where he has been academic director of the master in management and associate dean of the Executive Education school. His specializations areas concern critical thinking development in management education, integration of well being issues in management control systems, adaptation and ergonomics of management tools and business schools education models.

His last books are about purposeful management ("Panne de sens", Dunod, 2022) and about the representations of management in classic novels.

Keynote III: Tuesday, September 12, 2023, 11:00 - 11:40 am



**Ms Thao Nguyen** Vietnam

My name is Nguyen Huynh. Originally, I was born in Vietnam – a developing country, and in an ordinary family. Fortunately, it was a time of peace and the economic transition period. Therefore, my childhood was not too difficult as my parents' childhood, but it was challenged enough for growing up. Thanks for that I could not only receive a good education but also practice many life skills to live independently. Also, I really enjoy 7 years studying and working in United Kingdom provided me many interesting experiences. After Covid-19 epidemic, I decided to back to Vietnam then found a chance to develop myself here.

From primary school until graduation, I received a lot of encouragement and support of my family to my studying. This also brought to me a good awareness about studying. Although, I'm not always strictly in line with the good result, fortunately I got distinction for my master degree of International Management major at the university of the West of England after graduating Business Management Bachelor at the same university.

After graduation I dreamed to work in academic area. However, my career way is not as straight forward as my intention. I relised that I may need more practical knowledge to develop myself. At the present, I have worked as a secretary in Thanh Binh Phu My company in Viet Nam. Prior to be a secretary, I experienced in many kinds of job and industries from United Kingdom to Vietnam, such as: beauty industry, pharmaceutical and grocery as a customer assistant in Boots Ltd in UK, food and beverage as a human manager in a restaurant, marketing executive in My Xuan port. Thanks to that, the jobs have brought to me a lot of practical knowledge and help me to realize that learning the knowledge and applying the knowledge is different. Otherwise, the practical knowledge can help to enhance the literature one.

Specifically, the recent job in Thanh Binh Phu My company who is the main investor and manager Phu My 3 specialized industry can help me feel the gap between literature and practice with a lot of knowledge about industry real estate, industrial park management, supply chain, logistic. Especially, Phu My 3 specialised industrial park is the only one specialized industrial park in Vietnam which brings many new concepts to me and help me chase my academic goal in the future.

Keynote IV: Tuesday, September 12, 2023, 11:40 am - 12:20 pm



Mr. Stan Weonsuk Lee General Director DAEHONG Communications Vietnam (LOTTE Group) Ho Chi Minh City Vietnam

Mr Stan Weonsuk Lee is the General Director at DAEHONG Communications Vietnam (LOTTE Group). He has over 20 years in many phases of Marketing management including Branding, Strategy, Planning, IMC, Retail, Digital, PR, Media, VIP CRM, New business development and Promotion event as a brand manager, team leader, AE and the General director. He is also a PhD candidate at the University of Economics Ho Chi Minh City.

Keynote V: Tuesday, September 12, 2023, 12:20 - 1:00 pm



**Dr. Ir. Wahyudi Sutopo**Professor
Industrial Engineering Department
Universitas Sebelas Maret (UNS)
Surakarta, Indonesia

Dr. Wahyudi Sutopo is a professor (since April 2020) and Head of Industrial Engineering and Techno-Economics (RITE) Research Group (since January 2014), Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret (UNS). He is serving as President of IEOM Indonesia Professional Chapter (since 2020). Since 2020, he has been assigned as Vice Dean for Human Resources, Finance, and Logistics (2020-2023). He was as deputy dean of the general and financial affairs of the faculty of engineering UNS (2019-2020). He was the head of the industrial engineering undergraduate study program (2015-2019); as an asset auditor of the internal supervisory unit (2014-2019); the head of UNS technology innovation center (2014-2016); and the general chair of the Indonesian industrial engineering higher education institution cooperation agency/BKSTI (2017-2020). He is an Assessor of BAN-PT (Noreg. 2017-01215). He had

cooperation agency/BKSTI (2017-2020). He is an Assessor of BAN-PT (Noreg. 2017-01215). He had experience working in the electronics industry as an engineer at PT. Panasonic Manufacturing Indonesia from 2000-2003. His educational background is the profession of an engineer (Ir) from the Professional Engineer Program – Universitas Sebelas Maret (UNS) in 2018; Doctor (Dr) in Industrial Engineering & Management from Institut Teknologi Bandung in 2011; Master of Management (M.Si.) from Universitas Indonesia in 2004, and Bachelor of Industrial Engineering (S.T.) from Institut Teknologi Bandung in 1999. He has professional qualifications as an associate professional engineer (P. Eng) since 2016.

3:20 - 4:00 pm - Keynote VIII - Tuesday, September 12, 2023



# **Prof. Arvind Upadhyay**Professor of International Trade, Supply Chain and Logistics University of Stavanger Business School University of Stavanger, Norway

Arvind Upadhyay is Professor of International Trade, Supply Chain and Logistics at the University of Stavanger Business School, University of Stavanger, Norway. Professor Upadhyay's research interests lie in the field of operations and supply chain management, specifically around two interrelated phenomena: operational efficiency and sustainability. Both phenomena often stretch beyond the walls of a single organization and demand complex and holistic solutions. The most recent additions to his research scope include broader issues such as greenhouse gas emissions and the social impacts of supply chain practices. Due to the emergence of the digital economy, his research scope also includes the impact of the digital economy on business operations. He combines a sound technical base across all aspects of operations, logistics and supply chain management

with excellent communication skills, delivering knowledge, understanding and skills in a user-friendly, relevant manner. He has teaching experience across Doctoral, Master, and Undergraduate levels and on vocational and professional courses. He is a Senior Fellow of the Higher Education Academy (SFHEA), UK. His research has been published in the International Journal of Production Research, Production Planning and Control, Journal of Business Research, Technological Forecasting and Social Change, Business Strategy and the Environment, and Journal of Cleaner Production, amongst others. He has presented at international conferences, including European Operations Management Association Conferences, Production and Operations Management Society Conference, British Academy of Management and research lunch seminars at Cambridge Judge Business School.

# Wednesday, September 13, 2023

Keynote IX: Wednesday, September 13, 2023, 9:40 - 10:20 am



### **Professor Alain Chong**

Co-editor in chief of Industrial Management & Data Systems
Associate Editor of Information & Management and Journal of Computer Information Systems

Dr. Alain Chong was born in London and grew up in Malaysia and Indonesia. Alain went to North Jakarta International School (NJIS), British International School (BIS) and Jakarta International School (JIS) from 1992 to 1998. He received his PhD in Information Systems from the University of Nottingham and PhD in Operations Management from Multimedia University Malaysia. Following his two years post-doctoral research fellowship at Hong Kong Polytechnic University, he became an assistant professor and later associate professor and professor in information systems at the University of Nottingham Ningbo China. Alain is currently the Dean of Graduate School and Global Engagement at the University of Nottingham Ningbo China. Alain was named the Ten Outstanding Young Malaysian by Junior Chamber International in 2012. Alain is ranked among the top 2% of scientists globally by Stanford-Elsevier. Elsevier named him one of the most cited scholars in China for seven consecutive years (2015 – 2021). He is also a recipient of the Ningbo 3315 Foreign Talent Scheme and the NSFC International Excellent Young Scientists grant. Alain was awarded the Ningbo Camellia Award in 2020. The Ningbo Camellia Award is the highest honor for foreign talent, recognizing their contribution to the social

and economic development of the city. Alain is currently the co-editor in chief of Industrial Management & Data Systems, Associate Editor of Information & Management and Journal of Computer Information Systems, and was previously the Senior Editor of Decision Support Systems. He also holds adjunct or visiting positions at Monash University Malaysia Campus, Taylor's University, Nanyang Technological University, Greenwich University, Hong Kong Polytechnic University, China University of Geosciences, and Zhejiang University of Finance and Economics. He has published in more than 100 SSCI/SCI journal articles and obtained more than 4 million RMB research grants.

Keynote X: Wednesday, September 13, 2023, 10:20 - 11:00 am



Prof. Hing Kai Chan
Professor of Operations Management
Nottingham University Business School, China
Co-editor of Industrial Management & Data Systems (SCI-indexed) since 2014
Associate Editor of Transportation Research Part E: Logistics and Transportation
Review (SCI-indexed) since 2018

Professor Hing Kai Chan joined the Nottingham University Business School China in September 2014 and is a Professor of Operations Management. He received the MSc degree (with distinction) and the PhD degree from the Department of Industrial and Manufacturing Systems Engineering, University of Hong Kong. He also earned a BEng degree in Electrical and Electronics Engineering from the University of Hong Kong. He received a BSc degree in Economics and Management from the London School of Economics and Political Science. He worked in the electronic manufacturing industry for over 10 years before joining the academia. Professor Chan has published over 250 academic articles and 9 monographs/edited volumes. His publications appear in Production and Operations Management, European Journal of Operational Research, various IEEE Transactions, Decision Support Systems, International Journal of Production Economics, and International Journal of Production Research, among others. He has been the co-editor of Industrial Management & Data Systems

(SCI-indexed) since 2014 and is an Associate Editor of Transportation Research Part E: Logistics and Transportation Review (SCI-indexed) since 2018. He was the Associate Editor of the IEEE Transactions on Industrial Electronics (SCI-indexed) from 2009 to 2015, and the Associate Editor of the IEEE Transactions on Industrial Informatics (SCI-indexed) from 2014 to 2017. Professor Chan also serves as an Editorial Board Member (or similar) in a number of journals such as the Journal of Business & Industrial Management (SSCI-indexed), International Journal of Logistics Research and Applications (SSCI-indexed), and Online Information Review (SCI-indexed). He has (co-)edited 15 special issues for reputable international journals.

Keynote XI: Wednesday, September 13, 2023, 11:00 - 11:40 am



**Ms Jen Vu Huong** Vietnam

Ms. Vu Thi Huong holds two Masters – Valedictorian degrees in the UK (Master of International Management) and Spain (Master of Business Innovation and Technology Management) from two top world academic scholars programs: Chevening – British Government and Erasmus – European Union. She has more than 5 years of experience in managing engineering projects (with a degree in Electronics and Telecommunications, Hanoi University of Technology) for Samsung International Corporation (Vietnam), Dell partner (Emerio, Malaysia). She has more than 10 years of experience in training, consulting, and coaching fields for people in over 20 countries; published 6 books based on qualitative and quantitative research in the field of human development and entrepreneurship leadership potential with American and Vietnamese publishers (Business Expert Press LLC) and Vietnam (Women Publishing House, Alphabooks Publishing House). She has participated in training programs in training in international programs such as High-Performance Coaching Academy and Expert Academy (USA); Bristol Coaching and The Coaching Academy (UK). Jen is also the first and only Vietnamese accredited with the Senior Practioner Coaching level by EMCC – European Mentoring and Coaching Council

- one of the major coaching bodies, alongside ICF and CCE. Jen is the Program Director of the first program in Vietnam training the 20 first coaches for Innovation and Entrepreneurship by implementing Government project 844 of the Ministry of Science and Technology.

Keynote XII: Wednesday, September 13, 2023, 11:40 - 12:20 pm



**Dr. Anabela Soares**Senior Lecturer in Strategy & Operations Management
Programme Leader for the MSc in International Management
University of the West of England, Bristol, UK

I am currently a Senior Lecturer in Strategy & Operations Management and the Programme Leader for the MSc in International Management at UWE, Bristol Business School. My professional background includes management roles in the service industry, consultancy (manufacturing and services sector) and teaching in various UK institutions. I have been an educator in Higher Education Institutions in the UK since 2009 and I am a HEA Fellow. I have published in international journals and conferences, and I am also a reviewer for various journals such as Production Planning & Control, International Journal of Production & Research, and Supply Chain Management: An International Journal, amongst others. My research interests include Supply Chain Quality Management, Inter-Firm Relationships, Servitization and Gamification. I am happy to receive PhD applications from candidates with shared research interests.

Keynote XIII: Wednesday, September 13, 2023, 12:20 - 1:00 pm



**Dr. Fitra Lestari**Vice Dean for Academic Affairs in Faculty of Science and Technology Professor in Industrial Engineering Department
Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Fitra Lestari is currently a Professor and Former Head of Industrial Engineering Department in Faculty Science and Technology, UIN Sultan Syarif Kasim Riau, Indonesia. Then, He also Head of Emerging Technology and Continuous Improvement in Center Of Islamic Data Science And Continuous Improvement (CIDSCI) Research Group, UIN Sultan Syarif Kasim Riau, Indonesia. He gained his BEng and MEng in Industrial Engineering from Andalas University (Indonesia) and Universiti Teknologi Malaysia (UTM- Malaysia). Then, He has continued the PhD project at UTM Malaysia in the field of Supply chain relationships in a downstream sector of the Palm Oil industry. He has published extensively including several refereed journal papers, conference papers, book chapters, and edited reference books associated with Supply Chain Management, Marketing, Logistic, and Performance Measurement. He serves as a reviewer, associate editor and editorial member for several national

and international journals. He joins as a member of the International Association of Engineers (IAENG), and Director of student competition in Industrial Engineering and Operations Management (IEOM Society- Indonesia), and General Secretary of Indonesian Industrial Engineering Higher Education Organizing Agency (BKSTI Indonesia-Sumatera II). He also registered as Halal Auditor in Indonesia. His industrial and government collaborators include Strategy of Small Medium Enterprises, Halal Supply Chain dan Performance Assessment and Institutional Strengthening of Oil Palm Supply Chains.



2:00 - 2:40 pm, Wednesday, September 13, 2023 - Keynote XIV

Mr. Nguyen Thanh Nha General Director Tan Cang – SCT Human Resource Development LLC Vietnam

Mr. Nguyen Thanh Nha is currently the General Director of Tan Cang – SCT Human Resource Development LLC.

2:40 - 3:20 pm, Wednesday, September 13, 2023 - XV



**Dr. Sabri Bin Mohamad Sharif**Deputy VC Student and Alumni Affairs
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-chancellors, 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).

3:20 - 4:00 pm, Wednesday, September 13, 2023 - Keynote XVI



Professor Jose Arturo Garza-Reyes, Ph.D.
Professor of Operations Management
Head of the Centre for Supply Chain Improvement
College of Business, Law and Social Sciences
Derby Management School
University of Derby, Derby, United Kingdom (UK)

Prof. Jose Arturo Garza-Reyes is a Professor of Operations Management and Head of the Centre for Supply Chain Improvement at the University of Derby, UK. He is actively involved in industrial projects where he combines his expertise and industrial experience in operations management to help organisations achieve excellence in their internal functions and supply chains. He has led international research projects funded by the British Academy, British Council and Mexico's National Council of Science and Technology. As a leading academic, he has published extensively in leading scientific journals and a number of international conferences. Professor Garza-Reyes has also published seven books in the areas of operations management and innovation, manufacturing performance measurement and quality management systems. He is Co-founder and current Editor of the Int. Journal of Supply Chain and Operations Resilience (Inderscience), Associate

Editor of the Int. Journal of Production and Operations Management, Associate Editor of the Journal of Manufacturing Technology Management and Editor-in-Chief of the Int. Journal of Industrial Engineering and Operations Management. Professor Garza-Reyes has also led and guest edited special issues for journals such as Production Planning & Control, Supply Chain Management: An International Journal, Int. Journal of Lean Six Sigma, Journal of Manufacturing Technology Management, Technological Forecasting & Social Change, Operations Management Research, International Journal of Quality and Reliability Management, among others. His areas of expertise and interest include Operations and Production Management, Supply Chain and Logistics Management, Lean and Agile Operations and Supply Chains, Sustainability within the context of Operations and Supply Chains, Circular or Closed-Loop Operations and Supply Chains, Sustainable and Green Manufacturing, Industry 4.0 technologies application in operations and supply chains, Lean Management, Quality Management & Operations Excellence. He is a Chartered Engineer (CEng), a certified Six Sigma-Green Belt, and has over eight years of industrial experience working as Production Manager, Production Engineer and Operations Manager for several international and local companies in both the UK and Mexico. He is a Fellow of the Higher Education Academy (FHEA), Fellow of the Industrial Engineering and Operations Management Society (FIEOM) and a member of the Institution of Engineering Technology (MIET).

# Thursday, September 14, 2023

Conference Chair Remarks: Thursday, September 14, 2023, 9:30 - 9:40 am

Keynote XVII: Thursday, September 14, 2023, 9:40 - 10:20 am



**Prof. Chandan Chowdhury**Senior Associate Dean and a Practice Professor of Operations Management and Information Systems
Indian School of Business (ISB), Hyderabad, Telangana, India

Professor Chandan did his MS in Mechanical Engineering and received his Ph.D. from the Hungarian Academy of Sciences and Budapest University of Technology and Economics. Prof. Chandan is currently a Senior Associate Dean and a Practice Professor of Operations Management and Information Systems at the Indian School of Business (ISB). He is also the Executive Director leading the (1) Munjal Institute for Global Manufacturing and the (2) Punj-Lloyd Institute of Infrastructure Management at ISB, the two institutes set up with MIT Sloan, as an Associate Partner. Dr. Chandan Chowdhury is also a Member of the Board of Governors at IIM Sambalpur. Before joining ISB, he served three top multinationals as Managing Director and Country

Manager. Before joining ISB, he served Dassault Systemes for over five years, initially as a Managing Director-India Geo and subsequently as Vice President-Global Affairs. During his last academic stint, Dr. Chandan was a Professor, Dean (Academy), and Chairman (Board of Research) at NITIE (National Institute of Industrial Engineering, established as a joint initiative between the United Nations and the Government of India in 1963). He was an expert panel member at NITI Aayog (National Institution for Transforming India, Government of India), developing the Manufacturing India@2035 roadmap. He is also the Chairman of the Technical Committee (Management and Productivity) at the Bureau of Indian Standards.

Keynote XVIII: Thursday, September 14, 2023, 10:20 - 11:0 am



**Dr.-Ing. Savas Tumis**Professor in Marketing and Entrepreneurship CFVG, Vietnam
Technical University of Berlin, Germany Vietnamese German University, Vietnam

Prof. Savas Tumis has been serving companies in various industrial sectors since 1995 to be a Market Leader and he is Coaching and Training companies and their Management Teams to be successful leaders. He holds a Ph.D. Degree in Engineering from the Technical University of Berlin and has more than 35 years of industrial and academic experience. Prof. Tumis worked as a manager, CEO, Entrepreneur, and Consultant in Germany, China, Turkey, and China. Since 1989 Prof. Tumis' expertise is especially in the Success Strategies of Hidden Champions – World Market Leader Companies based on Prof Hermann Simon's research. With the method

"MLS – Market Leadership Strategy" Prof Tumis is developing in internal workshops Success Strategies for Companies onsite. Prof Tumis established until today 9 Wholly Foreign Owned Enterprises in Europe and in Asia. He published 4 books and more than 30 research papers in English, German, Chinese, and Turkish. Prof Hermann Simon, and Prof Tumis as co-author will publish the book "Success Secrets of Global Market Leader Companies" in Vietnamese beginning of 2024. Prof Tumis can communicate in German, English, Chinese, and Turkish languages. Specialties: Establishing Market Leadership Strategies, Detection of the REAL Corporate Culture of Companies based on their Management Potential, Succession Success, Leadership Coaching and Training.

Keynote XIX: Thursday, September 14, 2023, 11:00 - 11:40 am



**Prof. Yigit Kazancoglu**Full professor and Head, Logistics Management Department Yasar University, Turkey

He holds BS degree from Industrial Engineering, and MBA and PhD from Business Administration, Operations Management. He is full professor and the head of Logistics Management Department in Yasar University since 2017. He has published many papers. His research areas are: green supply chain management, sustainability, circular economy, and digitalization. He has published more than 130 articles in the SCI and SCOPUS indexed journals. Prof Dr. Kazancoglu has papers published in reputed international journals such as; International Journal of Production Research, Production Planning and Control, Business Strategy and the Environment, Journal of Cleaner Production, International Journal of Logistics Management, Expert Systems with Applications, Annals of Operations Research, Transportation Research Part – E, Technological Forecasting and Social Change, Sustainable Cities and Society, Sustainable Production and Consumption, Resource Conservation and Recycling, Environmental Science and Pollution Research, Sustainable Development, Journal Material Cycles and Waste Management, Computers and Operations Research, Journal of Global

Information Management, Science of Total Environment; Operations Management Research, Journal of Enterprise Information Management, International Journal of Logistics Research and Applications, Industrial Data and Management System, International Journal of Quality and Reliability Management. He has completed many research projects funded by international institutions such as, DAAD, British Council (Newton Fund), European Union (Erasmus+, Transversal, Leanordo), Govt. of India (USERC), and Japan's National Grants for in Aid for Scientific Research. He is associate editor in International Journal of Mathematical, Engineering and Management Sciences and guest editor in Journal of Business Research, International Journal of Productivity and Performance Management, Computers & Industrial Engineering, and Sustainability. He is the member of NWO – Dutch Research Council – Circular Economy Committee.

Keynote XX Thursday, September 14, 2023, 11:40 am - 12:20 pm



Prof. Siwarit Pongsakornrungsilp Associate Professor of Marketing School of Management Walailak University, Thailand

Siwarit Pongsakornrungsilp is an Associate Professor of Marketing, School of Management, Walailak University, Thailand. He holds a Ph.D. degree in Management Studies from Exeter Business School, UK. He has been appointed as an Acting Dean, School of Management, since 2022. His current research interests focus on sustainability, value co-creation, consumer culture theory, brand culture, brand co-creation, and also superstitious and spiritual consumption. His current project is focusing on developing carbon neutral tourism in the South of Thailand and also driving long stay, digital nomad and wellness tourism in Andaman Tourism Cluster, Thailand. He has previously published articles that appeared in ABAC Journal, Innovative Marketing, Production Engineering, Sustainability, TEM Journal, Marketing Theory, Social Marketing Quarterly, Journal of Marketing Management, and Journal of Enterprise Information Management. He has successfully secured

funding in the excess of £1 million from various research agencies such as PMUC, Thailand Science Research and Innovation (TSRI), the Bio Diversity Based Development Office (BEDO), the Bank for Agriculture and Agricultural Cooperatives (BAAC), and the Thailand Research Fund (TRF).

Keynote XXI: Thursday, September 14, 2023, 12:20 - 1:00 pm



**Dr. Abdul Talib Bon**Professor, Department of Production and Operations Management Universiti Tun Hussein Onn Malaysia

Dr. Abdul Talib Bon is Professor of Production and Operations Management in Department of Production and Operations Management at the Universiti Tun Hussein Onn Malaysia (UTHM). He has a PhD in Manufacturing, which he obtained from the Universite de La Rochelle, France. He studied Business Administration major in Quality Management at the master's level in the Universiti Kebangsaan Malaysia for which he was awarded the MBA. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom. He is Director of Teaching Factory since 1 September 2016. Dr. Abdul Talib Bon has had over 33 years experiences of teaching in higher learning education. In UTHM, he teaches Industrial Engineering and Project Management at the under-graduate and postgraduate level. Dr. Abdul Talib Bon has multidisciplinary research interests that encompass industrial engineering, forecasting and Green Supply Chain

management. His completed 25 research grant projects as project leader and research member. He has supervised more than 120 undergraduate and postgraduate research projects. He has served as a reviewer for a number of industrial engineering, engineering management and computer science conferences and journals as part of his expertise sharing initiatives. He had published more than 400 Journals and Proceeding Scopus Indexed and 10 books. He is also Fellow and President of Industrial Engineering and Operation Management Society (IEOMS, Malaysia), Global Council member of Industrial Engineering and Operation Management Society (IEOMS Global).

2:00 - 2:30 pm, Thursday, September 14, 2023 - Keynote XXII



**Dr. Pimlapas Pongsakornrungsilp**Assistant Professor of Tourism Management Walailak University, Thailand

Pimlapas Pongsakornrungsilp is an Assistant Professor of Tourism Management at Walailak University, Thailand. She holds a Ph.D. degree in Management Studies from Exeter Business School, UK. She has been appointed as a Head of Research Center, School of Management, since 2022. Her research interests focus on sustainable tourism, carbon neutral tourism, and tourist behavior. Her current project is focusing on developing carbon neutral tourism in Thailand. She has previously published articles in Social Sciences, Journal of Enterprise Information Management, Innovative Marketing, Journal of Tourism Futures, and Sustainability. She also works as the Chair of Center of the Excellence for Tourism Business Management and Creative Economy, School of Management, Walailak University.

2:30 - 3:00 pm, Thursday, September 14, 2023 - Keynote XXIII



**Dr. Kinnaleth VONGCHANH**Senior Lecturer / Research and Head of Thermal Lab
Department of Industrial and Mechanical Engineering (GIM)
Institute of Technology of Cambodia (ITC), Phnom Penh, Cambodia

Dr. Kinnaleth Vongchanh holds a distinguished position as an international senior lecturer in the Department of Industrial and Mechanical Engineering and a researcher at the Research Innovation Center (RIC), Institute of Technology of Cambodia (ITC). She is also a co-founder of the Thermal Lab. With a focus on energy efficiency, waste-to-energy, bio briquettes, solar drying, and heat stress, her contributions have been impactful. She earned her master's and Ph.D. degrees in 2006 and 2010 respectively, from the Institute of Technology of Bandung, Indonesia. Previously, she conducted research at Hokkaido University and Tokyo Institute of Technology, Japan, and served as a lecturer-researcher at the Faculty of Engineering, National University of

Laos from 2010 to 2015. Dr. Vongchanh's accomplishments are reflected in her accolades, including the Best Researcher and Outstanding Researcher awards at ITC from 2018 to 2022 consecutively. She was also honored with the Outstanding Young Professor award by IEOM in 2021. Notably, she received the Energy Efficiency award at the 2020 ASEAN Energy Awards, as well as recognition as an energy auditor and energy manager trainer by METI, Japan, in 2020.

3:00 - 3:30 pm, Thursday, September 14, 2023 - Keynote XXIV



**Dr. Ozlem Bak**Senior Lecturer in Operations Management
Brunel Business School
Brunel University, UK

Dr Ozlem Bak is a Senior Lecturer in Operations Management at Brunel Business School, UK. She lectures on courses in operations management, research methods and supply chain management at undergraduate and postgraduate levels. She has received her PhD from the University of East Anglia supported by a full scholarship from the University of East Anglia, Management School in the UK. Her PhD received Emerald Highly Commended Award in the field of Operations Management. Her current research interest and experience lies in supply chain management particularly organisational transformation and e-business implementations in supply chains; supply chain skills; supply chain risk and resilience; organisational transformation and Industry- Higher Education collaboration. Ozlem is the editor of three books and her research has been published in national and international journals such as Supply Chain Management an International Journal (SCMIJ), Production Planning and

Control(PPC), Information Technology & People (ITP); Strategic Change; Benchmarking: an International Journal (BIJ); Journal of Qualitative Research. She has also edited three books on e-Business and Supply Chain Integration in public and private organisations and Green and Sustainable Supply Chains. Ozlems' academic activities are underpinned by industrial and commercial background which included experience in the automotive industry for companies such as Daimler Chrysler and Hyundai and distributors in the UK, Germany and Turkey as well as Consultancy.

3:30 - 4:00 pm, Thursday, September 14, 2023 - Keynote XXIII



**Professor Qile He (Horace)**Professor of Strategy and Performance Management University of Derby, UK

Professor Qile He, also known as Horace, is a Professor of Strategy and Performance Management at the University of Derby, UK. He was previously a Reader in Operations Management and the Associate Head of School for Research of the School of Strategy and Leadership at Coventry University, UK, successfully leading the school research portfolio. His research expertise and interests are in the area of interfirm alliances and partnerships, innovation strategies and processes of organizations, as well as sustainable and responsible business, and inter-organizational knowledge transfer. He has published over 80 papers in refereed journals, books, and leading international conference proceedings. Including prestigious international journals, such as British Journal of Management, European Management Review, International Journal of Production Economics, International Journal of Production Research, Supply Chain Management: An International Journal, Production Planning & Control, and Food Control, He has supervised multiple PhD candidates to completion.

He is an elected council member of the British Academy of Management. He is also a Senior Fellow of the Higher Education Academy and a Chartered Member of Chartered Institute of Logistics and Transport. He is a reviewing expert for European Commission Horizon2020 projects. He serves in the editorial board of three international journals. He is also an editorial review board member for the International Journal of Operations and Production Management (CABS 4\*). He was a selected member of staff for RAE2008 and REF2014.

In the past, he has led 3 undergraduate/postgraduate courses to successful accreditation or re-accreditation by CILT (Chartered Institute of Logistics and Transport) and CIPS (Chartered Institute of Procurement and Supply). He also led the development of the Management Pathway of the Transnational Research Degree Programme of Coventry University to a successful launch in Dubai.

### September 12, 2023, Tuesday, 4:00 - 7:00 pm

### Six Sigma Certification Green Belt Workshop



Dr. Ahad Ali

Associate Professor
Director, Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director, Graduate Certificate in Lean Six Sigma

Director of Smart Manufacturing and Lean Systems Research Group

A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering

Lawrence Technological University, Southfield, Michigan, USA Executive Director, IEOM Society International

Dr. Ahad Ali is an Associate Professor and Director of Bachelor of Science in Industrial Engineering and Master of Science in Industrial Engineering in the A. Leon Linton Department of Mechanical, Robotics and

Industrial Engineering at the Lawrence Technological University, Michigan. Dr. Ali is the Director of Smart Manufacturing and Lean Systems Research Group. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and Ph.D. in Industrial Engineering from University of Wisconsin-Milwaukee. Dr. Ali is the Executive Director of IEOM Society and Conference Chair of the Sixth International Conference on Industrial Engineering and operations Management, Kuala Lumpur 2016. He advised six doctorate students in Doctor of Engineering in Manufacturing Systems. Dr. Ali has published journal and conference papers. He was past President of IIE Lean Division. Dr Ali has done research projects with Chrysler, Ford, DTE Energy, Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. His research interests include quality, reliability, six sigma, manufacturing, simulation, optimization, scheduling, maintenance, e-manufacturing, lean, CAE and GD&T and. He is a member of ASEE, IEEE, IEOM, INFORMS, and SME.

### **Six Sigma Certification Topics**

Six Sigma Fundamentals

#### Define

- Project Charter
- Process Maps, SIPOC, Matrix Diagrams, Critical to Quality (CTQ) Metrics, and DPMO
- Pareto Chart
- SIPOC

#### Measure

- Process analysis
- Probability, Statistics and Distribution
- Data collection and analysis
- Gage Repeatability and Reproducibility (R&R)
- Process capability
- X-Bar Charts, Run Charts, Moving Average Charts, EWMA Charts, Attribute Charts, Takt Time, Standardization, Spaghetti Diagrams, and Setup Reductions

### **Analyze**

- Value Stream Map
- Hypothesis Testing
- Goodness of fit test
- Regression Analysis
- Cause & Effect Diagrams
- ANOVA
- Confidence Interval

### **Improve**

- Lean Tools to reduce NVA: 5S, Kaizen, Seven Zeros, TPS Principles, FMEA, and Simulation
- Design of Experiments (DOE)
- Statistical Process Control (SPC)
- Analysis of Variance (ANOVA)
- Solutions Validation

### Control

- Control Plan
- SPC
- Tracking
- DFSS

# September 14, 2023 (Thursday) - Session: 7:00 – 10:00 pm Conference Awards Ceremony and Gala Dinner

The gala dinner will be held on a cruise ship. It will bring us around Saigon River for 1 hour 45 minutes while we enjoy our dinner. Some traditional Vietnamese song and dance will be performed too.









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Dr. Ho Viet Tien, CFVG, University of Economics Ho Chi Minh City,

Dr. Từ Văn Bình, CFVG, University of Economics Ho Chi Minh City, Vietnam

Dr. Vikas Kumar, Birmingham City University, UK

Dr. Linh Duong, University of the West of England, UK

Dr. Ir. Wahyudi Sutopo, Universitas Sebelas Maret, Surakarta, Indonesia

Dr. Ahad Ali, Lawrence Technological University, Michigan, USA

#### **Technical Chairs**

Dr. Abdul Talib Bon, Professor, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia

Dr. Lina Gozali, Universitas Tarumanagara, Indonesia

Dr. Fitra Lestari, Vice Dean for Academic Affairs in Faculty of Science and Technology and Professor in Industrial Engineering Department, Universitas Islam Negeri Sultan Syarif Kasim Riau, Riau, Indonesia Dr. Jafri Mohd. Rohani, Associate Professor, Materials, Manufacturing & Industrial Engineering, School of Mechanical Engineering, Faculty of Engineering, Universiti Teknologi Malaysia, Johor, Malaysia Dr. Dwi Agustina Kurniawati, M.Eng., Ph.D., Faculty of Science and Technology, UIN Sunan Kalijaga, Indonesia

#### **Program Chairs**

Professor Don Reimer, Chief Operating Officer (COO) and Director of Student Chapter Development, IEOM Society

Dr. Pham Minh Vu, Admissions and Communication Manager, French-Vietnamese Center for Management Education (CFVG), HCMC Dr. Edly F. Ramly, Certification Director for EFR Certification and Fellow of IEOM Society

### **Program Committee**

Dr Faridh Ahmad Zaharuddin (Expert in Welding Processes), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia Khidzir Zakaria (Expert in Additive Manufacturing), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia Anh Duong Vo Nhi, International University – Vietnam National University

HCM City, Vietnam Anh Su Kim, Can Tho University, Vietnam

Aung Myo Lwin, Yangon Technological University, Myanmar AyeSu Hlaing, IT, Myanmar

Bui Dinh, Viettel High Technology Industries Corporation-VHT, Vietnam Bui Minh Dinh HUST, Vietnam

Chea Eliyan, Royal University of Phnom Penh, Cambodia Dinh Linh, HUST, Vietnam

Dinh-Nhat Truong, Lecturer at Division of Construction Technology and Project Management, the Department of Civil Engineering, University of Architecture, Ho Chi Minh City, Vietnam

Duong Do Tung, University of Science and Technology of Hanoi, Vietnam Duy Anh Dang, University of Science and Technology of Hanoi, Vietnam Duy Phan The, Ho Chi Minh City University of Industry and Trade, Vietnam

Faridh Ahmad Zaharuddin (Expert in Welding Processes), Universiti Teknologi Malaysia

Felix C. Veroya, Professional Industrial Engineer, Certified Lean Facilitator, Lean Six Sigma Master Black Belt and Certified Sprint Master, Manila, Philippines

Ha Thi Xuan Chi, International University - Vietnam National University HCM City, Vietnam

Hien Nguyen Thi Thuy, Faculty of Civil and Environmental Engineering,

Hop Nguyen Van, International University of Ho Chi Minh City, Vietnam Huy Nguyen Hoang, International University - VNUHCM, Vietnam Huy Truong Quang, RMIT Vietnam, Vietnam

Janice J. Gumasing. Mapua University. Manila, Philippines Khaing Myat Thu, Technological University (Hmawbi), Myanmar Khidzir Zakaria (Expert in Additive Manufacturing), Universiti Teknologi Malaysia

Khin Khin Thant Yangon Technological University, Myanmar Kian Phang Anh, Ho Chi Minh University of Industry and Trade, Vietnam Kim Cuc Vo Thi, Can Tho University, Vietnam

Kinnaleth Vongchanh, Institute of Technology of Cambodia, Cambodia Korakanh PASOMSOUK, Associate Professor, Head of Department Mechanical Engineering and Industrial Engineering, Faculty of Engineering, National University of Laos, Sokpaluang Campus, Laos Le Xuan Thanh, HaNoi University of Mining and Geology, Vietnam Linh Nguyen Tran Quang, International University - Vietnam National University, Vietnam

Luong Thi Ngoc Anh, International University, Vietnam Ly Tran, School of Industrial Engineering and Management, International University, Vietnam National University, Ho Chi Minh City, Vietnam Mai Quyen Hoang, Hanoi University of Industry, Vietnam Minh Hoang Pham, Hanoi University of Science and Technology (HUST),

Moe Moe Myint, Technological University (Mandalay), Myanmar Ngan Tuyet Truong, School of Business and Management, RMIT University, Vietnam

Nguyen Thi Hang, Hanoi University of Science and Technology, Vietnam Nguyen Thi Mai Hanoi University of Science and Technology, Vietnam Nguyen Duc Tuyen, Hanoi University of Science and Technology Vietnam

Nguyen Huy Thien Phuc, International University - Vietnam National University HCM City Vietnam

Nguyen Minh, International University, Vietnam

Nyein Aye Maung Maung, Yangon Technological University, Myanmar Pham Dang Khoi Nguyen, University of Science and Technology of Hanoi, Vietnam

Puthika Kou, Chiang Mai University, Cambodia

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Quang Thai Lam, Department of Electrical Engineering, Faculty of Electrical-Electronic Engineering, University of Transport and Communications,, Vietnam

Quoc Huynh, International University, Vietnam

Su Nandar Hlaing, Yangon Technological University, Myanmar

Thanh-Lam Nguyen Lac Hong University, Vietnam

Thi Huynh Anh Le, Faculty of Project Management, The University of Danang, University of Science and Technology, Vietnam

Thi Kim Loan Nguyen, University Medical Center, Vietnam

Thiri Kyaw, Technological University (Mandalay), Myanmar Thu Tu Ngo Dan, UEH-Interanational School of Business, Vietnam

Tram Nguyen, Faculty of Business Administration, Ho Chi Minh City Open University, Ho Chi Minh City, Vietnam

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Trung Nguyen, A.P. Moller Maersk, Vietnam

Truong Thi Nguyen, Can Tho University, Vietnam

Truong Nguyen Bosch Vietnam Vietnam

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University HCM City, Vietnam

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Y Nhu Ngoc Hoang, School of International Business and Marketing, University of Economics, Vietnam

Yinmon Swe, IT, Myanmar

Zaw Lin Htet, Genius Leaf Team: Technical Services & Innovations, Myanmar

Zin May Zaw, Technological University (Mandalay), Myanmar

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Mohammad Abdullah Shaikh, Deakin University, Australia Bhaskar Bhandarkar, Indian Institution of Industrial Engineering (IIIE), Mumbai, India

Mohd Khairol Anuar bin Mohd Ariffin, Coordinator Master of Manufacturing System Engineering, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University Putra Malaysia (UPM), Selangor, Malaysia

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Abdullah Nayeem, Faculty of Agriculture and Food Science, Laval University, Quebec, Canada

## 43rd IEOM Global Engineering Education

8:00 - 9:45 am - Room 1 (Onsite)

8:00 am -8:20 am (Tuesday, September 12)



Dr. I Gede Susrama Mas Diyasa Vice Dean and Assistant Professor, Faculty of Computer Science University of Pembangunan Nasional "Veteran" Surabaya, East Java, Indonesia

I Gede Susrama Mas Diyasa, received his Bachelor Electrical Engineering (1993) Adhi Tama Institute of Technology Surabaya, Master Informatics Engineering (2000) Sepuluh Nopember Institute of Technology (*ITS*) Surabaya and Doctor Electrical Engineering (2019) Sepuluh Nopember Institute of Technology (*ITS*) Surabaya. Currently as Vice Dean and an Assistant Professor at Faculty of Computer Science University of Pembangunan Nasional "Veteran" also registered as Engineer Expert Certified. He currently leads a research team grant from Ministry of Education, Indonesia since 2009 in Sustainability, Intelligence System, Biomedis, also Machine Learning, include Image and Video Processing. He is also a International Program Committee Chair (The Information Technology International Seminar (ITIS) Since 2020), LAM INFOKOM Accreditation Assessor since 2022, Commissioner of PT IGS Indonesia Groups, member of IEEE, author of 92 SCOPUS documents, editor

and reviewers Journal in SCOPUS, DOAJ, CROSSREF, GOOGLE and SINTA(Indonesia indexed)

8:20 am - 8:40 am (Tuesday, September 12)



Dr. Muhammad Isradi Lecture and Assistant Professor, Department of Civil Engineering Faculty of Engineering Mercu Buana University, Indonesia

Muhammad Isradi received his Bachelor of Civil Engineering (1998) Universitas Muhammadiyah Malang Indonesia, Master Civil Engineering (2001) Universitas Brawijaya Malang and Doctor of Philosophy Civil Engineering and Technology (2023) Universiti Tun Hussein Onn Malaysia. Currently as Lecture and Assistant Professor at Faculty of Engineering Department of Civil Mercu Buana University Indonesia also registered as Engineer Expert Certified, member of IORA (Indonesian Operation Research Association), ADRI (Indonesia Expert and Lecturer Association). As the author of 14 SCOPUS documents, 92 national papers authors, editors and journal reviewers in DOAJ, CROSSREF, GOOGLE and SINTA (indexed Indonesia)

8:40 am - 9:00 am (Tuesday, September 12)



Dr. Ir. Eko Pujiyanto Associate Professor and Head of Master of Industrial Engineering Program Sebelas Maret University, Surakarta Indonesia

Eko Pujiyanto received the B.S. degree in Mathematics in 1993 and the M.Eng. degree in Industrial Engineering in 1998, both from Bandung Institute of Technology, Bandung and Ph.D. degree in Mechanical Engineering in 2012 from Gadjah Mada University, Yogyakarta, Indonesia. He is also received Professional Engineer from Sebelas Maret University, Surakarta Indonesia. He is currently as an Associate Professor and Head of Master of Industrial Engineering Program. He is a member of The Center for Research in Manufacturing System at Sebelas Maret University, Surakarta Indonesia. His main research is the modeling and experimentation of manufacturing processes. His research interests include modeling and optimization using heuristics. In addition to research in the field of sustainable manufacturing modeling, he is also experimental-based

research related to biomaterials using the Taguchi Method. The results of the multi-response experiment using the Taguchi method were optimized simultaneously with the multi-objective optimization tool. He has authored and coauthored several papers on these subjects. He has published more than 40 papers in journals and international conferences and owned h-index 5. He has been involved as a reviewer in several journals, such as the International Journal of Production Research, Production & Manufacturing Research, International Journal of Management Science and Engineering Management, International Journal of Applied Science and Engineering and Safety and Health at Work. He has completed the supervision of 15 Master Students and over 50 Undergraduate Students.

9:00 am - 9:20 am (Tuesday, September 12)



Nangkula Utaberta Head of Research and Postgraduate Study School of Architecture and Built Environment (SABE) UCSI University. Nangkula, Malaysia

Nangkula Utaberta is an International Writer, architect and Professor of Architecture who has written 28 books of Architecture in Malaysia. Currently he is Head of Research and Postgraduate Study at School of Architecture and Built Environment (SABE), UCSI University. Nangkula is the recipient of the National Book Award of Malaysia for Architecture and Creative Books for three years in 2014, 2015 and 2017 awarded by Prime Minister of Malaysia. He was also a recipient of Anugerah Gemilang Putra as the Best lecturer for Book Publication awarded by Sultan (king) of Selangor in 2018. As an academic since 2009 Nangkula has produced more than 70 chapters in books, 390 papers in SCOPUS and ISI WOS indexed journals, 28 articles in Citation Index Journals, 139 papers in indexed proceedings and over 30 articles in newspaper articles. Up to 2023, he

used to lead 23 major Malaysian Government Major research projects including Permata Pintar, Lake Chini Biosphere Research, Fundamental Research Grant, Trans Disciplinary Research Grant (TRGS), Flood Disaster Management, Community-Industriy-University Grant worth more than RM 4.5 million. He is also involved in several interdisciplinary consultancy projects since 2010, bringing the High Impact Industry and Community Award from the UPM Vice-Chancellor for the Design of Indonesian School of Kuala Lumpur in 2016, 2017 and 2018.

### 42<sup>nd</sup> IEOM Industry Solutions and Industry 4.0 - Plenary

September 13, 2023, Wednesday, 8:00 – 9:30 pm – Meeting Room 1 (Onsite)

8:00 am - 8:20 am (Wednesday, September 13)



Ts Dr Ihfasuziella Binti Ibrahim Senior Researcher Construction Research Institute of Malaysia (CREAM), Kuala Lumpur, Malaysia

Ts. Dr. Ihfasuziella Ibrahim is a Senior Researcher at Construction Research Institute of Malaysia (CREAM). CREAM is a research institute established under the Construction Industry Development Board (CIDB), which she joined in February 2013. Ihfasuziella received her Bachelor Science in Real Estate Management with Honors from UTHM, Johor in 2009. Upon completing her studies, she has been a research assistant in University Tun Hussein Onn Malaysia (UTHM) in 2010 under the Technology Management & Business Faculty. Due to high enthusiasm and encouragement for continuing studies, Ihfasuziella have been offered a place at University Tun Hussein Onn Malaysia entering master's level on Science in Property and Facilities Management in 2010. The title of her thesis is "Development of Space Charging Model in Malaysian Higher Education Institutions'. Ihfasuziella completed her Doctorate of Philosophy (PhD) in Property Management from MARA University of Technology (UiTM) under Faculty of Architecture, Planning and Surveying in 5 years and graduated in 2021. The title of her PhD thesis is

'Development of Shopping Centre Classification Model using Analytical Hierarchy Process (AHP)'. The research study was evaluated by an expert professor in property field, Professor Piyush Tiwari from University of Melbourne, Australia. Prior to that, Ihfasuziella entered Pahang Matriculation College in 2005 and her background study was accounting, economic and business management. She is also a member in Malaysian Association of Facilities Management (MAFM). She also committee for Industrial Engineering and Operations Management (IEOM) for Malaysian chapter. Her research interests are in built environment, facilities management, strategic facilities management, property management, performance management, construction management, Geographic Information System (GIS) and Industrialised Building System (IBS). She has published papers in the local and international conference, seminars, journals, articles, and chapter in books. She has been involved with the development of a module entitled Technology and Innovation in Facility Management (SMT15103) in 2016 for Open University Malaysia (Msc Program) and the Facilities Management module for CIDB. She also involved in book publishing entitled Facilities Management Initiatives and Empowerment for Construction Industry in Malaysia in 2021, Construction Law Report for Edition 2018 until 2021, and Managing Property and Facilities in Higher Education Institutions (Chapter 3-Space Management for an Effective Space Usage for Classrooms in Academic Buildings in 2006. She also contributes to The Ingenieur Article published in Vol 90 April-June 2022 under the title Strategic Approach to Facilities Management in the Healthcare Sector. Infasuziella welcomes any future research collaboration pertaining her research areas.

8:20 am - 8:40 am (Wednesday, September 13)



Alias Abdul Rashid Head of Maintenance Unit KLCC Urusharta Sdn. Bhd., Permata Sapura, Kuala Lumpur, Malaysia

Alias Abdul Rashid is a Head of Maintenance unit at Permata Sapura, KLCC Urusharta Sdn. Bhd from Feb 2021. Alias received her Bachelor in Electrical Engineering with Honors from UTHM, Johor in 2007. Due to high enthusiasm and encouragement for continuing studies, Alias have been offered a place at University Technology Mara (UiTM) Shah Alam entering master's level on built environment and Facilities Management in 2022. The title of his thesis is "Critical Success Factor for Iconic Building Maintenance". Prior to that, Alias entered Negeri Sembilan Matriculation College in 2002 and his background study was Science Biology. He is also a member in Malaysian Association of Facilities Management (MAFM). His experienced in facilities management, asset management and energy management with over 14 years to maintain the prestige condition of Permata Sapura by managing the facilities within the budget proposed. He lead the development of sustainable supply chain programs, including supplier assessments, audits, and performance monitoring. He also collaborate with cross-functional teams to drive sustainable practices and achieve targets for energy and resource efficiency. Alias need to ensure

all defects are closed by the project team as the building started in operation on Feb 2021 with DLP in 18 Months except for the gondola and vertical transport by two (2) years. Auditor for 37001:2016.



8:40 am – 9:00 am (Wednesday, September 13)
Ts. Dr. Hj. Mohd Khairolden Bin Ghani
Senior Researcher
Construction Research Institute of Malaysia (CREAM). Kuala Lumpur, Malaysia

Ts. Dr. Hj. Mohd Khairolden Bin Ghani holds a Doctor of Philosophy (Ph.D) in Built Environment from the University of Malaya, Masters of Science in Civil Engineering (Construction), Bachelor Degree Civil Engineering from UiTM and Diploma in Civil Engineering and Professional Technologist from the Malaysia Board of Technologist (MBOT). He has been working with Construction Research Institute of Malaysia (CREAM) for the past 16 years. His expertise and research areas in facility management, digitalization, resilient construction and contractor development as well as environment and sustainability. To date he has managed and secured research projects and published many journal papers, conferences, proceeding locally and internationally. Currently he is a manager in charge of construction industry consultancy, industrial lecturer at Faculty of Built Environment, Universiti Malaya (UM).

Recently he has been appointed as Industrial Advisor and Adjunct Professor from Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM).

9:00 am - 9:20 am (Wednesday, September 13)

ID 333 Quadruple Helix Social Innovation in Labuhan Coastal and Lake Shuji Tourism in PT PHE Upstream Pertamina: West Madura Offshore and Prabumulih Field Case Studies

Fitri Erika, Widya Gustiani, PT Pertamina EP Cepu Regional 4, Central Java, Indonesia
Hengky Rosadi, Erwin Hendra, and Putra, PT Pertamina EP Prabumulih Field Zona 4 Regional, South Sumatera, Indonesia
Ulil Masruroh, PT Pertamina Hulu Energi West Madura Offshore Zona 11 Regional 4, East Java, Indonesia
Amarullah. PT Pertamina EP Cepu Regional 4, Central Java, Indonesia
Arya Dwi Paramita, PT Pertamina Hulu Energi (PHE), Jakarta, Indonesia

## 13th IEOM Business Management and Project Management - Plenary

September 14, 2023 - 8:00 - 9:40 am - Room 1 (Onsite)

8:00 - 8:20 am, Thursday, September 14, 2023



**Dr. Muhamad Chairul Basrun Umanailo** Lecturer at Social and Political Sciences Brawijaya University Indonesia

Dr. Muhamad Chairul Basrun Umanailo Born in Tanah Lapang Kecil, Ambon City on November 22, 1978. Undergraduate program in the Department Sociology, Eleven March University (1997-2001). Continuing the Postgraduate Masters program in Sociology at Eleven March University (2012-2015). Completed Doctoral Program in Sociology FISIP Universitas Brawijaya in 2021. Active as a Permanent Lecturer at Iqra Buru University in 2011-2022. Currently active as a lecturer at Social and Political Sciences at Brawijaya University. Served as Vice Chancellor III of Iqra Buru University (2016-2018). Member of the Indonesian Sociological Association (2003-present). Previously served as Head of Center for Planning and Development Studies at Iqra Buru University in 2017-2022. Become a reviewer in several Scopus indexed journal and WoS.

8:20 - 8:40 am, Thursday, September 14, 2023



**Dr. Syamsiah Badruddin**Professor in the Sociology Study Program
National University
Indonesia

Syamsiah Badruddin, Holds a Bachelor of Education Degree (1987) from the Ujung Pandang Teaching and Education Institute (IKIP), Masters in Population and Family Planning (1997) and Doctor of Social Sciences (2004) Hasanuddin University. Currently as a Professor in the Sociology Study Program at the National University. He is currently leading the grant research and community service team from the Ministry of Education, Indonesia since 2022 in the field of social, sustainability and digitalization of education. Renewable energy. He also serves as Chair of the South Sulawesi Institute for Public Policy Studies (LKKPI). General Treasurer of DPP ADRI (Expert and Lecturer of the Republic of Indonesia), Head of Research and Publication of IPEST (International Researcher in Economics, Social and Technology), author of 32 Scopus documents.

8:40 - 9:00 am, Thursday, September 14, 2023

Indonesia



**Evi Sopandi**Coordinator of Collaboration/Cooperation, Educational Research Planner National Research and Innovation Agency (BRIN)

Evi Sopandi received his Bachelor of Biology Education (1990) IKIP Padang Indonesia, Master on Biology (2000) Universitas Pendidikan Indonesia, Bandung, and Doctor Degree on Educational Research and Evaluation (2019) Universitas Negeri Jakarta, Indonesia. Currently he serves as Coordinator of Collaboration/Cooperation, Educational Research Planner in National Research and Innovation Agency (RPIN) Indonesia. He is active in many

Educational Research Planner in National Research and Innovation Agency (BRIN) Indonesia. Let is active in many research team conducted by National Research and Innovation Agency, majoring in social sciences, humanities, and education. He also author of several SCOPUS documents, and many articles in SINTA Journals (Indonesia indexed).

9:00 - 9;20 am, Thursday, September 14, 2023



Dr Fauzilah Salleh Associate Professor Department of Finance and Banking Faculty of Business and Management Universiti Sultan Zainal Abidin Terengganu. Malaysia

Dr Fauzilah Salleh is an Associate Professor at the Department of Finance and Banking, Faculty of Business and Management, Universiti Sultan Zainal Abidin, Terengganu. She holds a PhD in Finance from Universiti Malaysia Kelantan, in addition to a Bachelor of Business Administration in Insurance (Hons), a Master of Science in Marketing, and Master of Entrepreneurship. Her areas of expertise include risk management, marketing and

entrepreneurship. With over 24 years of teaching and research experience, she has also spent 10 years in the financial and government sectors. In terms of research, she was appointed as a researcher under the Ministry of Home Affairs of Malaysia to research on Safety Perception Index 2023, Ministry of Higher Education to develop the Cyber Security Risk Management Framework for Higher Education Institutions: Strategies to Address Uncertainty in Industry 4.0, Islamic Risk Management for Public Listed Companies in Malaysia, and Develop a National Disaster Risk Reduction Framework (DRR) on Flood Risk Management. In addition, Dr Fauzilah was also entrusted by the Takaful industry to develop Micro Takaful coverage

products for the B40 group. Her skills in quantitative and qualitative research methodology are seen as the strength to ensure the success of each research project. She has also presented papers at international and national conferences and produced several international conference proceedings, journal articles, and research projects, specifically in risk management, marketing and entrepreneurship.

9:20 - 9:40 am, Thursday, September 14, 2023



**Dr. Tukimun**Lecturer
Faculty of Civil Engineering
17 Agustus 1945 University
Samarinda, Indonesia

Tukimun, received his Bachelor Civil Engineering (2002) Universitas 17 Agustus 1945 Samarinda, Master Civil Engineering (2004) Universitas 17 Agustus 1945 Surabaya and Doctor Civil Engineering (2021) Universitas Hasanuddin Makassar, Indonesia. Currently as Lecturer at Faculty of Civil Engineering 17 Agustus 1945 Samarinda, Indonesia also registered as Engineer Expert Certified. Engineer Professional Program (PPI) at UMI-Makassar in 2018. Received the 2019 Associate Professional Engineer Program (IPM) and the Asean Engineering Registration Program (Asean Eng) in 2019. Current activity is as a permanent lecturer at the 17 August 1945

Samarinda University Foundation at the Faculty of Engineering, Department of Civil Engineering, also the current position as the Main Director of PT. Arcsindo Karya Utama Engineering Consultant. He is active as an administrator for professional organizations such as the DPP INKINDO KALTIM, DPP INTAKINDO KALTIM, the East Kalimantan branch of the Indonesian Engineers Association (PII). In addition, he is also active in organizations such as HPJI East Kalimantan, the Indonesian Lecturer Community and other activities related to the BNSP / LSP HATSINDO Expertise Assessment and Instructors in the Field of Civil Engineering by Government Agencies both Local and National.

### **Submissions Received from Countries and Territories**

2.       Bangladesh       10.       Lebanon       18.       PNG       26.       UAE         3.       China       11.       Malaysia       19.       Qatar       27.       UK         4.       France       12.       Morocco       20.       Saudi Arabia       28.       United States         5.       Germany       13.       New Zealand       21.       South Africa       29.       Vietnam         6.       India       14.       Norway       22.       South Korea       30.       Zimbabwe         7.       Indonesia       15.       Pakistan       23.       Taiwan         8.       Japan       16.       Peru       24.       Thailand	1.	Australia	9.	Kuwait	17.	Philippines	25.	Turkey
4. France12. Morocco20. Saudi Arabia28. United States5. Germany13. New Zealand21. South Africa29. Vietnam6. India14. Norway22. South Korea30. Zimbabwe7. Indonesia15. Pakistan23. Taiwan	2.	Bangladesh	10.	Lebanon	18.	PNG	26.	UAE
5. Germany13. New Zealand21. South Africa29. Vietnam6. India14. Norway22. South Korea30. Zimbabwe7. Indonesia15. Pakistan23. Taiwan	3.	China	11.	Malaysia	19.	Qatar	27.	UK
6. India 14. Norway 22. South Korea 30. Zimbabwe 7. Indonesia 15. Pakistan 23. Taiwan	4.	France	12.	Morocco	20.	Saudi Arabia	28.	United States
7. Indonesia 15. Pakistan 23. Taiwan	5.	Germany	13.	New Zealand	21.	South Africa	29.	Vietnam
	6.	India	14.	Norway	22.	South Korea	30.	Zimbabwe
8 Janan 16 Peru 24 Thailand	7.	Indonesia	15.	Pakistan	23.	Taiwan		
o. Japan 10. i eta 24. i hallana	8.	Japan	16.	Peru	24.	Thailand		

### 14th International Conference on Industrial Engineering and Operations Management

February 12-14, 2024, Dubai, United Arab Emirates (UAE)

Venue: Hyatt Regency Dubai Host: Khalifa University, Abu Dhabi

http://ieomsociety.org/dubai2024/

Conference Chair: Dr. Mohammed Omar

Professor and Chair, Department of Industrial and Systems Engineering Khalifa University, Abu Dhabi, UAE

## 22<sup>nd</sup> IEOM Global Supply Chain and Logistics

September 14, 4:00 - 5:45 pm - Meeting Room 1 (onsite)

4:00 pm - 4:30 pm



Dr. Muhammad Hisjam
Department of Industrial Engineering, Faculty of Engineering
Universitas Sebelas Maret (UNS)
Surakarta, Indonesia

Title: Problem Based Learning for Techno-economic Analysis for Logistics System Course: Case in a State-owned Warehouse

Muhammad Hisjam is a Lecturer at the Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret since 1998. He earned Bachelor's in Agro-industrial Technology from Universitas Gadjah Mada, a Master in Industrial Engineering & Management from Institut Teknologi Bandung, and Ph. D in Environmental Science from Universitas Gadjah Mada. His research interests are supply chain, logistics, business, and sustainable development. He published some papers in journals and proceeding his research area. He and his team have won some research grants from Government institutions and private companies. He holds an Accredited Supply Chain Analyst from the American Academy of Project Management. He is the Head of the Logistics System and Business

Laboratory, Faculty of Engineering, Universitas Sebelas Maret. He is one of the directors of IEOM Indonesia Professional Chapter. He is a member of IISE. AAPM and IEOM.

4:30 pm - 5:00 pm



Dr. Ahad Ali
Associate Professor
Director of Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director of Smart Manufacturing and Lean Systems Research Group
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University, Southfield, Michigan, USA
Executive Director, IEOM Society International

Dr. Ahad Ali is an Associate Professor and Director of Bachelor of Science in Industrial Engineering and Master of Science in Industrial Engineering in the A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering at the Lawrence Technological University, Michigan. Dr. Ali is the Director of Smart Manufacturing and

Lean Systems Research Group. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and Ph.D. in Industrial Engineering from University of Wisconsin-Milwaukee. Dr. Ali is the Executive Director of IEOM Society and Conference Chair of the Sixth International Conference on Industrial Engineering and operations Management, Kuala Lumpur 2016. He advised six doctorate students in Doctor of Engineering in Manufacturing Systems. Dr. Ali has published journal and conference papers. He was past President of IIE Lean Division. Dr Ali has done research projects with Chrysler, Ford, DTE Energy, Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. His research interests include quality, reliability, six sigma, manufacturing, simulation, optimization, scheduling, maintenance, e-manufacturing, lean, CAE and GD&T and. He is a member of ASEE, IEEE, IEOM, INFORMS, and SME.

# 9th North American Conference on Industrial Engineering and Operations Management

Washington, DC, USA, June 4-6, 2024

Host: University of University of the District of Columbia, Washington, DC Venue: UDC Campus, 4200 Connecticut Ave NW

**Conference Chair** 

Dr. Devdas Shetty

Dean, School of Engineering and Applied Sciences and Professor of Mechanical Engineering University of the District of Columbia, Washington, DC, USA

### **Global Innovation Plenary**

September 13, 2023 - 4:00 pm - 5:45 pm - Room 1 (Onsite)

4:00 pm - 4:15 pm



**Dr. Hendro Sasongko, Ak., MM., CA**Dean, Faculty of Economics and Business
Pakuan University, Bogor, Indonesia

Cost Effectiveness Strategy by Utilizing Electromagnetic Generators in Water Service System in Remote Areas – Case Study in Sukamakmur Village, Bogor Regency, Indonesia

Hendro Sasongko is from Indonesia, one of the countries in ASEAN with the fourth largest population in the world. He completed his diploma program and obtained an accountant degree from the State College of Accountancy in 1990 and continued to obtain a master of management from the Business School of IPB University in 2001 and a doctorate in finance at the same school in 2012. He has 28 years of teaching experience, and currently he is the dean of the Faculty of Economics and Business at Pakuan University, the largest private university in the city of Bogor, Indonesia, and also as a lecturer in the postgraduate program at Business School of IPB University. Apart from being an academic, he also serves as a commissioner of an affiliated company of a state-owned enterprise, an investment advisory team for the Regent of Bogor Regency, deputy chairman of the Bogor City Wage Council,

as well as a financial consultant in several government institutions and companies. He is also a member of the Indonesian Economist Association and a member of the Indonesian Institute of Accountants. The area of his research include financing, capital structure, financial analysis model, tariff design on infrastructure, management strategic, and is currently focusing on research in the context of regional economic development, including the development of MSMEs, Villages and Village Owned Enterprise.

4:15 pm - 4:30 pm



Asep Denih, M.Sc., Ph.D. Dean, Faculty of Mathematics and Natural Sciences University of Pakuan, Bogor, Indonesia

### Monitoring Solar Radiation Intensity in Solar Tracking System Based on Artificial Intelligences

Asep Denih, M.Sc., Ph.D., is from Indonesia. He completed his undergraduate education in computer science in 1995 at University of Gunadarma, Depok, Indonesia, and earned a master's degree in Information Technology for Natural Resource Management at IPB University in 2005. Furthermore, he successfully completed his doctoral degree in Environmental Informatics in 2019 at the University of Miyazaki, Japan. He has been a lecturer at the Computer Science Study Program, Faculty of Mathematics and Natural Sciences, University of Pakuan, Bogor since 1997, and as a lecturer at the Postgraduate Program since 2021. Currently, he serves as the dean of the Faculty of Mathematics and Natural Sciences at University of Pakuan. Some organizational experiences that he is

currently participating in, including as a member of the Association of Higher Education in Informatics and Computer (APTIKOM), and as an editor in chief at the scientific journal of computer science and mathematics. His research areas include geographic information systems, remote sensing, artificial intelligence, Internet of Things, software and hardware programming, Decision support systems.

4:30 pm - 4:45 pm



LEE Kar Heng
Founding President, AOC Singapore Chapter
Senior Advisor, Vietnamese Association in Singapore
Advisor, Vietnam Chamber of Commerce, Singapore
School Advisory Committee, Henry Park Primary School
Chairman, IEEE Education Chapter, Singapore Section

Teaching in Higher Education Certificate (SEDA, UK)

Dr LEE KH is an Engineer turned Entrepreneur, he founded TBSS companies from 2012 in Singapore and started a company in Ho Chi Minh City from 2013. Today, TBSS Radar Technology and Surveillance Company Limited in Ho Chi Minh City has delivered 1 coastal surveillance radar, 9 vessel traffic radars, 2 radar training systems and security and surveillance systems in Vietnam. He is still practising engineering and project management in addition to his current role as a leader and management staff with TBSS. LEE has vast experiences in installation, setting-to-work and commissioning of surveillance systems and sensors and a regular speaker at international conferences,

symposiums and seminars, he also published papers at reputable journals.

He officially addresses his career as Engineerpreneur in a topic "Being an Engineerpreneur in Vietnam as a Singaporean" presented at the 11th Annual International Conference on Industrial Engineering and Operations Management and at the 2019 IEEE International Conference on Engineering, Technology and Education, a topic on "Engineerpreneurship: Engineers can be Entrepreneurs". TBSS also designs, develops and delivers customized professional courses in Radar, EW, Surveillance, System Engineering and Entrepreneurship related courses the Asia- Pacific Region, he has conducted more than 40 such course for engineers and officers from the government bodies, academic institutions and defense industry.

LEE handled radar and electronic warfare when he with DSO National Laboratories and DSTA. He practiced system engineering and with Police Technology Department, and supported the establishment of Integrated Logistic System, in addition to being a radar and coastal surveillance system expert in these establishments. Lee received the Commission's Commendation for his work in a coastal surveillance system project and Police Coast Guard Commander's Award for his excellent work in Maritime Control, Command and Computer works. He had led a team of engineers and technical officers when he was with the Maritime and Port Authority of Singapore, specialized in Vessel Traffic System. LEE was also a section leader when he was lecturing at the Temasek Polytechnic. In 2023, he was invited by Temasek Polytehnic to embrace the Class of 2023 as the

Guest of Honour. Lee is also SIM University Long Service Award winner and Singapore Manufacturing Federation Institute of Higher Learning Best Lecturer Award winner.

Lee graduated from NUS with Master of Engineering and Bachelor of Technology (Hons) degrees. He also holds a Master of Science from the University of Sheffield. Dr LEE obtained his Ph.D in Engineering Management via online study with Madison Hills University. Lee was a certified Singapore Arm Forces Instructor and he taught 2 years with the then Institute of Naval Engineering. Dr LEE is also certified to teach in Higher Education by the Staff Education and Development Association, UK and Temasek Polytechnic. He was an Associate Staff with the University of Newcastle where he taught Communications Engineering subjects and supervised Final Year Project students. Dr LEE had developed Wireless and Optical Communication Systems course materials for the SIM University. He had taught communications, radio frequency, microwave and signal processing subjects with James Cook University, University of Southern Queensland, RMIT University, Northumbria University and Edith Cowan University based in Singapore to ensure smooth running of the Bachelor of Engineering courses in Singapore.

LEE is a Keysight Certified Expert, he had designed antennas and front-end radio-wave and microwave circuits using the Keysight Electronic Automation Design Tools. In short professional courses and training, LEE and his team have designed, developed and delivered more than 40 courses in classroom and distance learning modes. TBSS courses are attended by participants from the military and defence industry in Singapore, Vietnam, Myanmar, Brunei and Philippines.

Dr Lee had served as a Chairman and Secretary in the Education Chapter, IEEE Singapore Section. Currently, Lee is serving the in the board of Vietnam Chamber Senior Advisor for Science and Technology. Lee is also the founding and present president of the Association of Old Crows Singapore Chapter. In addition, he is also an Award Winning School Advisory Committee member of Henry Park Primary School, appointed by the Ministry of Education. Lee is also a member of the System Engineering Technical Committee, the Institution of Engineers, Singapore.

Dr Lee has published over 50 papers in International conferences such as IEEE and IES conferences and research programs such as NUS Research Program, on Antennas, Electronic Warfare, Radar, Training, Education and Entrepreneurship topics internationally including Washington DC, Hawaii, Princeton, Beijing, Chongqing, Maldives, Taiwan, Hong Kong, Bangkok, Philippine, Italy, Switzerland, Indonesia, Japan, Malaysia, Turkey, Singapore and Vietnam, at various Universities and MICE locations such as the Nanyang Technological University, Temasek Polytechnic, Tsinghua University, Kainan University, University of Economic, Ho City Minh City, Le Quy Don Technical University, Defense Services Technological Academy and Military Technical Academy, to name a few.

Lee enjoys up the sky, on the road, or out at sea. He was a student pilot when he was receiving his education with the Singapore Polytechnic, where he flew close to two years with the Junior Flying Club. At DSO National Laboratories, he worked on a sensor installed on-board an aircraft where he also flew for testing work. His jobs brought to the sea and along the coast as Navy Specialist, Police Technology Department staff attached to the Police Coast Guard, and Engineer with the Maritime and Port Authority and Defense Science and Technology Agency. His current job also allows him to work close to the sea and on-board vessels. Lee has brought up two children who are now working adults, with the Ministry of Education and Central Provision Fund Board respectively as their scholars.

# 7<sup>th</sup> European Conference on Industrial Engineering and Operations Management

Augsburg / Munich, Germany, July 16-18, 2024

Host and Venue: Augsburg Technical University, Augsburg, Bavaria, Germany

http://ieomsociety.org/germany2024/

Conference Chair **Dr. Jürgen H. Lenz**, Research Professor - AI in Manufacturing

Augsburg Technical University of Applied Science

Augsburg, Bavaria, Germany

# 5<sup>th</sup> Asia Pacific Conference on Industrial Engineering and Operations Management

Tokyo, Japan, September 10-12, 2024 (Tentative Dates)

Host: Hosei University, Tokyo, Japan

http://ieomsociety.org/tokyo2024/

Conference Chair **Dr. Hiroyuki Goto** 

Professor, Department of Industrial and Systems Engineering
Faculty of Science and Engineering
Hosei University, Tokyo, Japan

### **Global Lean**

September 14, 2023 – 2:00 pm – 4:00 pm - Room 2 (Onsite) Session Chair: Prof Fabien, CFVG Director HCMC

Speaker I - 2:00 - 2:15 pm



Carlos Guardado
Lean Expert, Black Belt Six Sigma, Gold Certification Lean, MBA in Operations Direction
Senior Quality Engineering Manager at Techtronic Industries in Vietnam

### LEARNING TO SEE (VALUE & MUDA) - "NO PROBLEM IS A BIG PROBLEM"

Carlos Guardado is a professional with more than 12 years of management experience in quality & continuous improvement in diverse industries such as Assembly, Recycled Plastics, Apparel and Healthcare. Carlos has built a career by successfully guiding and advising several companies on Lean Culture deployment led by multidisciplinary teams with a value stream perspective (end to end) that assure the total integrity of the product and customer satisfaction. Over the past 10 years Carlos has a vast proven record in ROI, cost efficiency, expenses reduction, increase level of service and productivity. His Asia journey started in 2018 by being the leader of an expansion project opening a new facility in the North of Vietnam, since then his target has been coaching personnel in Lean Six Sigma practices and manage to accomplish the first Lean Healthcare training In Nghe An Dr. Quang Khoi Hospital proving that Lean is not a just tool is a way of life.

Speaker II: 2:15 - 2:30 pm



Bao Ho Software Engineer Qlik Lund, Skane, Sweden

Speaker III: 2:30 - 2:45 pm



Kỳ Nam Nguyễn Ngọc Market & Consumer Researcher Techcombank (TCB) Vietnam

Speaker IV: 2:45 - 3:00 pm

Cu Hoang Hung Lean Director MTC Vietnam



Speaker V: 3:00 - 3:15 pm

Felix Nguyen Phuc Thinh
Sales Manager
PEMS – Industrial Supplies & Services
PEMS – An Asia Networks Holdings Company
Xã Long Sơn, Ba Ria-Vung Tau, Vietnam

Speaker VI: 3:15 - 3:30 pm



Dr. Satirenjit Kaur Johl
Associate Professor
Department of Management and Humanities
Universiti Teknologi PETRONAS
Ipoh, Perak, Malaysia

Speaker VII: 3:30 - 3:45 pm

Velisia Chandra Gunawan Process Engineer and Business Strategies Enthusiast Asia Pacific Resources International Limited (APRIL) Group Jakarta, Indonesia

Speaker VII: 3:45 - 4:00 pm



Brian Pook
International Project Portfolio Management Executive
Mining, Smelting, Recycling, Minerals, Metals, Chemicals and Battery Technology
Hanoi Capital Region, Vietnam

Mechanical Engineer with over 20 years of experience in successfully delivering international portfolios, programs and projects across the full business life cycle. A wealth of professional experience in international project management including successful brownfield and greenfield project delivery in mining, smelting, chemicals, mineral processing, and recycling operations across Australia, Southeast Asia, South America and Europe.

Passionate about creating and delivering value through effective stakeholder alignment, business case emphasis and applying a growth learning mindset to focus people on achieving exceptional results. I enjoy the challenge of managing people by appreciating their strengths and intrinsic motivators to enable a disciplined and accountability

driven performance culture.

My strength is to simplify complex processes with lean principles and efficiently integrate the standards, processes and systems to produce sustainable outcomes. Collaborative and decisive leadership style that delivers exceptional results through a culture of Project Portfolio Management Excellence.

His current role is the Global Project Executive for Masan High Tech Materials, directly reporting to the CEO and a member of the Executive Committee. The role is accountable for the global Enterprise Portfolio Management Office (PMO), Global Studies Team, Regional Project Groups, and the development and execution of the key studies and projects across the organization.

Key specialties include:

- Global Enterprise Portfolio Management Office (PMO) Leadership
- Project Portfolio Management Maturity Improvement
- Project Lifecyle Management and Governance
- Project Office Establishment
- Key Major Study Development and Project Delivery
- Business Case Development and Optimisation
- Capex Cashflow Optimisation
- Project Controls System configuration
- Operational Readiness

He is a proven leader in the capital portfolio and project management disciplines and have performed senior project management roles at Masan High Tech Materials, Tara Resources, BHP, MMG, Orica and Iluka Resources.

# Panel Sessions

### Women in Industry and Academia (WIIA) Panel

September 12, 2023, 8:00 - 9:30 am - Room 2 (Onsite)

Panel Chair



**Dr. Anabela Soares**Senior Lecturer in Strategy & Operations Management
Programme Leader for the MSc in International Management
University of the West of England, Bristol, UK

I am currently a Senior Lecturer in Strategy & Operations Management and the Programme Leader for the MSc in International Management at UWE, Bristol Business School. My professional background includes management roles in the service industry, consultancy (manufacturing and services sector) and teaching in various UK institutions. I have been an educator in Higher Education Institutions in the UK since 2009 and I am a HEA Fellow. I have published in international journals and conferences, and I am also a reviewer for various journals such as Production Planning & Control, International Journal of Production & Research, and Supply Chain Management: An International Journal, amongst others. My research interests include Supply Chain Quality Management, Inter-Firm Relationships, Servitization and Gamification. I am happy to receive PhD applications from candidates with shared research interests.

Panel Speaker I



Dr. Haslinda Musa Associate Prof. in Department of Technopreneurship Universiti Teknikal Malaysia Melaka (UTeM) CEO of ERADA Solutions Sendirian Berhad (Sdn Bhd) Melaka, Malaysia

Dr. Haslinda Musa obtained her Bachelor's degree in Civil Engineering from the University of Malaya in 2000 and her MSc (by Research) in Applied Science – The application of GPS and Remote Sensing from Universiti Teknologi Mara in 2003. Later she acquired her PhD in Operations Management from the University of Leeds United Kingdom in 2011. She is a founder and currently the CEO of ERADA Solutions Sdn Bhd., a spin- off company established

under Universiti Teknikal Malaysia Melaka (UTeM). Her main task is to strategically manage and formulating plans for Educational Tourism related, using the outcome from research-based knowledge sharing and products, establishing collaborations and commercialization with various agencies for the industry. One of the most known products that she commercialized is Electric Beca (eBECA). As a scholar and a researcher in her field, Dr. Haslinda has shown leadership and scholarship in her field of expertise. She has received numbers of prestigious grants in her field, and written numbers of scientific papers published in leading academic journals and proceedings on Operations Management and SMEs Performances. She is also a reviewer for numbers of journals and examiners for Post Graduates work.

Panel Speaker II



Ms. Diyana Binti Mohd Amin Head of Sustainability & ESG Iskandar Investment Berhad (IIB), Iskandar Puteri (Nusajaya), Malaysia

Diyana joined IIB in April 2023 as the Head of Sustainability & ESG. She possesses over 15 years of experience in sustainability, urban design and project management in built environments. Prior to joining IIB, she was the Senior Project Manager (Sustainability Lead) at CBRE, where she refined her skills in and is committed to providing long-term sustainable business models and resource solutions. As Head of Sustainability & ESG at IIB, Diyana is primarily responsible for developing and implementing group sustainability & ESG strategies, as well as to coordinate and align resource solutions to help achieve our mission and vision. Diyana is a member of International Project Management Association (IPMA) and has experience working with skyscrapers such as Merdeka 118 and TRX. She earned her Masters of Science (MSc) in Integrated Construction Project Management and her Bachelors

Degree in Interior Architecture from Universiti Teknologi Mara (UiTM).

### Panel Speaker III



Dr. Azlin Abd Jamil
Senior Marketing Officer, Strategic Division
Office of Deputy Vice Chancellor (Research and Innovation)
Universiti Teknologi Malaysia
Johor Bahru, Malaysia

Dr. Azlin is a well experienced innovation manager with expertise in IT. She demonstrates proficiency across multiple domains, including project management, process enhancement, system integration, process modelling, and testing. She skilfully connects innovation with industrial demands to deliver comprehensive solutions. She is also a proficient problem-solver who can envision workable solutions from both business and technical perspectives. Dr. Azlin's motivation and creativity inspire organizations to pursue creative business and impactful technology commercialization. Dr. Azlin Jamil has spent more than 15 years developing her experience at UTM in

innovation commercialization management. Through promoting UTM's research output she has facilitated various levels of innovation projects. Assisting researchers towards successfully commercialising their inventions has become her passion, aided by ongoing education from Japan, the United States, Italy, the United Kingdom, and several Asian countries. Her enthusiastic yet humble character has inspired her to work hard for a better achievement today.

### **Sustainability Panel**

September 12, 2023, 2:00 – 3:30 pm - Room 2 (Onsite)

Panel Chair



Dr. Robert Radics Senior Lecturer Department of Global Supply Chains and Trade Lincoln University **New Zealand** 

Dr. Radics is a senior lecturer in the Department of Global Supply Chains and Trade at Lincoln University, New Zealand, and a specialist in Supply Chain Management. Dr. Radics has expertise in optimising agriculture supply chains, improving productivity and economic modelling.

Industry 4.0 Panel
September 12, 2023, 4:00 - 5:30 pm - Room 2 (Onsite)

Panel Chair



Dr. Muhammad Isnaini Hadiyul Umam Lecturer at Industrial Engineering UIN Sultan Syarif Kasim Riau Indonesia

Panel Speaker I



Dr. Rahmad Kurniawan, ST. Senior Lecturer, Department of Computer Science University of Riau, Pekanbaru City, Riau 28293, Indonesia

Presentation Title: DESK: A Dashboard Application for Early Warning and Prevention of Forest Fires in Riau Region Using Machine Learning

Rahmad Kurniawan was born in Riau, Indonesia, in 1990. He earned his Bachelor of Engineering in Informatics Engineering from the State Islamic University of Sultan Syarif Kasim Riau, Indonesia in 2011, followed by a Master of Information Technology (MIT) in Computer Science from The National University of Malaysia in 2014. In 2019, he obtained his Doctor of Philosophy (Ph.D.) in Computer Science from The National University of Malaysia. He currently holds the position of Senior Lecturer in the Department of Computer Science at the University of Riau, which he joined in 2022. In the same year, he was appointed as the chairman of the Center of Islamic Data Science and Continuous Improvement (CIDSCI). Rahmad Kurniawan has two certifications of expertise: Microsoft Technology Associate (MTA) and Certified International Specialist Data Visualization (CISDV). His research interests include machine learning, data science, data mining and optimization, big data, and intelligent systems.

### Lean Six Sigma Panel

September 13, 2023, 8:00 - 9:30 pm - Room 2 (Onsite)

Panel Chair



Dr. Edly Ferdin Ramly Certification Director, EFR Certification Johor Bahru, Malaysia

Presently Dr. Edly Ramly is Certification Director and Lead Auditor for various certification schemes including ISO/TS16949. Apart from auditing, he is currently Business Excellence Assessor, Exemplar Global Lead Auditor trainers for Quality (ISO9001. Environment (ISO14001) and Safety (ISO45001) management system. Dr. Ramly actively conducting research, consultation and trainings to local and multi-national companies that seek operational improvement and breakthrough. His industrial experience was in the automotive industry. During his stayed with the TRW Automotive, he was tasked with the responsibility of promoting and implementing Lean and Six-Sigma within the Organization. Due to his extensive exposure in Lean and Six-Sigma Management System, he was invited

by Malaysia Productivity Corporation (MPC) and Asia Productivity Organization (APO) to conduct training in the area of Lean and Six-Sigma implementation. Dr. Ramly graduated from University of Bradford, UK with Bachelor Degree in Manufacturing System with Management. He then furthered his studies at Sheffield Hallam University, UK and awarded with a Master Degree of Science in Engineering with Management and Ph.D. from Universiti Tun Hussein Onn, Malaysia.

### **Global Business Management Panel**

September 13, 2023, Wednesday, 2:00 - 3:30 pm - Room 2 (Onsite)

Panel Chair



**Dr. Fitra Lestari**Vice Dean for Academic Affairs in Faculty of Science and Technology Professor in Industrial Engineering Department
Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Fitra Lestari is currently a Professor and Former Head of Industrial Engineering Department in Faculty Science and Technology, UIN Sultan Syarif Kasim Riau, Indonesia. Then, He also Head of Emerging Technology and Continuous Improvement in Center Of Islamic Data Science And Continuous Improvement (CIDSCI) Research Group, UIN Sultan Syarif Kasim Riau, Indonesia. He gained his BEng and MEng in Industrial Engineering from Andalas University (Indonesia) and Universiti Teknologi Malaysia (UTM- Malaysia). Then, He has continued the PhD project at UTM Malaysia in the field of Supply chain relationships in a downstream sector of the Palm Oil industry. He has published extensively including several refereed journal papers, conference papers, book chapters, and edited reference books associated with Supply Chain Management, Marketing, Logistic, and Performance Measurement. He serves as a reviewer, associate editor and editorial member for several national and international journals. He joins as a member

of the International Association of Engineers (IAENG), and Director of student competition in Industrial Engineering and Operations Management (IEOM Society- Indonesia), and General Secretary of Indonesian Industrial Engineering Higher Education Organizing Agency (BKSTI Indonesia-Sumatera II). He also registered as Halal Auditor in Indonesia. His industrial and government collaborators include Strategy of Small Medium Enterprises, Halal Supply Chain dan Performance Assessment and Institutional Strengthening of Oil Palm Supply Chains.

### **Global Engineering Education Panel**

Asia Pacific Industrial Engineering Education

September 13, 2023, 4:00 – 5:30 pm – Room 2 (Onsite)

Panel Chair



**Dr. Ir. Wahyudi Sutopo**Professor, Industrial Engineering Department
Universitas Sebelas Maret (UNS), Surakarta, Indonesia

Dr. Wahyudi Sutopo is a professor (since April 2020) and Head of Industrial Engineering and Techno-Economics (RITE) Research Group (since January 2014), Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret (UNS). He is serving as President of IEOM Indonesia Professional Chapter (since 2020). Since 2020, he has been assigned as Vice Dean for Human Resources, Finance, and Logistics (2020-2023). He was as deputy dean of the general and financial affairs of the faculty of engineering UNS (2019-2020). He was the head of the industrial engineering undergraduate study program (2015-2019); as an asset auditor of the internal supervisory unit (2014-2019); the head of UNS technology innovation center (2014-2016); and the general chair of the Indonesian industrial engineering higher education institution cooperation agency/BKSTI (2017-2020). He is an Assessor of BAN-PT (Noreg. 2017-01215). He had experience working in the electronics industry as an engineer at PT. Panasonic Manufacturing Indonesia from 2000-2003. His educational background is the profession of an engineer (Ir) from the Professional Engineer Program – Universitas Sebelas Maret (UNS) in 2018; Doctor (Dr) in Industrial Engineering &

Management from Institut Teknologi Bandung in 2011; Master of Management (M.Si.) from Universitas Indonesia in 2004, and Bachelor of Industrial Engineering (S.T.) from Institut Teknologi Bandung in 1999. He has professional qualifications as an associate professional engineer (P. Eng) since 2016.



Panel Speaker I
Dr. Muhammad Ikhsan Setiawan
Vice Rector and Assistant Professor at Faculty of Civil Engineering
Narotama University, Surabaya, East Java, Indonesia

Muhammad Ikhsan Setiawan received his Bachelor Civil Engineering (1998) Universitas Merdeka Malang Indonesia, Master Civil Engineering (2000) Universitas Indonesia and Doctor Civil Engineering (2018) Universitas Tarumanagara Indonesia. Currently as Vice Rector and an Assistant Professor at Faculty of Civil Engineering Narotama University Indonesia also registered as Engineer Expert Certified. He currently leads a research team grant from Ministry of Education, Indonesia since 2009 in Sustainability, Business and Digital Transportation, also Tourism and Regional Economic, include Smart City. He is also a Chairman of WORLDCONFERENCE (Indonesia International eConference), Vice President of iPEST (Indonesia International Expert Forum), Secretary of DPP ADRI (Indonesia Expert and Lecturer Association), Vice Director of PT Songsong Buana Jakarta Indonesia, member of IEEE, author of 92 SCOPUS documents, editor and reviewers Journal in SCOPUS, DOAJ, CROSSREF, GOOGLE and SINTA (Indonesia indexed)



Panel Speaker II
Endang Noerhartati
Vice Rector and Associate Professor at Agroindustrial Technology Department
Universitas Wijaya Kusuma, Surabaya Indonesia

Endang Noerhartati Received his Bachelor of Agricultural Technology (Concentration in Agricultural Product Technology) (1987) from Universitas Jember, Indonesia, Master of Agricultural (Concentration in Agricultural Product Technology) (1994) from Universitas Gadjah Mada Yogyakarta, and Doctor of Education Management (Concentration in Entrepreneurship Education) (2021) from Universitas Negeri Surabaya Indonesia. As Vice Rector and an Associate Professor at Agroindustrial Technology Department, Universitas Wijaya Kusuma Surabaya Indonesia. Registered as a Certified Engineer member of AMCA (Association of Muslim Community in ASEAN, IORA (Indonesian Operation Research Association), and board of ADRI (Indonesia Expert and Lecturer Association) in East Java, Indonesia. Leader Project Grant Research from the Ministry of Education, Indonesia, since 2009 in Entrepreneurship based on sorghum as an alternative food. As the author of 39 SCOPUS documents, 27 national papers, 16 book authors, editors and journal reviewers in SCOPUS, Index Copernicus, Ebsco, Proquest, DOAJ, CROSSREF, GOOGLE and SINTA (indexed Indonesia)

### **Diversity and Inclusion Panel sponsored by Ford Motor Company**

September 13, 2023, 8:00 – 9:30 pm - Room 5 (Online)

Panel Chair



Professor Donald M. Reimer
Chief Operating Officer – IEOM Society
President, The Small Business Strategy Group, Detroit, Michigan, USA
Adjunct Faculty, Lawrence Technological University, Southfield, Michigan, USA

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering in College of Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kern Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs' Organization. Mr. Reimer serves

as a Kern Fellow of The Kern Family Foundation, Co-Direct of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs' Organization Faculty Advisory Council and is a member of the American Society of Engineering Education. He has operated his own consulting company – The Small Business Strategy Group for 23 years. He published numerous articles on small business, entrepreneurship and strategic thinking. He has received several awards and recognition by local, state and federal agencies for his work in entrepreneurship and minority business development. Mr. Reimer served as member of the Minority Economic Development Committee of New Detroit. Mr. Reimer is member of the Small Business Advisory Council of the Detroit Regional Chamber of Commerce. Mr. Reimer is a member of Advisory Board of the Milwaukee Junction Small Business Assistance Center. He is also a member of the Applied Innovation Alliance. Mr. Reimer serves as a KEEN Fellow for The Kern Family Foundation and is a member of United States Association of Small Business and Entrepreneurship.

### **Global Supply Chain and Logistics Panel**

September 14, 2023, 8:00 – 9:30 am – Room 2 (Onsite)

Panel Chair



Dr. Linh Duong
Senior Lecturer in Operations Management
Bristol Business School
Faculty of Business and Law (FBL)
University of the West of England, UK

A supply chain management professional with invaluable knowledge of managing projects, resources, and staff in an effective and efficient manner. Highly focused on a comprehensive understanding of logistics, procurement, and the supply chain. Boasting a consistent & proven track record of successfully employing best business practices that improve efficiency and reduce operating costs while increasing performance, all to tight timescales and within budget. Positions include developing and managing initiatives across a supply chain with a record of reducing inventory, improving service levels, creating visibility, improving storage utilization, and enhancing the financial

performance of a business unit. Dr Linh N K Duong is a Senior Lecturer in Operations Management at Bristol Business School, University of the West of England, UK. His current research interests focus on sustainable and resilient supply chain management with the link to digital transformation, innovation, and collaboration among supply chain partners. He focuses on vulnerable contexts such as the agri-food industry, tourism industry, or small and medium enterprises (SMEs). His papers relating to supply chain resiliency and sustainable innovation were published in the International Journal of Production Research (ABS: 3, JIF: 3.199), Journal of Macromaketing (ABS: 2, JIF: 1.952), and Trends in Food Science and Technology (JIF: 11.077). He has previously worked at the University of Lincoln (UK), New Zealand Forest Research Institute (Scion) and Auckland University of Technology (NZ). Prior to this, he worked in the Supply Chain Management field since 2007 for dairy and pharmaceutical companies. He also joined projects on Distribution Management Systems, Inventory Management, and Production Management. Dr Duong has taught a range of operations management and supply chain modules and has experience in module design and student supervision. He is on the Editorial Review Board for the International Journal of Applied Logistics and reviews for several journals including the International Journal of Production Economics.

### **Innovation Panel**

September 14, 2023, 4:00 – 5:30 pm Room 2 (Onsite)

Panel Chair



Dr. Từ Văn Bình
Associate Professor
CFVG – European Excellence in Management Education
Director of Executive Education Program (EXED)
Program Manager of Master in Marketing, Sales and Services (MMSS)
Vice Dean of Graduate School of University of Economics Ho Chi Minh City
Vietnam

Assoc. Prof. Dr. Tu Van Binh got PhD. degree in Applied Economics, University of Antwerp, Belgium in 2009, and Master of Science in Agricultural Economics and Marketing, Wageningen University, the Netherlands in 1998. He is currently a professor at CFVG – European Excellence in Management Education, Director of Executive Education Program (EXED), and Program Manager of Master in Marketing, Sales and Services (MMSS). Besides, he is also

Vice Dean of Graduate School - University of Economics Ho Chi Minh City.

## **Parallel Sessions**

### **All Times are Vietnam Time**

Monday, September 11, 2023

	Room 1 - Virtual	Room 2 - Virtual Room 3 - Virtual Room 4 - Virtual				
8:00 am	Undergraduate Student Paper	Supply Chain and Logistics Graduate Student Paper		Masters Thesis		
	Competition sponsored by Siemens	Competition	Competition Sponsoredby Eaton	Competition		
10:00 am	Undergraduate Student Paper	Undergraduate Research Competition				
	Competition sponsored by Siemens	sponsored by Daikin Applied	1 / 11			
12:00 pm	Technical Presentations	Competitions – Senior Design, LSS				
		and Simulations				
2:00 pm	Technical Presentations	Conference Onsite Registration Open: 2:00 – 6:00 pm				
İ		CFVG School of Management, 91, 3/2 Street, Ward 11, Dist 10, HCMC, Vietnam				

Tuesday, September 12, 2023

	: aloo alay, o o promisor 12, 2020						
	Room 1 – Ballroom Onsite	Room 2 Onsite	Room 3 Onsite	Room 4 Onsite	Room 5 Online		
8:00	Global Engineering Education	Women in Industry and	Undergraduate Paper Competition	Operations SCM			
		Academia (WIIA) Panel	sponsored by Siemens	Management			
9:30	Welcome Address - Dr. Su Dinh T	han, President of University	y of Economics Ho Chi Minh City (UEH) a	nd Dr. Ahad Ali, Exe	ecutive Director,		
	IEOM Society International						
9:40	Keynote I: Prof. Dr. Vikas Kumar, A	Associate Dean for Researd	ch Innovation and Enterprise, Birmingham	City University, Bird	mingham, UK		
10:20	Keynote II: Prof. Fabien De Geuse	r, Director, CFVG, French \	Vietnamese School of Management, HCM	IC, Vietnam			
11.00	Keynote III: Ms Thao Nguyen, Vietnam						
11:40	Keynote IV: Mr. Stan Weonsuk Lee, General Director, DAEHONG Communications Vietnam (LOTTE Group), Vietnam						
12:20	Keynote V: Dr. Ir. Wahyudi Sutopo, Professor, Industrial Engineering Department, Universitas Sebelas Maret (UNS), Surakarta, Indonesia						
1:00	Lunch Break						
2:00	3:20 – 4:00 Keynote VIII – Prof. Arvind Upadhyay, Professor, University of Stavanger Business School, University of Stavanger, Norway						
2:00	Keynotes	Sustainability Panel	Undergraduate Paper Competition	Industry 4.0	Systems		
	Reynotes	-	sponsored by Siemens	•	Engineering		
4:00	Six Sigma Certification	Industry 4.0 Panel	Undergraduate Paper Competition	Supply Chain	Business		
	Workshop by Dr. Ali	-	sponsored by Siemens	Management	Management		

Wednesday, September 13, 2023

	Room 1 – Ballroom Onsite	Room 2 Onsite	Room 3 Onsite	Room 4 Onsite	Room 5 - Online		
8:00	Global Industry Solutions	Lean Six Sigma Panel	Master Thesis Competition	Technology	Technical		
			Doctoral Diss. Competition	Management	Presentations		
9:40	Keynote IX: Professor Alain Chong, Co-editor in chief of Industrial Management & Data Systems, Associate Editor of Information &						
	Management and Journal of Compu	,					
10:20	Keynote X: Prof. Hing Kai Chan, Professor of Operations Management, Nottingham University Business School, China and						
	Co-editor of Industrial Management & Data Systems (SCI-indexed) since 2014						
11.00	Keynote XI: Ms Jen Vu Huong, Vietnam						
11:40	Keynote XII: Dr. Anabela Soares, Programme Leader for the MSc in International Management, University of the West of England, Bristol, UK						
12:20	Keynote XIII: Dr. Fitra Lestari, Vice Dean for Academic Affairs in Faculty of Science and Technology, UIN Sultan Syarif Kasim Riau, Indonesia						
1:00	Lunch Break						
2:00	2:00 – 2:40 Keynote XIV: Mr. Nguyen Thanh Nha, General Director, Tan Cang – SCT Human Resource Development LLC, Vietnam						
	2:40 – 3:20 Keynote XV: Dr. Sabri Bin Mohamad Sharif, Deputy VC Student And Alumni Affairs, Universiti Teknikal Malaysia (Melaka)						
	3:20 – 4:00 Keynote XVI - Professor Jose Arturo Garza-Reyes, Professor of Operations Management, Head of the Centre for Supply Chain						
	Improvement, College of Business, Law and Social Sciences, Derby Management School, University of Derby, Derby, United Kingdom (UK)						
2:00	Keynotes Global Business Graduate Student Paper Production Engineering SCM						
	rto y oto o	Management Panel	Competition	and Simulation			
4:00	Global Innovation Plenary	Global Engineering	Lean Six Sigma	Engineering	Artificial Intelligence		
		Education Panel	Competition + FYP	Management	and Data Analytics		
8:00 pm	Diversity & Inclusion Panel sponsored by Ford Motor Company - Room 5 (Online), Panel Chair: Professor Donald M. Reimer, COO of IEOM						

### Thursday, September 14, 2023

	Room 1 – Ballroom Onsite	Room 2 Onsite	Room 3 Onsite	Room 4 Onsite	Room 5 - Online	
8:00	Global Business Management	Global Supply Chain and	Healthcare and	SCM	Technical	
		Logistics Panel	Human Factors		Presentations	
9:40	Keynote XVII: Prof. Chandan Chor	wdhury, Senior Associate Dea	n, Indian School of Bu	siness (ISB), Hyderabad, India	10 am – 2 pm	
10:20	Keynote XVIII: DrIng. Savas Turr	nis, Professor in Marketing and	Entrepreneurship, CF	VG, Vietnam	Missing Virtual	
11.00	Keynote XIX: Prof. Yigit Kazancog	lu, Full professor and Head, L	ogistics Management	Department, Yasar University, Turkey	Presentations	
11:40	Keynote XX: Prof. Siwarit Pongsakornrungsilp, Associate Professor of Marketing, Walailak University, Thailand					
12:20	Keynote XXI: Dr. Abdul Talib Bon, Professo of Production and Operations Management, Universiti Tun Hussein Onn Malaysia					
1:00	Lunch Break					
2:00	2:00 – 2:30 pm - Keynote XXII: Dr. Pimlapas Pongsakornrungsilp, Assistant Professor of Tourism Management, Walailak University, Thailand					
	2:30 – 3:00 pm - Keynote XXIII: Dr. Kinnaleth Vongchanh, Sr Lecturer/Researcher, Institute of Technology of Cambodia, Phnom Penh					
	3:00 – 3:30 pm - Keynote XXIV: Dr. Ozlem Bak, Senior Lecturer in Operations Management, Brunel Business School, Brunel University, UK					
	3:30 – 4:00 pm - Keynote XXV: Professor Qile He (Horace), Professor of Strategy and Performance Management, University of Derby, UK					
2:00	Keynotes	Global Lean	Energy	Maintenance, Reliability and Smart	Operations	
	rtoynotoc			Systems	Management	
4:00	22nd IEOM Global Supply	Innovation Panel	Data Analytics and	Inventory Control	Manufacturing	
	Chain and Logistics		Al			

Gala Dinner in the Indochina Queen Cruiship 14 Sep 2023. Please ask the taxi driver to drop you at 5 Nguyễn Tất Thành, Phường 12, Quận 4, Thành phố Hồ Chí Minh (English version: No 5 Nguyen Tat Thanh Street, Ward 12, District 4, HCMC)

Welcome from 18:00 (6:00 pm), Departure for tour at 19:45 (7:45 pm), Return at 21:15 (9:15 pm)

Please ask the staff their guiding to: "CFVG Gala Dinner", to make sure everyone come to the right ship. Thank you

# September 11, 2023 (Monday)

### September 11, 2023 (Monday) - Session: 8:00 - 9:45 am

### 8:00 am - 11:45 am, MONDAY

**Virtual Room 1** 

### **Undergraduate Student Paper Competition Sponsored by Siemens**

#### Session Chairs:

Professor Don Reimer, Chief Operating Officer (COO) and Director of Student Chapter Development, IEOM Society Maricar M. Navarro, PhD, Associate Professor, Industrial Engineering Department, Techonological Institute of the Philippines

# ID 69 Factors Influencing the Adoption of Online Advertising within Podcast Episodes among Generation Z in Ho Chi Minh City (Vietnam)

Tu Ngo Dan Thu, Undergraduate student, UEH-International School of Business, 17 Pham Ngoc Thach Street, Vo Thi Sau Ward, District 3 Ho Chi Minh City, Vietnam

# ID 182 Workplace Safety and Health Study in a Manufacturing Plant in Bulacan, Philippines utilizing NIOSH Lifting Equation Jhia Angelyck Mavy R. Cruz, Ina Karmela M. Enriquez, Joan Valen L. Lamadrid and Gwyneth Kim F. Reyes, Students, Industrial Engineering Department, Technological Institute of the Philippines – Manila, Philippines Janina Elyse A. Reyes, Adviser, Industrial Engineering Department, Technological Institute of the Philippines – Manila, Philippines

#### ID 240 Fundamental Analysis of the Price of Gocap Share Listed on the Indonesia Stock Exchange

Alya Ummus Syuhada, Accounting Student of Undergraduate Program, Universitas Bina Darma, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculity of Social Humanities, Universitas Bina Darma, Palembang, Indonesia

## ID 59 Handy Fix: A Service Design for a Location-Based Mobile Application for Acquiring On-Demand Local Handyman Services in Metro Manila

Allyssa Tandoc, Sophia Anne Marie Arguinoso, Sheila Carungay and Karen Tafalla, Department of Industrial Engineering, College of Engineering Adamson University, Manila, Philippines

# ID 177 The influence of content marketing and influencer marketing on consumer purchasing decisions with e-WOM as a moderating variable

Julia Deby Ayreni, Management Student of Undergraduate Program, Bina Darma University, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculty of Social and Humanities, Bina Darma University, Palembang, Indonesia

### ID 175 The Effect of Social Media Marketing on Customer Retention Mediated by Customer Engagement

Cici Rizki Oktaviani, Management Student of Undergraduate Program, Universitas Bina Darma, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculty of Social and Humanities, Universitas Bina Darma, Palembang, Indonesia

### ID 304 Urban farming waste to energy community-based

Adli H. Ibrahim and Dina Nurul Fitria, Department of Agribusiness, Trilogi University, Jakarta, Indonesia

# ID 57 Literatura PH: An Adapted System Analysis and Design-Based Mobile Application for Improving Reading and Comprehension using Philippine Folk Literature among Primary Education Students

Mia Coleen Geca, Hiezel Lasat, Sheila Mae Carungay and Elaine Rodriguez, Department of Industrial Engineering, College of Engineering Adamson University, Manila, Philippines

## ID 253 Improving Forecast Accuracy with Hybrid Time Series Forecasting and Machine Learning Methods A Case Study of a Pharmaceutical Company

Diep Tran Thao Vy, Pham Huynh Tram and Ha Thi Xuan Chi, School of Industrial Engineering & Management, Ho Chi Minh City, Vietnam

# ID 254 Analysis of Priority Decision Rules Using MCDM Approach for A Dual-Resource Constrained Flexible Job Shop Scheduling by Simulation Method

Cao Hoang Bao Long, Pham Hoang Nam Quynh, Pham Huynh Tram and Ha Thi Xuan Chi, School of Industrial Engineering and Management International University, Ho Chi Minh City, Vietnam

#### ID 255 Hybrid flow shop scheduling using Multi-Criteria Decision Making and Simulation

Lieu Nguyen Thuy Hoang Uyen, Doan Luu Kim Ngan, Pham Huynh Tram and Ha Thi Xuan Chi, School of Industrial & Systems Engineering, International University, Ho Chi Minh city, Vietnam

### 8:00 - 9:45 am, MONDAY, September 11

**Virtual Room 2** 

# **Supply Chain and Logistics Competition**

Session Chair: Dr. Vikas Kumar, Birmingham City University, UK

#### D 158 Flexible Decision Framework for Resilient Closed Loop supply Chain Network

Prof. Jitender Madaan, Professor, Operations and Supply Chain Management, Department of Management Studies, Indian Institute of Technology, Delhi, India Prof. Parikshit Charan, Associate Professor, Operation Management, Indian Institute of Management Raipur India

### ID 167 Unraveling Risks and Resonance in Service-Oriented Manufacturing Supply Chains

Huy Truong Quang, RMIT Vietnam, Vietnam

#### ID 172 Digital Transformation of Delevery System- A Supply Chain Model for Smart Chittagong Port

Rear Admiral M. Sohail, Commodore M Fazlar Rahman, Lt Commander Nezam (retd), Major Md Wahidul Haque, Chittagong Port Authority, Bangladesh

### 8:00 - 9:45 am, MONDAY, September 11

**Virtual Room 3** 

### **Graduate Student Paper Competition sponsored by Eaton**

#### **Session Chairs:**

Dr. Linh Duong, University of the West of England, UK

Dr. Truong Quang Huy, Lecturer, Logistics & Supply Chain Management, Research cluster lead, Logistics & Supply chain management, The Business School, RMIT International University, 702 Nguyen Van Linh Blvd., District 7, HCMC

#### ID 52 Safe Evacuation Routes in Inundated Situations ~Assessment of a Lowland District in Eastern Tokyo~

Ko Inoue, Graduate School of Science and Engineering, Hosei University, Tokyo 184 8584, Japan

Daiki Ito, LTS, Inc., Tokyo 107-0051, Japan

Daiki Okamura, Toho System Science Co., Ltd., Tokyo 112-0002, Japan

Hiroyuki Goto, Department of Industrial and Systems Engineering, Hosei University, Tokyo 184 8584, Japan

#### ID 145 Investigating the Transformation of Rural Housing in Satkhira, Bangladesh

D. M. A. Sufian Reza, Instructor, Department of Architecture Technology, AITVET, Dhaka, Bangladesh

M. Arch Student, Department of Architecture, Ahsanullah University of Science and Technology, Dhaka 1208, Bangladesh

Rabaya Nusrath Niva, Faculty of Engineering, Department of Architecture, Premier University, Chittagong, Bangladesh

M. Arch Student, Department of Architecture, Bangladesh University of Engineering and Technology, Dhaka 1000, Bangladesh

# ID 260 Analyzing Manufacturing Readiness Level (MRL) PT XYZ Supporting the Indonesian Army Transportation Logistics Distribution Chadziqatun Najilatil Mazda, Department of Industrial Engineering, UIN Sunan Kalijaga, Yogyakarta, Indonesia

### ID 289 Improvement proposal applying Lean Manufacturing in a Mype: Case Study in a Dental Center

Amelia Nicold Arias-Perez and Rosario Susana Aguilar-Valero, Students, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Perú Rafael Chavez Ugaz, Research Professor, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Perú

# ID 302 From Theory to Practice: The Impact of 3D Printing on Supply Chain Configurations and Cost Efficiency - A Case Study from Germany

Mohamed Osman, Transport systems and logistics, Faculty of Engineering, University of Duisburg-Essen, 47058 Duisburg, Germany Sijia Cui, Anhui Xinhua University, China

Ziye Tian, Transport systems and logistics, Faculty of Engineering, University of Duisburg-Essen, 47058 Duisburg, Germany Ahmed Tarek El-Said, University of Warwick, CV4 7AL Coventry, United Kingdom

#### ID 62 A Study of Technopreneurship on Market Penetration and Product Development (Case Study PT. Batex Energi Mandiri)

Cindy Saraswati, Master Program of Industrial Engineering Department, Faculty of Engineering Universitas Sebelas Maret, Surakarta, Indonesia Wahyudi Sutopo, Professor, Department of Industrial Engineering, Head of Industrial Engineering and Techno-Economics Research Group Universitas Sebelas Maret (UNS), Surakarta, Indonesia

President, IEOM Indonesia Chapter

Renny Rochani, Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia

# ID 65 The Influence of Technopreneurship and Innovation Systems on the Adoption of Agricultural Drones in Indonesia (Case study: Todaytech drone)

Imam Sya'roni, Master of Industrial Engineering, Sebelas Maret University, Surakarta 57126, Indonesia

Wahyudi Sutopo, Center of Excellence for Electrical Energy Storage Technology, Sebelas Maret University, Jl. Slamet Riyadi 435, Surakarta 57146, Indonesia

Research Group of Industrial Engineering and Economic Technology, Department of Industrial Engineering, Faculty of Engineering, Sebelas Maret University, Indonesia

Renny Rochani, Research Group of Industrial Engineering and Economic Technology, Department of Industrial Engineering, Faculty of Engineering, Sebelas Maret University, Indonesia

### 8:00 - 9:45 am, MONDAY, September 11

Virtual Room 4

### **Masters Thesis Competition**

#### **Session Chairs:**

Dr. Từ Văn Bình, CFVG-HCM, University of Economics Ho Chi Minh City, Vietnam

Dr. Anzum Ali, Formar Professor, Electrical Engineering Department, National University of Computer and Emerging Sciences, Lahore, Pakistan

### ID 176 Empirical Investigation of the Supply chain 4.0 Adoption in Vietnam

Giang Nguyen, Anabela Soares and Linh Duong, College of Business and Law, University of the West of England, Bristol BS16 1QY, UK Vikas Kumar, Professor, Faculty of Business, Law and Social Sciences, Birmingham City University, Birmingham B5 5JU, UK

#### ID 230 The influence of determinants of citizen relationship quality in e-Government adoption

Trang Thi Uyen Nguyen and Phuong Van Nguyen, Center for Public Administration, International University, Vietnam National University-Ho Chi Minh City, Vietnam

Linh Phuong Le, The School of Economics, Finance and Accounting, International University, Vietnam National University–HCMC, Vietnam Hien Thi Ngoc Huynh, The School of Business, International University, Vietnam National University-Ho Chi Minh City, Vietnam

ID 166 Covid-19 Response Efficiency Rating of Central Visayas Region, Philippines: A Data Envelopment Analysis Approach C. K. A. Ocan and C.A.M. Cabanlit, Department of Industrial Engineering, Cebu Institute of Technology – University, Cebu City, Philippines

#### ID 46 Maize Crop Yield Prediction Model Using Machine Learning

Thobekile Chigwada, Mary Dzinomwa, Belinda Ndlovu, Khulekani Sibanda and Sibonile Moyo, Department of Informatics and Analytics, National University of Science and Technology, Bulawayo, Zimbabwe

ID 173 Building a Model of Work Productivity in the Mining Industry: The Effect of Work Pressure Mediated by Job Satisfaction Indah Puspita Sari, Master Student of Management, Postgraduate Program, Universitas Bina Darma, Palembang, Indonesia Muji Gunarto, Management Department of Economics and Business Faculty, Universtas Bina Darma, Palembang, Indonesia

### ID 211 The Influence of Construction Safety and Government Policies on Work Productivity of Flyover Projects

Danial Firdaus, Civil Engineering master's Student, Universitas Bina Darma, Jl. Jend. A Yani No 3A Plaju, Palembang, South Sumatera, Indonesia Firdaus Firdaus, Department of Civil Engineering, Universitas Bina Darma, Jl. Jend. A Yani No 3A Plaju, Palembang, South Sumatera, Indonesia Muji Gunarto, Assoc. Prof., Department of Management, Universitas Bina Darma, Palembang, South Sumatera, Indonesia

### September 11, 2023 (Monday) - Session: 10:00 - 11:45 am

10:00 - 11:45 am, MONDAY

Virtual Room 1

### Undergraduate Student Paper Competition Sponsored by Siemens - continute

10:00 - 11:45 am, MONDAY

Virtual Room 2

# Undergraduate Research Competition Sponsored by Daikin Applied

Session Chair: Dr. Mizanur Rahman, IEOM Australia Operations Director

ID 324 Replacement Operational Cost Analysis to Increase Cost Efficiency of Decoration Flower Small Medium Enterprise Michael William, Lina Gozali and Frans Jusuf Daywin, Tarumanagara University, Indonesia

#### ID 291 Analyzing Operation Plan of Ho Chi Minh City's Bus Rapid Transit System

Tran Huynh Diem Phuong, Phan Thi Ngoc Anh, Pham Huynh Tram and Ha Thi Xuan Chi, School of Industrial Engineering and Management Vietnam National University - International University, Ho Chi Minh City, Vietnam

#### ID 116 Coating Work Project Management from Service Company for Chemical Companies

Mario Pangestu, Lina Gozali and Frans Jusuf Daywin, Tarumanagara University, Indonesia

# ID 44 Optimizing Facility Layout for Enhanced Productivity using Pro Model: A Case Study of a Shoe Manufacturing Company in Marikina, Philippines

Eisen Jules S. Cabusas, Cyra Eve A. Helis, Duane Marc Malonda, Alliyah Jade B. Paguio, Kyle Vincent M. Pangan, Beverly N. Perez, Maricar M. Navarro and Valerie Peralta, Industrial Engineering Department, Technological Institute of the Philippines, Cubao Quezon City, Philippines

### ID 53 Sustainable School and Office Supplies Using Agri-waste and Air-waste

Jan Patricia R. Diamonon\*, Trixczia Z. Salinas, Jea Pierre B. San Juan, Elijah O. Senia, Kervin C. Taoatao and Jaypy T. Tenerife, Department of Industrial Engineering, College of Engineering and Architecture, Technological Institute of the Philippines, Quezon City, Philippines

### ID 60 Risk Analysis on the Management Practices of an Electronics and Automation Company

Jewell P. Bosto, Johanh Gabrielle C. Julian, Rey Marc B. Lagundimao, Ralph Miguel M. Panganiban, Jemuel A. Tan, and Jaypy T. Tenerife Industrial Engineering Program, College of Engineering and Architecture, Technological Institute of the Philippines, Quezon City, Philippines

### ID 74 Development of Food Container with Spoilage Detector

Jan Marielle I. Bidayan, Arjen Guila C. Cruz, John Rei C. Garchitorena, Erika Mae, P. Ople, Carl Joseph C. Quintana and Jaypy T. Tenerife, Industrial Engineering Program, College of Engineering and Architecture, Technological Institute of the Philippines, Quezon City, Philippines

#### ID 179 Development of Food Container with Spoilage Detector

Jan Marielle I. Bidayan, Arjen Guila C. Cruz, John Rei C. Garchitorena, Erika Mae, P. Ople, Carl Joseph C. Quintana and Jaypy T. Tenerife Industrial Engineering Program, College of Engineering and Architecture, Technological Institute of the Philippines, Quezon City, Philippines

## ID 56 Ergo Let: The Solution to the Adversity of Senior Citizens and Persons with Disabilities in Accessing the Conventional Public Utility Toilet Bowl in Metro Manila

Dantes, Mac Friedrich R., Garcia, Antonio Mari C., Gonzalez, Carlo C., Halog, John Matthew G., Paguio, Alliyah Jade B. and Santos, Marinell M., Department of Industrial Engineering, College of Engineering and Architecture Technological Institute of the Philippines – Quezon City, Philippines – Quezon City, Cubao, Quezon City, Philippines

10:00 - 11:45 am, MONDAY

Virtual Room 3

### September 11, 2023 (Monday) - Session: 12:00 - 1:45 pm

12:00 – 1:45 pm, MONDAY

**Technical Presentation** 

Virtual Room 1

Session Chair: Gulshan Kumar Gaur, Research Scholar, Department of Management Studies, IIT Delhi, India

#### ID 268 Decentralized and Distributed Power Generation

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

#### ID 269 Micro Grids: Design, Operation and Applications

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

#### ID 272 Not Ivory Tower Industrial Engineering

Prabhakar Deshpande, IIT alumni, India

### ID 267 Sugarcane Bagasse and Cane Trash as a Fuel

Moses Jeremiah. Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### ID 292 Leveraging Resilience of Infant Formula Milk (IFM) Supply Chain

Mohamed Haouari and Maryam Al-Khatib, Department of Mechanical and Industrial Engineering, College of Engineering, Qatar University, Qatar Mona Haji, College of Science and Engineering, Hamad Bin Khalifa University, Doha, Qatar Mohamed Kharbeche, Qatar Transportation and Traffic Safety Center, College of Engineering, Qatar University, Doha, Qatar

### ID 266 Biogas Treatment and Upgrading Techniques

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### ID 297 Analyzing Critical Barriers to develop Battery-Swapping Ecosystems (BSE) for Sustainable Transportation in India

Utkarsh Nigam and Jitender Madaan, Department of Management Studies, Indian Institute of Technology Delhi, IIT Delhi Campus, Hauz Khas, New Delhi, India

12:00 – 1:45 pm, MONDAY

**Technical Presentation** 

Virtual Room 2

### Competitions

Session Chair: Dr. Mizanur Rahman, IEOM Australia Operations Director

### Senior Capstone Design Competition / FYP Competition

### ID 136 Helpy: A Mobile Application System for Engineering and Architecture Tools Rental Business

Angel Shaine N. Martin, Christine Joy V. Olanosa and Mary Jo M. Santiago, Industrial Engineering Department, Technological Institute of the Philippines – Manila, Philippines

Dr. Maria Teresa B. Mendoza, PIE, ASEAN Eng., Industrial Engineering Department – Adviser/ IE Program Chairperson, Technological Institute of the Philippines, Philippines

### ID 322 Ergonomic Adjustable chair as an Innovative Product Design Using Water Hyacinth Waste

Ronaldo Setiawan, Frans Jusuf Daywin and Lina Gozali, Tarumanagara University, Indonesia

### Lean Six Sigma Competition sponsored by Tooling Tech Group

### ID 301 Safety Stock Control to Minimize Bullwhip Effect at Casting Pump Manufacturing

Megalita Permata Putri, Lina Gozali and Juliana Kristina, Industrial Engineering, Universitas Tarumanagara, Jakarta, Indonesia

### ID 112 Six Sigma Application to Reduce Variance in Turnaround Time for Fertilizer Analysis

Mohd Kamaruddin Jaffar, Chemist, R&D and Agricultural Services, Johor Plantations Berhad, Central Analytical Laboratory, Johor Plantations Berhad, Kota Tinggi, Johor, Malaysia

Azianti Ismail, Associate Professor, Smart Manufacturing Research Institute (SMRI), Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

### **Poster Competition (Undergraduate)**

#### ID 300 Strategic Decisions Making Analysis of the 2015 Paris Climate Change Negotiation

Abdullah Alrabghi, Yasir Aljefri, Nawaf Sahli, Khalid Atallah and Abdulrahman Alsharef, Department of Industrial and Systems Engineering University of Jeddah, Jeddah, Saudi Arabia

### **Simulation Competition**

# ID 323 Production Floor Re-Layout Design of Packaging Company Using Systematic Layout Planning and Computerized Relationship Layout Planning Methods

Vanecia Marchella Hardinanerl, Lina Gozali and Lamto Widodo, Tarumanagara University, Indonesia

### September 11, 2023 (Monday) - Session: 2:00 - 3:45 pm

### 2:00 - 3:45 pm, MONDAY

### **Technical Presentation**

**Virtual Room 1** 

Session Chair: Priyanka Aggarwal, Delhi Technological University, India

### ID 320 Omni-Channel Retail: How Convenience and Trust Shape Buying Behavior

Raja Debashis, Research Scholar, School of Management Studies, University of Hyderabad, Hyderabad, India

# ID 321 Empowering Indian Tribal Communities: Examining the Synergy between the Sustainable Development Goals 2030 and Tribal Development – A Systematic Review and Conceptual Framework

Priyanka Aggarwal, Delhi Technological University, India Arushi Bathla, Indian Institute of Foreign Trade, India

# ID 256 Increasing Efficiency in the Process of Loading Goods into Containers through Lean Automation Concepts: A Case Study of 25kg Tapioca Starch Packaging

Patitta Kamjumpol and Nara Samattapapong, School of Industrial Engineering, Institute of Engineering, Suranaree University of Technology, Nakhon Ratchasima, Thailand

# September 12, 2023 (Tuesday)

### September 12, 2023 (Tuesday) - Session: 8:00 - 9:45 am

### 8:00 - 9:45 am, TUESDAY, September 12

Onsite Room 1

### **Global Engineering Education**

Session Chair: Dr. Ho Viet Tien, CFVG-HCM, University of Economics Ho Chi Minh City, Vietnam

8:00 am - 8:30 am (Tuesday, September 12)

Dr. I Gede Susrama Mas Diyasa

Vice Dean and Assistant Professor, Faculty of Computer Science

University of Pembangunan Nasional "Veteran"

SUrabaya, East Java, Indonesia

8:30 am - 9:00 am (Tuesday, September 12)

Dr. Muhammad Isradi

Lecture and Assistant Professor, Department of Civil Engineering

Faculty of Engineering

Mercu Buana University, Indonesia

9:00 am - 9:30 am (Tuesday, September 12)

Nangkula Utaberta Head of Research and Postgraduate Study School of Architecture and Built Environment (SABE) UCSI University. Nangkula, Malaysia

8:00 - 9:45 am, TUESDAY, September 12

**Onsite Room 2** 

### Women in Industry and Academia (WIIA) Panel

Panel Chair

Dr. Anabela Soares Senior Lecturer in Strategy & Operations Management Programme Leader for the MSc in International Management University of the West of England, Bristol, UK

Panel Speaker I

Dr. Haslinda Musa
Associate Prof. in Department of Technopreneurship
Universiti Teknikal Malaysia Melaka (UTeM)
CEO of ERADA Solutions Sendirian Berhad (Sdn Bhd)
Melaka, Malaysia

Panel Speaker II

Ms. Diyana Binti Mohd Amin Head of Sustainability & ESG Iskandar Investment Berhad (IIB), Iskandar Puteri (Nusajaya), Malaysia

Panel Speaker III

Dr. Azlin Abd Jamil
Senior Marketing Officer
Strategic Division
Office of Deputy Vice Chancellor (Research and Innovation)
Universiti Teknologi Malaysia, Johor Bahru, Malaysia

8:00 - 9:45 am, TUESDAY, September 12

**Onsite Room 3** 

# **Undergraduate Student Paper Competition sponsored by Siemens**

Session Chair: Dr. Từ Văn Bình, CFVG-HCM, University of Economics Ho Chi Minh City, Vietnam

ID 34 Implications of Working Memory Capacity of the Students to the Mental Workload During Modular, Online, and Face-To-Face Class

Abegail G. Sadia, Student, Visayas State University-Isabel, Visayas State University-Isabel, Philippines
Darry Mhei L. Morales, Assistant Professor, Visayas State University-Isabel, Department Head, Department of Industrial Engineering, Visayas State
University-Isabel, Philippines

ID 45 Optimal Manpower Requirement of the Office of the Registrar at Visayas State University- Isabel, Isabel, Leyte
Simon Peter P. Diano, Student, Department of Industrial Engineering, Visayas State University-Isabel Campus, Isabel, Leyte, Philippines
Fritzie F. Lucero, Instructor, Department of Industrial Engineering, Visayas State University-Isabel Campus, Isabel, Leyte, Philippines

ID 252 Home Health Care Routing and Scheduling Problem for Newborns and Mothers: A Case Study in Ho Chi Minh City Nguyen Thuy Bich Ngoc, School of Industrial Engineering and Management, International University, Thu Duc City, Viet Nam Ha Thi Xuan Chi, School of Industrial Engineering and Management, International University, Thu Duc City, Viet Nam Pham Huynh Tram, School of Industrial Engineering and Management, International University, Thu Duc City, Viet Nam

ID 285 Factors Influencing the Adoption of Online Advertising within Podcast Episodes among Generation Z in Ho Chi Minh City (Vietnam)

Tu Ngo Dan Thu, Undergraduate student, UEH-International School of Business, 17 Pham Ngoc Thach Street, Vo Thi Sau Ward, District 3 Ho Chi Minh City, Vietnam

ID 296 Operation Efficiency in the F&B Enterprise through Digitalization and Cloud Kitchen Integration: A Systematic Literature Review Karina Tricahya Wulandari, Mutiara Ayu Mukti an Kiren, Department Faculty of Economics and Business, Pakuan University, Indonesia

8:00 - 9:45 am, TUESDAY, September 12

**Operations Management** 

**Onsite Room 4** 

Session Chair: Dr Faridh Ahmad Zaharuddin (Expert in Welding Processes), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia

### ID 3 FlowKey: A Software Monitoring Application for Continuous Patient Flow in Hospitals

Salvador, Maerie Joyce A., Valdoria, Vanessa V., dela Cruz, Rommel, Quevedo and Venusmar, Industrial Engineering Department, College of Engineering Adamson, University, Manila, Philippines

#### ID 19 A Bibliometric Network Analysis of Service Quality Research in the GCC Countries Over the Past Two Decades

Mohamad Najem Alnajem, Assistant Professor of Operations Management at Gulf University for Science and Technology, Kuwait City, Kuwait

#### ID 20 Integrating Analytical Hierarchy Process and Hayami for Increasing the Value-Added Products

Fitra Lestari, Raka Maureka, Vera Devani, Muhammad Rizky and Muhammad Isnaini Hadiyul Umam, Industrial Engineering Department, Faculty of Science and Technology, State Islamic University Sultan Syarif Kasim Riau, Indonesia Rahmad Kurniawan, Department of Computer Science, Universitas Riau, Indonesia

#### ID 39 Helicopter Remote Control Improvement Design Using QFD and DFMA Methods

Evan Fardian Sinuhaji, Shishilya Yazid, Benjamin Hutapea and Siti Nur Maulidina, Postgraduate of Industrial Engineering Student, Faculty of Engineering, University of North Sumatera, Medan, Indonesia

#### ID 41 A Quest for Management Practices in Vietnam's Manufacturing Firms

Tung Nhu Nguyen, Lecturer, School of Business, International University – Vietnam National University Ho Chi Minh City, Quarter 6, Linh Trung Ward, Thu Duc, Ho Chi Minh City, Vietnam

### ID 170 Multi-Depots Capacitated Vehicle Routing Problem: A Case Study of Rice Distribution System in Mekong River Delta

Ly Van Tran, School of Industrial Engineering and Management, International University - Vietnam National University, Ho Chi Minh City, Vietnam

# ID 205 Continuous improvement model to increase productivity using Lean Manufacturing tools in an SME in the plastics industry Jose Zaga-Quispe, Bruno Vicuna-Valera and Alberto Flores-Perez, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú

# ID 235 Integration of Science, Technology, Engineering, and Mathematics (STEM) in Islamic Education Using Strategic Assumption Surfacing and Testing (SAST)

Sri Murhayati, Hartono, Susilawati and Khusnal Marzuqo, Faculty of Education and Teacher Training, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Salmaini Yeli, Faculty of Ushuluddin, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Budi Azwar, Faculty Syariah and Law, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Fitra Lestari, Industrial Engineering Department, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Lisa Rahmadani Utami, Bidang Pemberdayaan Masyarakat, Pekerjaan Umum dan Perumahan Rakyat

### ID 66 Stakeholder analysis of the circular business of electric motorcycle swappable batteries in Indonesia

Hafidh Munawir, Ph.D. Student Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret, Surakarta 57126, Indonesia

Department of Industrial Engineering, Faculty of Engineering, Universitas Muhammadiyah Surakarta, Indonesia

Wahyudi Sutopo and Muhammad Hisjam, Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret, Surakarta 57126. Indonesia

Anugerah Widiyanto, Directorate of Human Development, Demography, and Culture Policy Deputy for Development Policy, National Research and Innovation Agency (BRIN), BJ Habibie Bld. 6th fl., MH Thamrin No. 7, Central Jakarta, 10340, Indonesia

#### 8:00 - 9:45 am, TUESDAY, September 12

SCM

**Virtual Room 5** 

Session Chair: Dr. Sugoutam GHOSH, Senior Lecturer, School of Business/Logistics & Supply Chain Management, Singapore University of Social Sciences, Singapore

### ID 25 Risk Management Analysis in the Halal Food Supply Chain (HFSC) Using A Multi-Criteria Decision-Making (MCDM) Approach

Vira Guspa, Industrial Engineering Student, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia Tika Endah Lestari, Industrial Engineering Lecturer, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia Sri Susilawati Islam, Industrial Engineering Lecturer, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia

# ID 73 Vehicle Routing and Scheduling Problem with Time-Dependent Costs for A Case Study of Inventory & Last-mile Delivery Ly Van Tran, School of Industrial Engineering and Management, International University - Vietnam National University, Ho Chi Minh City, Vietnam

Nguyen Thi Kim Loan, Consumables and Materials Procurement, University Medical Center, Ho Chi Minh City, Vietnam

# ID 111 Inventory Cost Management Analysis Using Order Quantity Planning on Cold Rolled Coil Product in Indonesia and Thailand: Digital Price Setting

Martino Wibowo, Postgraduate Program, Faculty of Economics, Universitas Terbuka, South Tangerang, Indonesia Damrongsak Hattasat, School of Business, Rajamanggala university of Technology Suvarnabhumi, Phra Nakhon Si Ayyuthaya, Thailand Sompong Chuaynugul, International College, National Institute Development Administration (ICO-NIDA), Bangkok Krungthep Mahanakhorn, Thailand

Faizul Mubarok, Postgraduate Program, Faculty of Economics, Universitas Terbuka, South Tangerang, Indonesia

# ID 202 Application of ABC, Slotting and EOQ to Increase Productivity in a Trading Company: An Empirical Research in Peru Rocio Gonzales-Vasquez, César Adriano Lobato-Tello and Alberto Flores-Pérez, Facultad de Ingeniería. Universidad de Lima, Lima, Perú

#### ID 112 Six Sigma Application to Reduce Variance in Turnaround Time for Fertilizer Analysis

Mohd Kamaruddin Jaffar, Chemist, R&D and Agricultural Services, Johor Plantations Berhad, Central Analytical Laboratory, Johor Plantations Berhad, Kota Tinggi, Johor, Malaysia

Azianti Ismail, Associate Professor, Smart Manufacturing Research Institute (SMRI), Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

ID 81 Technological feasibility for the application of Cellular Manufacturing in a Typical Costume Workshop (Caporales)
Carlos Joao Maldonado-Galván and María del Carmen Mendoza-Velásquez, Bachelors in Industrial Engineering, Facultad de Ingeniería,
Universidad de Lima, Perú

Juan Carlos Quiroz-Flores and Martin Fidel Collao-Diaz, Researcher Professors, Facultad de Ingeniería, Universidad de Lima, Perú

### September 12, 2023 (Tuesday) - Session: 10:00 am - 1:00 pm - Onsite Room 1

### **Keynote Speakers**

Keynote I: Tuesday, September 12, 2023, 9:40 – 10:20 am

Prof. Dr. Vikas Kumar
Associate Dean for Research Innovation and Enterprise
Faculty of Business, Law and Social Sciences
Birmingham City University
Birmingham, UK

Keynote II: Tuesday, September 12, 2023, 10:20 - 11:00 am

Prof. Fabien De Geuser
Director
CFVG, French Vietnamese School of Management
HCMC, Vietnam

Keynote III: Tuesday, September 12, 2023, 11:00 – 11:40 am Ms Thao Nguyen Vietnam

Keynote IV: Tuesday, September 12, 2023, 11:40 am - 12:20 pm

Mr. Stan Weonsuk Lee
General Director
DAEHONG Communications Vietnam (LOTTE Group)
Ho Chi Minh City, Vietnam

Keynote V: Tuesday, September 12, 2023, 12:20 – 1:00 pm

Dr. Ir. Wahyudi Sutopo Professor Industrial Engineering Department Universitas Sebelas Maret (UNS) Surakarta, Indonesia

1:00 Lunch Break

### 2:00 pm, Tuesday - Poster Competition Onsite

**ID 299** Operation Efficiency in the F&B Enterprise through Digitalization and Cloud Kitchen Integration: A Systematic Literature Review Karina Tricahya Wulandari, Mutiara Ayu Mukti and Kiren, Department Faculty of Economics and Business, Pakuan University, Indonesia

### September 12, 2023 (Tuesday) - Session: 2:00 - 3:45 pm

2:00 - 3:45 pm, TUESDAY, September 12

**Onsite Room 1** 

### **Keynotes**

2:00 – 2:40 pm Keynote VI – Tuesday, September 12, 2023

2:40 - 3:20 Keynote VII - Tuesday, September 12, 2023

3:20 – 4:00 pm – Keynote VIII – Tuesday, September 12, 2023

Prof. Arvind Upadhyay
Professor, University of Stavanger Business School, University of Stavanger, Norway

2:00 - 3:45 pm, TUESDAY, September 12

**Onsite Room 2** 

### Sustainability Panel

Panel Chair

Dr. Robert Radics
Senior Lecturer
Department of Global Supply Chains and Trade
Lincoln University, New Zealand

ID 305 PT Pertamina Hulu Energi's Waste to Methane (WASTECO) Self-Sufficiency Program in Mahakam Lestari Village

Wahyu Irfan, Elvina Winda Sagala and Dina Nurul Fitria, Pertamina Hulu Energi, Jakarta, Indonesia Department of Agribusiness, Trilogi University, Jakarta, Indonesia

ID 306 "Raden Mas Prabu" and "Pesona Subang" Technology Innovation by Reusing Pineapple Leaf Waste: Case Study in Subang and Prabumulih Region of Pertamina Hulu Energi

Hesty Apriani, Elvina Winda Sagala and Dina Nurul Fitria, Pertamina Hulu Energi, Jakarta, Indonesia Department of Agribusiness, Trilogi University, Jakarta, Indonesia

ID 307 "Desa Berdikari Energi" Program in Renewable Energy of Pertamina Hulu Energi Initiatives

Ida Suryani Lasminar, Elvina Winda Sagala and Dina Nurul Fitria, Pertamina Hulu Energi, Jakarta, Indonesia Department of Agribusiness, Trilogi University, Jakarta, Indonesia

ID 308 "Sociopreneurships in Life Cycle Assessment and Net Zero Waste: A Synergy of Oil & Gas Companies with the Farmers Group"
Ade Barkah, Iwan Ridwan Faisal and Dina Nurul Fitria, Pertamina Hulu Energi, Jakarta, IndonesiaDepartment of Agribusiness, Trilogi University,
Jakarta, Indonesia

2:00 - 3:45 pm, TUESDAY

Onsite Room 3

# **Undergraduate Student Paper Competition sponsored by Siemens**

Session Chair: Dr. Ir. Wahyudi Sutopo, Universitas Sebelas Maret (UNS), Surakarta, Indonesia

ID 72 A Systematic Review of TQM Implementation in Electronic Production Settings

Az Zahra Azizah Hanum, Miguel Silvano Hermawan Wong, Stefan Garnett Harmasi and Valencia Grace Christanto, Department of Industrial Engineering, Faculty of Engineering and Technology, Sampoerna University, Jakarta Selatan, Jakarta, 11730, Indonesia

ID 118 Measurement of Software Quality Using the ISO 9126 Model on the Academic System of Jenderal Achmad Yani University Fajar Ramadhan, Informatics Department, Faculty of Science and Informatics, Universitas Jenderal Achmad Yani, Cimahi, Indonesia Puspita Nurul Sabrina, Informatics Department, Faculty of Science and Informatics, Universitas Jenderal Achmad Yani, Cimahi, Indonesia Herdi Ashaury, Informatics Department, Faculty of Science and Informatics, Universitas Jenderal Achmad Yani, Cimahi, Indonesia

ID 141 Smart Contract-based Rice Supply Chain Traceability: Perspective of Bangladesh

Maliha Rajwana Haque and Sadia Tabassum, Department of Industrial & Production Engineering, Rajshahi University of Engineering & Technology

Rajshahi, Bangladesh

Khairun Nahar, Asst. Professor, Department of Industrial & Production Engineering, Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh

#### ID 286 Sustainable Supplier Evaluations and Order Allocation with Multiple Products using Machine Learning

Huynh Uyen My, School of Industrial Engineering and Management, International University-VNU-HCM, Thu Duc City, Viet Nam Ha Thi Xuan Chi, School of Industrial Engineering and Management, International University-VNU-HCM, Thu Duc City, Viet Nam Pham Huynh Tram, School of Industrial Engineering and Management, International University -VNU-HCM, Thu Duc City, Viet Nam

Effectiveness of Virtual Work Immersion: A Descriptive-Correlational Study Among Extended Senior High School Graduates

Thea G. Espinueva, Vincent Matthew F. Labrador, Angel Shaine N. Martin, Christine Joy V. Olanosa and Mary Jo M. Santiago, Industrial Engineering Department, Technological Institute of the Philippines - Manila, Philippines

Janina Elyse A. Reyes, Industrial Engineering Department – Adviser, Technological Institute of the Philippines – Manila, Philippines

### 2:00 - 3:45 pm, TUESDAY

### Industry 4.0

Onsite Room 4

Session Chair: Khidzir Zakaria (Expert in Additive Manufacturing), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia

### Assessing the Impact of Implementing Smart Logistics Technologies at King Abdullah Seaport in Saudi Arabia

Turki Atbani, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478, Saudi Arabia

#### Decision support for SME entrepreneurs to become SME 4.0

Kenza Berrada, Faculty of Sciences and Techniques, Sidi Mohamed Ben Abdellah University, B.P. 2202 - Imouzzer Road, Fez, Morocco Brahim Herrou, Higher school of technology, B.P.2427 - Imouzzer Road, Fez, Morocco

#### A Study on Order Release Control Policies in Wafer Fabrication Facility: A Review, Classification and Conceptual Simulation ID 147 Framework

Raqupathi T and Mathirajan M, Department of Management Studies, Indian Institute of Science, Bangalore, India

### Consolidation policies on manufacturing SMEs: Approach on endogenous production inefficiency model

Tu Van Binh, University of Economics Ho Chi Minh City and CFVG

Ho Viet Tien, University of Economics Ho Chi Minh City and CFVG

Fabien De Geuser, Centre Franco-Vietnamien de formation à la Gestion (CFVG)

### Consumer Analytics Toward Development of Cross-selling Products at Retail Banking: An Approach on Big Data at X-Bank To Phuc Nguyen Khuong, Branch Managing Director, Vietnam

#### ID 283 Why do firms owe mandatory social insurance? Evidence from private firms in Can Tho city (Vietnam)

CFVG Management, Vietnam

### A Systematic Literature Review of Technology Transition for Electric Vehicles Using Bibliometrics Method

Roni Zakaria Raung, Wahyudi Sutopo and Muhammad Hisjam, Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret, Jl. Ir. Sutami, 36A, Surakarta, Jawa Tengah, 57126 Indonesia

Djoni Hartono, Department of Economics, Faculty of Economics and Business, University of Indonesia, Pondok Cina, Kecamatan Beji, Kota Depok, Jawa Barat, 16424 Indonesia

### 2:00 – 3:45 pm, TUESDAY, September 12

### Systems Engineering

Virtual Room 5

Session Chair: Ram Chandra, Centre for Rural Development and Technology, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India

#### ID 68 Implementation of RoboEOC (Automated Incident Management System) to Human Centric Incident Ticketing Management Workflow

Arnold I. Aguilar, Department of Industrial and Systems Engineering, De La Salle University, Manila, Philippines Ronaldo Polancos, Department of Industrial and Systems Engineering, De La Salle University, Manila, Philippines

### Investigating the Water Reticulation problem in the Nkangala District Municipality of Mpumalanga Province

D. R Hills, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa T.M Phumo, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa M.R Mafafo, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa M. E. Matlakala, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

### Investigating Water Reticulation Problem in The Sekhukhune District, Municipality of Limpopo

M. Lomboli, U.W. Abrahams, A.K. Mukombami, M. E. Matlakala and D. V. V. Kallon, Depatment of Mechanical and Industrial Technology, University of Johannesburg, South Africa

#### Barriers to Sustainable Business Model for Public EV Charging Infrastructure in Developing Nations

Gaurav Gupta and Anoop Singh, Department of Management Sciences, Indian Institute of Technology Kanpur, India

### Sustainable utilization of agricultural biomass residues for bioenergy production and a pathway towards minimization of greenhouse gases emissions

Ram Chandra, Centre for Rural Development and Technology, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India

Jitendra Madaan, Department of Management Studies, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India Ritunesh Kumar, Department of Mechanical Engineering, Indian Institute of Technology Indore, Indore, Madhya Pradesh, India

### September 12, 2023 (Tuesday) - Session: 4:00 - 5:45 pm

4:00 - 7:00 pm, TUESDAY, September 12

**Onsite Room 1** 

### Six Sigma Certification Workshop Speaker: Dr. Ahad Ali, LTU, MI, USA

4:00 - 5:45 pm, TUESDAY, September 12

Onsite Room 2

### **Industry 4.0 Panel**

Panel Chair
Dr. Muhammad Isnaini Hadiyul Umam
Lecturer at Industrial Engineering
UIN Sultan Syarif Kasim Riau, Indonesia

ID 239 Modification of Symbiotic Organisms Search Algorithm for Blood Distribution Problems in Pekanbaru City Blood Bank Unit Muhammad Isnaini Hadiyul Umam, Fitra Lestari, Muhammad Rizki and Nazaruddin, Industrial Engineering Department, Faculty of Science and Technology, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Muhammad Luthfi Hamzah, Information System Department, Faculty of Science and Technology, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Hartono, Mathematical Education Department, Faculty of Tarbiyah and Education, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia Budi Azwar, Islamic Economics Department, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

### Panel Speakers

Dr. Rahmad Kurniawan, ST.
Senior Lecturer, Department of Computer Science
University of Riau, Pekanbaru City, Riau 28293, Indonesia

Presentation Title: DESK: A Dashboard Application for Early Warning and Prevention of Forest Fires in Riau Region Using Machine Learning

4:00 - 5:45 pm, TUESDAY

**Onsite Room 3** 

# **Undergraduate Student Paper Competition sponsored by Siemens**

Session Chair: Dr. Linh Duong, University of the West of England, UK

# ID 207 The Influence of Profitability, Leverage and Good Corporate Governance on Tax Avoidance (Studies at Manufacturing Companies Listed on the IDX 2017 – 2021)

Septria Leony Almiranti, Student, School of Accountancy, Faculty of Economics and Business, Telkom University, Bandung, Indonesia Dr. Koenta Adji Koerniawan, SE., Ak., MM., BKP., CPA., CA., M. Ak, Lecturer, School of Accountancy, Faculty of Economics and Business Telkom University, Bandung, Indonesia

### ID 209 The Effect of Digital Transformation and Employee Communication on Work Effectiveness at the Archives Office of South Sumatra Province

Ni Ketut Ariyanti, Management Student of Undergraduate Program, Universitas Bina Darma, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculty of Social and Humanities, Universitas Bina Darma, Palembang, Indonesia

### ID 210 Analysis of Employee Change Behavior Towards Organization Moderated by Management Support

Rindi Antika, Undergraduate Student of Management Program, Bina Darma University, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculty of Social Sciences and Humanities, Bina Darma University, Palembang, Indonesia

ID 212 The influence of self-efficacy mediated by organizational citizenship behavior (OCB) on service quality in private universities Titian Nur Aulia, Management Student of Undergraduate Program, Universitas Bina Darma University, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculty of Sosial Sciences and Humanities, Universitas Bina Darma, Palembang, Indonesia

### ID 231 Three Key-Elements for Data Center Facilities Sizing in Early Stage of Design

Duy-Anh Dang, Xuan-Truong Nguyen and Hai-Minh Luong, Department of Applied Engineering and Technology, University of Science and Technology of Hanoi, Vietnam Academy of Science and Technology, No.18 Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam Mai-Quyen Hoang, Faculty of Electrical Engineering, Hanoi University of Industry, No.298 Cau Dien, Minh Khai, Bac Tu Liem, Hanoi, Vietnam

### ID 238 Analysis of Employee Engagement on Performance Mediated by Organizational Citizenship Behavior

Rizky Allia Septiana, Undergraduate Student of Management Program, Bina Darma University, Palembang, Indonesia Muji Gunarto, Management Study Program, Faculity of Social Sciences and Humanities, Bina Darma University, Palembang, Indonesia

ID 70 Optimizing Location of Public Electric Vehicle Charging Stations for Electric Motorcycles: A Case Study of Surakarta City Hilmi Septabiyya, Undergraduate Student, Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Central Java, Indonesia

Wahyudi Sutopo, University Centre of Excellence for Electrical Energy Storage Technology Department, Faculty of Engineering Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Universitas Sebelas Maret, Surakarta, Central Java, Indonesia

### 4:00 - 5:45 pm, TUESDAY

### **Supply Chain Management**

**Onsite Room 4** 

Session Chair: Md. Sajib Milki, Department of Industrial Engineering, BGMEA University of Fashion and Technology, Dhaka-1230, Bangladesh

### ID 1 Can Electric Motorcycles overtake Two-wheeled Gasoline-powered in Southeast Asia?

Wahyudi Sutopo, University Centre of Excellence for Electrical Energy Storage Technology, Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia Muhammad Hisjam, Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia

Sayyidah Maulidatul Afraah, Master Program of Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, 57126, Indonesia

Azanizawati Ma'aram, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor Baru, 81310, Malaysia

# ID 214 Exploring the Barriers of Circular Supply Chain Implementation in Electric Battery Industry: A Perspective of Developing Country

Md. Sajib Milki, Department of Industrial Engineering, BGMEA University of Fashion and Technology, Dhaka-1230, Bangladesh Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh Md. Ariful Islam, Department of Industrial & Production Engineering, Rajshahi University of Engineering & Technology, Rajshahi-6204, Bangladesh

### ID 98 Perceptions and Attitudes on the Adoption of Drones in Logistics Operations: A Case Study of Saudi Arabia

Mohammed Balfaqih, Department of Computer and Network Engineering, University of Jeddah, Jeddah 23218, Saudi Arabia Khalid Alasmari and Raneem Zainalabdeen, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

### ID 264 Future Outlook Toward Sustainable Supply Chain of Capture Fisheries in Rembang District, Central Java Indonesia

Hasrul, Lecturer, Faculty of Economy and Business, Universitas Pakuan, Bogor Indonesia

Yuary Farradia, Lecturer, School of Postgraduate, Universitas Pakuan, Bogor Indonesia

Herman, Retno Martanti Endah Lestari and Hamzah, Lecturer, Faculty of Economy and Business, Universitas Pakuan, Bogor Indonesia

# ID 75 Domain Knowledge-Based Structural Causal Model on Supply Chain Operational Vulnerabilities: Case Study on Electric Motorcycle - Battery Swapping Station

Yusuf Priyandari, A Doctoral student at the Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia

Wahyudi Sutopo, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia Muhammad Nizam, Electrical Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, and Centre of Excellence for Electrical Energy Storage Technology, Universitas Sebelas Maret, Surakarta, Indonesia

Hendro Wicaksono, School of Business, Social & Decision Sciences, Constructor University, Campus Ring 1, Bremen, 28759, Germany

### ID 76 Ecotourism Village Recognition Strategy Using Tourism Production Function Development Model

Brahmastya Artanto, Student of Industrial Engineering, Faculty of Engineering, Sebelas Maret University Surakarta, Indonesia Roni Zakaria Raung and Fakhrina Fahma, Staff of Industrial Engineering, Faculty of Engineering, Sebelas Maret University Surakarta, Indonesia

### 4:00 – 5:45 pm, TUESDAY, September 12

**Business Management** 

Virtual Room 5

Session Chair: Saskia Puspa Kenaka, Faculty of Industrial Technology, Institut Teknologi Bandung, Bandung, Indonesia

# ID 109 Identification of Bungo Batik Motifs Through Digital Catalog Design as Promotional Media and Visual Branding Ariyanto, Nanik Istianingsih, Susriyanti, Hamirul and Abu Bakar, UPI YPTK Padang, Indonesia

# ID 110 Identification of Bungo Batik Motifs Through Digital Catalog Design as Promotional Media and Visual Branding Ariyanto, Nanik Istianingsih, Susriyanti, Hamirul and Abu Bakar, Management Doctoral Program, UPI YPTK Padang, Indonesia

# ID 135 Sustainable Industrialisation For Economic Growth Through Research and Innovation Wilson Nyamanhindi, Harare Polytechnic, Zimbabwe

# ID 217 Consumer Analytics Toward Development of Cross-Selling Products at Retail Banking: An Approach on Big Data At X-Bank Tô Phúc Nguyên Khương, Vietnam

### ID 165 Commercialization of Drainage Inspection Services Using Drainage Probe Robot

Cabiles, Angelo Carl Kenneth A.; Dollisen, Rebecca Anne P.; Mandal, Charisse Amor Y.; Mirafuentes, Charina L. And Paran, Abigail Louise T., Cebu Institute of Technology – University, Philippines

### ID 64 Review and Framework for Data-Driven Joint Predictive Maintenance and Inventory of Spare Parts

Saskia Puspa Kenaka, Andi Cakravastia Raja Anas Ma'ruf and Senator Nur Bahagia, Faculty of Industrial Technology, Institut Teknologi Bandung Bandung, Indonesia

ID 120 Project Portfolio Management in the Digital Era for Organizational Strategy Execution and Sustainable Development Humphrey Matlala, Hannelie Nel and Jan-Harm Pretorius, Postgraduate School of Engineering Management, University of Johannesburg Johannesburg, South Africa

ID 51 Identification and Analysis of Barriers to the Adoption of Blockchain Technology in the Logistics Industry

Maneerat Tangsakul and Panitas Sureeyatanapas, Department of Industrial Engineering, Faculty of Engineering, Khon Kaen University
Khon Kaen, Thailand

# September 13, 2023 (Wednesday)

### **September 13, 2023 (Wednesday) - Session: 8:00 – 9:30 am**

### 8:00 - 9:40 am, WEDNESDAY, September 13

Onsite Room 1

### Global Industry Solutions and Industry 4.0

Session Chair: Dr. Talib Bon

8:00 am - 8:20 am (Wednesday, September 13)

Ts Dr Ihfasuziella Binti Ibrahim Senior Researcher Construction Research Institute of Malaysia (CREAM) Kuala Lumpur, Malaysia

8:20 am - 8:40 am (Wednesday, September 13)

Alias Abdul Rashid Head of Maintenance Unit KLCC Urusharta Sdn. Bhd., Permata Sapura Kuala Lumpur, Malaysia

8:40 am - 9:00 am (Wednesday, September 13)

Ts. Dr. Hj. Mohd Khairolden Bin Ghani Senior Researcher Construction Research Institute of Malaysia (CREAM) Kuala Lumpur, Malaysia

9:00 am - 9:20 am (Wednesday, September 13)

## ID 333 Quadruple Helix Social Innovation in Labuhan Coastal and Lake Shuji Tourism in PT PHE Upstream Pertamina: West Madura Offshore and Prabumulih Field Case Studies

Fitri Erika, Widya Gustiani, PT Pertamina EP Cepu Regional 4, Central Java, Indonesia Hengky Rosadi, Erwin Hendra, and Putra, PT Pertamina EP Prabumulih Field Zona 4 Regional, South Sumatera, Indonesia Ulil Masruroh, PT Pertamina Hulu Energi West Madura Offshore Zona 11 Regional 4, East Java, Indonesia Amarullah. PT Pertamina EP Cepu Regional 4, Central Java, Indonesia Arya Dwi Paramita, PT Pertamina Hulu Energi (PHE), Jakarta, Indonesia

### 8:00 - 9:40 am, WEDNESDAY, September 13

Onsite Room 2

### Lean Six Sigma Panel

Panel Chair
Dr. Edly Ferdin Ramly
Certification Director
EFR Certification
Johor Bahru, Malaysia

### 8:00 - 9:45 am, WEDNESDAY, September 13

Onsite Room 3

### **Master Thesis Competition**

**Session Chairs:** 

Dr. Từ Văn Bình, CFVG-HCM, University of Economics Ho Chi Minh City, Vietnam

Dr. Vikas Kumar, BCU, UK

ID 78 The Current Level of the Implementation of Unmanned Aerial Vehicles in the South African Construction Industry

Mpho Terrence Maiwashe and Prof Clinton Aigbavboa, Faculty of Engineering and the Built Environment, Department of Construction Management & Quantity Surveying, University of Johannesburg, Gauteng, South Africa

Emmanuel Oikelomen Ayorinde, Faculty of Engineering and the Built Environment, Department of Civil Engineering Technology, University of Johannesburg, Gauteng, South Africa

### **Doctoral Dissertation Competition**

### ID 133 A Contextual Relationship Structural Model for Practicing Lean Production System in Indian SME

S. Bharath Sankar and Muthu Mathirajan, Department of Management Studies, Indian Institute of Science (IISc), Bangalore, Karnataka 560012, India

# ID 147 A Study on Order Release Control Policies in Wafer Fabrication Facility: A Review, Classification and Conceptual Simulation Framework

Ragupathi T and Mathirajan M, Department of Management Studies, Indian Institute of Science, Bangalore, India

# ID 130 A Comparative Analysis of Heuristic Methods for Facility Location and Allocation of Buses to Facilities in Urban Road Transportation Systems

Rupkatha Ghosh and M. Mathirajan, Department of Management Studies, Indian Institute of Science, Bangalore 560012, India

### ID 137 A MILP Model for Single Depot, Single Truck and Multiple Drones for Last-Mile Delivery Problem

Saloni Jangid, Department of Mathematics, Central University of Rajasthan, Ajmer 305817, India

Rupkatha Ghosh and M. Mathirajan, Department of Management Studies, Indian Institute of Science, Bangalore 560012, India

### ID 129 LPG Cylinder Delivery Authentication using Artificial Intelligence in Last Mile Delivery

Prithvirajan D and Mathirajan M, Department of Management Studies, Indian Institute of Science, Bangalore 560012, India

### Senior Capstone Design Competition / FYP Competition

### ID 169 Filtrar: A Canal Solid Waste Collector and Compactor Machine

Jhia Angelyck Mavy R. Cruz, Thea G. Espinueva and Vincent Matthew F. Labrador, Industrial Engineering Department, Technological Institute of the Philippines – Manila, Philippines

Dr. Maria Teresa B. Mendoza, Industrial Engineering Department - Adviser, Technological Institute of the Philippines - Manila, Philippines

### 8:00 – 9:45 am, WEDNESDAY, September 13

**Technology Management** 

**Onsite Room 4** 

Session Chair: Anjum Ali, Ph.D., Former Professor of EE, FAST-NU, Lahore, Pakistan

### ID 22 Electric Motorcycle Market Projection Based on Subsidy and Incentive Policies in Indonesia

Roni Zakaria Raung, Wahyudi Sutopo and Muhammad Hisjam, Teknik Industri, Fakultas Teknik, Universitas Sebelas Maret Surakarta, Jl. Ir. Sutami, 36A, Surakarta, Jawa Tengah, 57126 Indonesia

Djoni Hartono, Departemen Ekonomi, Fakultas Ekonomi dan Bisnis, Universitas Indonesia, Pondok Cina, Kecamatan Beji, Kota Depok, Jawa Barat, 16424, Indonesia

### ID 140 Modelling Water Pumping System in the Govan Mbeki Local Municipality

- P. Sekwakwa, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa
- A. Cholo, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa
- T. Ramaila, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa
- M. E. Matlakala, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa
- D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

## ID 153 Mediating Role of Entrepreneurial Motivation Between Individual Entrepreneurial Orientation Factors, Self-Efficacy and Entrepreneurial Intention in the UAE

Khaled Mohammed Khalfan, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia Khadijah Md Ariffin, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

### ID 154 The Effect of Individual Entrepreneurial Orientation Factors, Self-Efficacy on Entrepreneurial Intention Among the UAE University Students

Khaled Mohammed Khalfan and Khadijah Md Ariffin, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia 86400 Parit Raja, Batu Pahat, Johor, Malaysia

# ID 156 The Effect of Technological, Organizational, Environmental and Overall quality factors on SMEs Performance: Empirical Evidence from UAE

Saeed Ali Saeed Bin Al Dada Al Shehhi and Khadijah Md Ariffin, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

### ID 157 The Relationship between Leadership styles, Artificial Intelligence and Employees Performance: A Review paper

Mansour Sulaiman Alshamisi, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

Aryani Binti Ahmad Latiffi, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

### ID 37 Quality Management Systems: A Case Study of a Multi-Business Packaging Organization in South Africa

Xhanti Dyonase, University of Johannesburg, South Africa

#### ID 117 Architectural Engineering Design: A Real-Life Example

Anjum Ali, Ph.D., Former Professor of EE, FAST-NU, Lahore, Pakistan

Former Professor, ECE, KICS, UET, Lahore, Pakistan

Former Associate Professor of EE, Mercer University, MACON, GA, USA

Former Associate Professor of CSE, LUMS, Lahore, Pakistan

### 8:00 - 9:45 am, WEDNESDAY, September 13

### **Technical Presentations**

Virtual Room 5

Session Chair: Pravin Mahendra Mishra, Industrial & Systems Engineering, Northern Illinois University, DeKalb, Illinois, USA

### ID 67 Multi-Objective Optimization Model for Sustainable 3D Printing Considering Quality Loss

Eko Pujiyanto, Department of Industrial Engineering, Universitas Sebelas Maret Surakarta (UNS), Surakarta, Indonesia Cucuk Nur Rosyidi, Department of Industrial Engineering, Universitas Sebelas Maret Surakarta (UNS), Surakarta, Indonesia Wakhid Ahmad Jauhari, Department of Industrial Engineering, Universitas Sebelas Maret Surakarta (UNS), Surakarta, Indonesia

### ID 42 Hearing Threshold Levels among Clothes Convection Industry Workers in Klaten, Central Java, Indonesia

Asti Widuri, Doctoral Program in Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada (UGM), Yogyakarta, Indonesia Otorhinolaryngology Department Faculty of Medicine and Health Science, Universitas Muhammadiyah Yogyakarta (UMY), Yogyakarta, Indonesia Endraswari Estigroho, Medical Student, Faculty of Medicine and Health Science, Universitas Muhammadiyah Yogyakarta (UMY), Yogyakarta, Indonesia

Eko Pujiyanto, Department of Industrial Engineering, Universitas Sebelas Maret Surakarta (UNS), Surakarta, Indonesia

### ID 107 Analysis of Design of Flowers and Honeybees in the Pollination Process

Pratap Sriram Sundar, Academic Director and Adjunct Professor of Operations Management (MIGM and PIILM), Indian School of Business Mohali-140306, India

Chandan Chowdhury, Senior Associate Dean, Practice Professor and Executive Director (MIGM and PLIIM), Indian School of Business, Gachibowli, Hyderabad 500111, TS, India

Sagar Kamarthi, Professor and Director of Data Analytics Engineering, Northeastern University, 360 Huntington Avenue, Boston, MA 02115, USA

### ID 219 Energy efficiency and carbon emissions of different forms of distribution in Vietnam and a comparison with France

LAM Quoc Dat, Doctor, Department of Urban and Road Transport, Faculty of Transport Economics, University of Transport and Communications, Hanoi 100000, Vietnam

### Optimization of Efficiency in a High-Traffic Fuel Station in India Using Queuing Theory and Service Time Analysis

Pravin Mahendra Mishra, Industrial & Systems Engineering, Northern Illinois University, DeKalb, Illinois, USA Mobasshira Zaman, Industrial Engineering, Arizona State University, Tempe, Arizona, USA

### **September 13, 2023 (Wednesday) - Session: 10:00 am - 1:00 pm**

### **Keynote Speakers**

Keynote IX: Wednesday, September 13, 2023, 9:40 – 10:20 am

### Professor Alain Chong

Co-editor in chief of Industrial Management & Data Systems
Associate Editor of Information & Management and Journal of Computer Information Systems

Keynote X: Wednesday, September 13, 2023, 10:20 – 11:00 am

Prof. Hing Kai Chan
Professor of Operations Management
Nottingham University Business School, China
Co-editor of Industrial Management & Data Systems (SCI-indexed) since 2014

Associate Editor of Transportation Research Part E: Logistics and Transportation Review (SCI-indexed) since 2018

Keynote XI: Wednesday, September 13, 2023, 11:00 - 11:40 am

Ms Jen Vu Huong Vietnam

Keynote XII: Wednesday, September 13, 2023, 11:40 - 12:20 pm

Dr. Anabela Soares
Programme Leader for the MSc in International Management
University of the West of England, Bristol, UK

Keynote XIII: Wednesday, September 13, 2023, 12:20 - 1:00 pm

Dr. Fitra Lestari
Vice Dean for Academic Affairs in Faculty of Science and Technology
Professor in Industrial Engineering Department
Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

1:00 Lunch Break

### September 13, 2023 (Wednesday) - Session: 2:00 - 3:45 pm

2:00 - 3:45, WEDNESDAY, September 13

**Onsite Room 1** 

### **Keynote Speakers**

2:00 – 2:40 pm, Wednesday, September 13, 2023 – Keynote XIV

Mr. Nguyen Thanh Nha General Director Tan Cang – SCT Human Resource Development LLC, Vietnam

2:40 – 3:20 pm, Wednesday, September 13, 2023 – Keynote XV

Assoc. Prof Datuk Dr. Sabri Bin Mohamad Sharif Deputy Vice Chancellor Student and Alumni Affairs Universiti Teknikal Malaysia (Melaka), Malaysia

3:20 – 4:00 pm, Wednesday, September 13, 2023 – Keynote XVI

Professor Jose Arturo Garza-Reyes, Ph.D.
Professor of Operations Management
Head of the Centre for Supply Chain Improvement
College of Business, Law and Social Sciences
Derby Management School
University of Derby, Derby, UK

### 2:00 - 3:45, WEDNESDAY, September 13

Onsite Room 2

### **Global Business Management Panel**

Panel Chair

Dr. Fitra Lestari
Vice Dean for Academic Affairs in Faculty of Science and Technology
Professor in Industrial Engineering Department
Universitas Islam Negeri Sultan Syarif Kasim Riau
Riau, Indonesia

2:00 - 3:45, WEDNESDAY, September 13

**Onsite Room 3** 

### **Graduate Student Paper Competition**

Session Chair: Dr. Vikas Kumar, Birmingham City University, UK

ID 61 Industrial Wastewater Treatment in Latin America and Europe: Methods and Applications. A Systematic Review of the Literature Gianfranco Julinho Hidalgo Salhuana, Valeria Paola Hip Salazar and Luis Jesús Córdova Aguirre, Faculty of Engineering and Architecture Industrial Engineering, Career University of Lima, Lima, Peru

ID 218 Socioeconomic Influence of Big Data in Southern African Development Countries and Sub-Saharan Countries Tanyaradzwa Machingauta, Master's student, School of Business, Amrita Vishwa Vidyapeetham, Bangalore, India

### ID 257 Process Level with Time Delay Control Using Smith Predictor and Fuzzy PI Controller

Trong Tai – Nguyen and Quang Phat – Tran, Dr., Faculty of Electrical & Electronics Engineering, Department of Control & Automation, VNU-HCM Ho Chi Minh City University of Technology (HCMUT), Vietnam National University Ho Chi Minh City, VietNam

# ID 48 The Role of Technological Entrepreneurship and Innovation System for Commercializing Electric Motorcycle Conversion Kit: A Case Study

Tasya Santi Rahmawati, Master Program of Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia

Wahyudi Sutopo, University Centre of Excellence for Electrical Energy Storage Technology, Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia Renny Rochani, Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia

**ID 49** The Role of Technopreneur and Innovation System to Increase the Adoption of Marketplace: A Case Study PT ABC in Indonesia Sayyidah Maulidatul Afraah and Renny Rochani, Master Program of Industrial Engineering Department, Universitas Sebelas Maret, Surakarta 57126, Indonesia

Wahyudi Sutopo, Master Program of Industrial Engineering Department, Universitas Sebelas Maret Centre of Excellence for Electrical Energy Storage Technology, Universitas Sebelas Maret, Surakarta 57126, Indonesia

### 2:00 - 3:45, WEDNESDAY, Sept. 13

### Production Engineering and Simulation

**Onsite Room 4** 

Session Chair: Ketut Gita AYU, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, Arizona, USA

### ID 32 An Intelligent Financial Trading Support System

Shian-Chang Huang, Department of Business Administration, National Changhua University of Education, Taiwan

### ID 185 Understanding household water-use behaviour in Limpopo rural areas, of South Africa

I. Mafanya, PhD Candidate, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa D.V.V Kallon, Associate Professor and Head of Quality Assurance, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

### ID 213 Simulation Model Vis-à-vis Hurricane Impacts through Emergency Response System

Ketut Gita AYU, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, Arizona, USA Khristian Edi Nugroho SOEBANDRIJA, Industrial Engineering Department, Faculty of Engineering, Bina Nusantara University, Jakarta, Indonesia

### ID 27 Line Efficiency Improvement of PHGL Through Fabrication of Tile Aligner at Mariwasa Siam Ceramics Inc.

Norxine L. Montalbo, Associate Professor, Batangas State University the National Engineering University, JPLPC Malvar Campus, Dean, College of Engineering, Malvar, Batangas, Philippines

Abellana, Lovelyn L., Orna, Generose M. and Talento, Liezel M., Students, Batangas State University the National Engineering University, JPLPC Malvar Campus, Malvar, Batangas, Philippines

### ID 184 Sustainability Synergies and Trade-offs of a Thai Metal Manufacturing Company

Vichathorn Piyathanavong, School of Manufacturing Systems and Mechanical Engineering (MSME), Sirindhorn International Institute of Technology (SIIT), Thammasat University, 99 Moo 18, Paholyothin, Khlong Luang, Pathum Thani 12120, Thailand School of Knowledge Science, Japan Advanced Institute of Science and Technology, 1-1 Asahidai, Nomi, Ishikawa, 923-1292, Japan

Van-Nam Huynh, School of Knowledge Science, Japan Advanced Institute of Science and Technology, 1-1 Asahidai, Nomi, Ishikawa, Japan Jessada Karnjana, National Electronics and Computer Technology Center (NECTEC), National Science and Technology Development Agency (NSTDA), 111 Thailand Science Park (TSP), Phahonyothin, Khlong Luang, Pathum Thani 12120, Thailand Sun Olapiriyakul, School of Manufacturing Systems and Mechanical Engineering (MSME), Sirindhorn International Institute of Technology (SIIT) Thammasat University, 99 Moo 18, Paholyothin, Khlong Luang, Pathum Thani 12120, Thailand

#### ID 21 Analysis of Consumer Purchase Patterns Using Frequent Pattern Growth Algorithm (FP-Growth)

Muhammad Rizki, Choiriah Azmi, Fitra Lestari, Nazaruddin and Muhammad Isnaini Hadiyul Ūmam, Industrial Engineering Department, Faculty of Science and Technology, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

Hartono, Department of Mathematical Education, Faculty of Tarbiyah and Education, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

### ID 268 Decentralized and Distributed Power Generation

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### ID 269 Micro Grids: Design, Operation and Applications

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### 2:00 - 3:45, WEDNESDAY, September 13

SCM

**Virtual Room 5** 

Session Chair: Rajan Ponnuswamy, Indian Institute of Information Technology Design and Manufacturing, Kancheepuram, India

### ID 113 Designing a Multi Echelon Supply Chain Network for Citrus Fruits

Rajan Ponnuswamy and Shahul Hamid Khan, Department of Mechanical Engineering, Indian Institute of Information Technology Design and Manufacturing, Kancheepuram, India

### ID 183 Analysis of Critical Barriers to Sustainability in Packaging Supply Chain using Fuzzy Best Worst Method

Gulshan Kumar Gaur and Jitender Madaan, Department of Management Studies, Indian Institute of Technology Delhi, IIT Delhi Main Rd, IIT Campus, Hauz Khas, New Delhi, India

#### ID 77 Insights into Circular Supply Chain for Electric Motorcycle Batteries: A Case in Indonesia

Muhammad Hisjam and Wahyudi Sutopo, Dept. of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret, Jalan Ir. Sutami 36A, Surakarta, Indonesia

## ID 105 An Integrated Network Design and Inventory Optimization Model for a Perishable Supply Chain Toward Sustainable Development

Kim Cuc Vo Thi, Thi Nguyen Truong, Thuy Nguyen Thi Le and Can Nguyen Van, Faculty of Industrial Management, Can Tho University, Can Tho city, Vietnam

### ID 263 Supplier Selection of Equipment Components for the Construction of Nuclear Facilities: AHP-Based Approach Integrated with Risk Assessment

Thippawan Phongnontachai and Jittra Rukijkanpanich, Department of Industrial Engineering, Faculty of Engineering, Chulalongkorn University Bangkok, Thailand

### ID 265 Enhancing map design for 3-dimensional spatial data based on integration of 4IR geomatics technologies

Edward Kurwakumire, Lecturer, Geomatics Department, Tshwane University of Technology, Pretoria, South Africa

### ID 144 The Interactions of Business Environment, Generic Strategy, Operations Strategy, and Business Performance in the Lebanese Industries

Ziad Ghazal, MBA Graduate, School of Business, Lebanese American University, Beirut, Lebanon

Abdulnasser Kassar, Associate Professor at Adnan Kassar School of Business, Lebanese American University, Beirut, Lebanon

### September 13, 2023 (Wednesday) - Session: 4:00 - 5:45 pm

### 4:00 – 5:45, WEDNESDAY, September 13

**Onsite Room 1** 

### **Global Innovation Plenary**

4:00 pm - 4:30 pm

Dr. Hendro Sasongko, Ak, MM., CA Dean, Faculty of Economics and Business Pakuan University Bogor, Indonesia

Cost Effectiveness Strategy by Utilizing Electromagnetic Generators in Water Service System in Remote Areas – Case Study in Sukamakmur Village. Bogor Regency. Indonesia

4:30 pm - 5:00 pm

Asep Denih, M.Sc., Ph.D. Dean, Faculty of Mathematics and Natural Sciences University of Pakuan Bogor, Indonesia

Monitoring Solar Radiation Intensity in Solar Tracking System Based on Artificial Intelligences

5:00 pm - 5:30 pm

LEE Kar Heng

Founding President, AOC Singapore Chapter Senior Advisor, Vietnamese Association in Singapore Advisor, Vietnam Chamber of Commerce, Singapore School Advisory Committee, Henry Park Primary School Chairman, IEEE Education Chapter, Singapore Section Teaching in Higher Education Certificate (SEDA, UK)

### 4:00 - 5:45, WEDNESDAY, September 13

**Onsite Room 2** 

### **Global Engineering Education Panel**

### **Asia Pacific Industrial Engineering Education**

Panel Chair

Dr. Ir. Wahyudi Sutopo Professor, Industrial Engineering Department Universitas Sebelas Maret (UNS) Surakarta, Indonesia

Panel Speaker I

Dr. Muhammad Ikhsan Setiawan Vice Rector Assistant Professor at Faculty of Civil Engineering Narotama University Surabaya, East Java, Indonesia

Panel Speaker II

Endang Noerhartati Vice Rector Associate Professor at Agroindustrial Technology Department Universitas Wijaya Kusuma Surabaya Indonesia

### 4:00 - 5:45, WEDNESDAY, September 13

**Onsite Room 3** 

### **Lean Six Sigma Competition**

Session Chair: Dr. Edly F. Ramly, Certification Director for EFR Certification and Fellow of IEOM Society

# ID 201 Process Improvement in A Company Manufacturing Computer Assembly to improve the service level indicator using SMED, Six Sigma and Poka Yoke

Carla Alexandra Dongo Moreno, Luis Alberto Malpartida Velasquez and Alberto Flores-Perez, Facultad de Ingeniería y Arquitectura. Universidad de Lima, Lima, Perú

### ID 149 Applying Lean Thinking to Improve Processes in Low Volume/High Complexity Industry: Part I

Dave Olson, Jones Metal, Inc., 3201 3rd Ave., Mankato, MN 56001, USA

Naim Islam and Kuldeep Agarwal, Department of Automotive and Manufacturing Engineering Technology, Minnesota State University, Mankato, MN 56001, USA

### ID 150 Applying Lean Thinking to Improve Processes in Low Volume/High Complexity Industry: Part II

Dave Olson, Jones Metal, Inc., 3201 3rd Ave., Mankato, MN 56001, USA

Naim Islam and Kuldeep Agarwal, Dept. of Automotive and Manufacturing Engineering Technology, Minnesota State University, Mankato, USA

### ID 133 A Contextual Relationship Structural Model for Practicing Lean Production System in Indian SME

S. Bharath Sankar and Muthu Mathirajan, Department of Management Studies, Indian Institute of Science (IISc), Bangalore, Karnataka 560012, India

### 4:00 - 5:45, WEDNESDAY, September 13

### **Engineering Management**

**Onsite Room 4** 

Session Chair: Haji S. Colina, Industrial Engineering Department, College of Engineering, Adamson University, Manila, Philippines

#### ID 148 Monotonic Job Recommendation with Separated Features

Kaito Hoshi, Takanari Seito, Hashi Yuichi, Tatsuya Izumi and Shinji lizuka, Research and Development Dept., Hitachi Solutions East Japan, Ltd. Miyagi, Japan

### ID 106 Integrated Lean and TPM model to increase the level of service in a plastics company in Peru

Vanessa Alvarado-Siancas and Yelitza Urrunaga-Ochante, Facultad de Ingeniería, Universidad de Lima, Perú Martin Collao-Díaz, Research Professor, Facultad de Ingeniería, Universidad de Lima, Perú

### ID 4 Linking Environmental Management System with Economic Performance of Packaging Company through Structural Equation Model

Jeanne Kaye Obongen, Klint Warren T. Saytono, Venusmar C. Quevedo, Marivic Esteban and Lourdes Lasian, Industrial Engineering Department, College of Engineering, Adamson University, Manila, Philippines

### ID 26 Agro-food Innovation in Thailand: An Investigation of The Current Practices, Challenges and Opportunities

Miss Naphatr Sathapornpong, Dr. Buddhi Pathak and Dr. Ximing Ruan, College of Business and Law, UWE Bristol, United Kingdom

### ID 50 Improve Coal Hauling Productivity using Lean Method: A Case Study in Mining Company

Selamat W. Hia, Graduate Student, Department Management and Technology, Institut Teknologi Sepuluh November, Surabaya, Indonesia

### ID 5 H&C Sports Web: An Advertising System of Sports Clinics for Enthusiasts

Haji S. Colina, Amiel G. Hernandez, Venusmar C. Quevedo and Francispito P. Quevedo, Industrial Engineering Department, College of Engineering, Adamson University, Manila, Philippines

### ID 101 Unveiling the Growth of E-commerce in Saudi Arabia and its Impact on Supply Chain Management

Abobakr Badahman, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

### ID 262 Purchase Intention on Coffee Shop Business (A Case Study in Bogor City West Java Indonesia)

Aditya Prima Yudha and Salmah, Lecturer, Departement of Management, Faculty of Economics dan Business, Pakuan University, West Java, Indonesia

Aisyah Rahmadani Siregar, Student, Departemen of Management, Faculty of Economics dan Business, Pakuan University, West Java Indonesia

### 4:00 - 5:45, WEDNESDAY, Sept. 13

### Artificial Intelligence and Data Analytics

Online Room 5

Session Chair: Trynos Gumbo, University of Johannesburg, Department of Urban and Regional Planning, Johannesburg, South Africa

### ID 236 Material Cost Prediction by Intelligent Machine Learning Algorithms to Support the Product Design Process

Lackes, Richard, Professor, Dept. of Business Informatics, TU Dortmund. Dortmund, Germany Sengewald, Julian, M.Sc., Dept. of Business Informatics, TU Dortmund, Dortmund, Germany

### ID 132 Gaming with Connection

Natasha MoniqueM Purvis, Lanz Eugene Agdeppa Dagdag and Gabriel Dela Cruz Santos, College of Computer Studies, Angeles University Foundation, Angeles City, Philippines

Joyce V. Macaspac, College of Computer Studies, Faculty, Angeles University Foundation, Angeles City, Philippines

### ID 152 Assessing traffic conditions that lead to traffic congestion in the City of Tshwane, South Africa

Leshego Billy Sepuru, Masters Student, University of Johannesburg, South Africa

Trynos Gumbo, Full Professor and Research Leader -Sustainable and Smart Cities and Regions; the University of Johannesburg, Department of Urban and Regional Planning, Office 6062, Sixth Floor, John Orr Building, Beit, and Siemert Street, 2028. Johannesburg, South Africa

### ID 287 A Cutting Plan of One-Dimensional Materials to Reduce Loss with MATLAB

Pattarapon Khongsiri and Nara, School of Industrial Engineering, Institute of Engineering, Suranaree University of Technology, Nakhon Ratchasima, Thailand

### ID 270 Fuel Cells Design, Operations and Applications

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### ID 143 Exploring Renewable Energy for Industrial Applications

O. Awogbemi, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

### ID 290 Effectiveness of Green Logistics Training for Developing Countries

Albert Wee Kwan Tan, Associate Professor, Academic Program Director and Online Master in Business Administration, Asian Institute of Management, Philippines

### ID 180 Evaluation of the Effect of Financial Technology Through Business Sustainability Practices on the Performance of MSMEs in Karawang Regency

Rianita Puspa Sari, Fatimah Khilaliyah Azzahrha, Aviska Nuravianti and Fina Fadhila Achka, Department of Industrial Engineering, Universitas Singaperbangsa Karawang, Karawang, Indonesia

Deri Teguh Santoso, Department of Mechanical Engineering, Universitas Singaperbangsa Karawang, Karawang, Indonesia

### Diversity and Inclusion Panel sponsored by Ford Motor Company

September 13, 2023, 8:00 – 9:30 pm - Room 1 (Online)

Panel Chair

Professor Donald M. Reimer Chief Operating Officer – IEOM Society President, The Small Business Strategy Group, Detroit, Michigan, USA Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering Lawrence Technological University, Southfield, Michigan, USA

# September 14, 2023 (Thursday)

September 14, 2023 (Thursday) - Session: 8:00 – 9:45 am

### 8:00 - 9:45, THURSDAY, September 14

**Onsite Room 1** 

### **Global Business Management**

8:00 - 8:20 am, Thursday, September 14, 2023

Dr. Muhamad Chairul Basrun Umanailo Lecturer at Social and Political Sciences Brawijaya University, Indonesia

8:20 - 8:40 am, Thursday, September 14, 2023

Dr. Syamsiah Badruddin Professor in the Sociology Study Program National University Indonesia

8:40 - 9:00 am, Thursday, September 14, 2023

Evi Sopandi Coordinator of Collaboration/Cooperation, Educational Research Planner National Research and Innovation Agency (BRIN) Indonesia

9:00 - 9;20 am, Thursday, September 14, 2023

Dr Fauzilah Salleh Associate Professor Department of Finance and Banking Faculty of Business and Management Universiti Sultan Zainal Abidin Terengganu. Malaysia

9:20 - 9:40 am, Thursday, September 14, 2023

Dr. Tukimun Lecturer, Faculty of Civil Engineering 17 Agustus 1945 University Samarinda, Indonesia

### 8:00 - 9:45, THURSDAY, September 14

**Onsite Room 2** 

### **Global Supply Chain and Logistics Panel**

Panel Chair
Dr. Linh Duong
Senior Lecturer in Operations Management
Bristol Business School
Faculty of Business and Law (FBL)

### University of the West of England, UK

### 8:00 - 9:45, THURSDAY, September 14

**Healthcare and Human Factors** 

**Onsite Room 3** 

Session Chair: S. Bharath Sankar, Department of Management Studies, Indian Institute of Science (IISc), Bangalore, Karnataka 560012, India

# ID 96 Analyzing the Causes and Impact of Essential Medicines and Supplies Shortages in the Medical Supply Chain in Saudi Arabia: A Quantitative Survey Study

Fatin Alshibli, Supply Chain Management Dept., College of Business Administration, University of Business and Technology, Jeddah, Saudi Arabia Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

# ID 99 Health Product Supply Chains in Saudi Arabia: Diagnosis of Real Causes of Low Performance and Suggested Improvement Solutions

Saeed Alqahtani, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

### ID 159 Using the Case-Based Reasoning-YOLO Approach for Rapid and Effective Identification of Bruises

Haitham Saleh, Industrial and Systems Engineering Department, Interdisciplinary Research Center for Smart Mobility and Logistics, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia

# ID 203 Improvement proposal to increase the fill rate through Lean tools and Ergonomic redesign in a metalmechanic micro company Camila Choque-Quispe and Mauricio Richter-Landeo and Alberto Flores-Perez, Facultad de Ingeniería. Universidad de Lima, Lima, Perú

### ID 334 Entrepreneurship, SME's and Startup Tourism Trend in the Asia and Indonesia

Agus Sukoco and Muhammad Ikhsan Setiawan, Narotama University, Indonesia Imam Nazarudin Latif, Universitas 17 Agustus 1945, Samarinda, Indonesia Abdul Talib Bon, UTHM Pagoh, Malaysia

#### ID 336 Sustainable, Heritage and Cultural Building Tourism Trend in the Asia and Indonesia

Wahyu Mahendra TA and Tukimun, Fakultas Teknik, Universitas 17 Agustus 1945 Samarinda Imam Nazarudin Latif, Universitas 17 Agustus 1945 Samarinda Muhammad Ikhsan Setiawan, Narotama University, Indonesia Abdul Talib Bon, UTHM Pagoh, Malaysia

ID 337 Transportation, Highway, Train and Airport Tourism, Research Trend in the Asia and Indonesia Tukimun and Wahyu Mahendra TA, Fakultas Teknik, Universitas 17 Agustus 1945 Samarinda, Indonesia Imam Nazarudin Latif, Universitas 17 Agustus 1945 Samarinda, Indonesia Muhammad Ikhsan Setiawan, Narotama University, Indonesia Abdul Talib Bon, UTHM Pagoh, Malaysia

MASTERS THESIS COMPETITION

### ID 251 The Impact of Employees' Perceptions of a Learning Organization on Innovativeness in A Healthcare Organization

Nga Do, Minh Nguyen, Tri Nguyen and Tuong Ho, My Duc Hospital, HOPE Research Center, Ho Chi Minh City, Viet Nam Kiet Nguyen, Can Tho University, Can Tho, Viet Nam

# ID 338 Disaster Risk Analysis in the Implementation of the Core Construction of the Kuwil Kawangkoan Dam in North Minahasa District, North Sulawesi Province

Putu Ika Wahyuni, I Wayan Parka and I Wayan Muka, Infrastructure and Environmental Engineering Master's Study Program, Postgraduate, Warmadewa University, Indonesia

### 8:00 – 9:45, THURSDAY, September 14

SCM

**Onsite Room 4** 

Session Chair: Faisal Alwaddani, Supply Chain Management Department, University of Business and Technology, Jeddah, Saudi Arabia

# ID 2 Improving Supply Chain Resilience Against Price Volatility by Long-Term Contracts and Price Adjustment Formulas – Case Study of Wood Processing Industry in New Zealand

Robert Istvan Radics, Senior Lecturer in Supply Chain Management, Faculty of Agribusiness and Commerce, Lincoln University, Lincoln, New Zealand

Muhammad Umar, Lecturer in Supply Chain Management, Faculty of Agribusiness and Commerce, Lincoln University, Lincoln, New Zealand

### ID 102 Enhancing Water Purification Efficiency in Reverse Osmosis Systems for Industrial and Human Applications

Khalid Alqahtani, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

## ID 103 Enhancing Supply Chain Efficiency through Railway Logistics for the Industrial Regions in Saudi Arabia Mohammad Madrassi,

Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

### ID 108 Developing a Sustainable Pharmaceutical Supply Chain to Reduce Medicine Waste by Promoting Medication Reuse

Faisal Alwaddani, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

### ID 100 Challenges and Factors influencing the implementation of Green Logistics in Saudi Arabia

Mohammed Balfaqih, Department of Computer and Network Engineering, University of Jeddah, Jeddah 23218, Saudi Arabia Rahaf Saber, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia

Hasan Balfaqih, Operations and Supply Chain Management Department, College of Business, Effat University, Jeddah, 21478 Saudi Arabia

#### ID 137 A MILP Model for Single Depot, Single Truck and Multiple Drones for Last-Mile Delivery Problem

Saloni Jangid, Department of Mathematics, Central University of Rajasthan, Ajmer 305817, India

Rupkatha Ghosh and M. Mathirajan, Department of Management Studies, Indian Institute of Science, Bangalore 560012, India

### ID 270 Fuel Cells Design, Operations and Applications

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### 8:00 – 10:00, THURSDAY, September 14 Technical Presentations

Virtual Room 5

Session Chair: Jayson M. Barlan, Lyceum of the Philippines University - Manila, Intramuros, Manila, Philippines

### ID 163 Application of Triangular Fuzzy TOPSIS Method for Cement Supplier Selection for a Construction Firm in India

Mobasshira Zaman, Industrial Engineering, Arizona State University, Tempe, Arizona, USA

Pravin Mahendra Mishra, Industrial & Systems Engineering, Northern Illinois University, DeKalb, Illinois, USA

#### ID 206 Three Key-Elements for Data Center Facilities Sizing in Early Stage of Design

Xuan-Truong Nguyen, Duy-Anh Dang and Hai-Minh Luong, Department of Applied Engineering and Technology, University of Science and Technology of Hanoi, Vietnam Academy of Science and Technology, No.18 Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam Mai-Quyen Hoang, Faculty of Electrical Engineering, Hanoi University of Industry, No.298 Cau Dien, Minh Khai, Bac Tu Liem, Hanoi, Vietnam

### ID 63 Employing Time Series Analysis within Context of Distribution Requirements

Tika Endah Lestari, Industrial Engineering Lecturer, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia Anak Agung Ngurah Perwira Redi, Industrial Engineering Lecturer, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia

Elsa Rahma Febriani, Industrial Engineering Student, Department of Industrial Engineering, Sampoerna University, Jakarta, Indonesia Vira Guspa, Industrial Engineering Student, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia

### ID 115 Factors affecting the increase in the metabolism rate during physical activity

Abdulelah Ali, Department of Industrial Engineering, Jazan University, Jazan, Saudi Arabia

### ID 295 The Board of Directors Characters and Corporate Performance

Van Anh Ho Thi, Dr., Faculty of Accounting & Auditing, Industrial University of Ho Chi Minh City, Vietnam Nghiem Hoang Thi Ngoc, Dr., Faculty of Accounting & Auditing, Industrial University of Ho Chi Minh City, Vietnam

### ID 271 Future of Urban Logistics in Singapore: A Foresight Methodology

Seyed Mehdi Zahraei, School of Business, Singapore University of Social Sciences, Singapore Sougotam Ghosh, School of Business, Singapore University of Social Sciences, Singapore

### ID 204 Improvement Model to Increase Productivity Using SLP, 5S and Standard Work at a Pisco Producer SME in Peru

Pedro Andre Kcomt Villavicencio, lago Martin Santa Maria Sotelo and Alberto Flores-Pérez, Facultad de Ingeniería. Universidad de Lima, Lima, Perú

### September 14, 2023 (Thursday) - Session: 10:00 am - 1:00 pm - Onsite Room 1

### **Keynote Speakers**

Keynote XVII: Thursday, September 14, 2023, 9:40 – 10:20 am

Prof. Chandan Chowdhury

Senior Associate Dean and a Practice Professor of Operations Management and Information Systems

Indian School of Business (ISB), Hyderabad, Telangana, India

Keynote XVIII: Thursday, September 14, 2023, 10:20 - 11:0 am

Dr.-Ing. Savas Tumis
Professor in Marketing and Entrepreneurship
CFVG, Vietnam
Technical University of Berlin, Germany
Vietnamese German University, Vietnam

Keynote XIX: Thursday, September 14, 2023, 11:00 - 11:40 am

Prof. Yigit Kazancoglu
Full professor and Head
Logistics Management Department
Yasar University, Turkey

Keynote XX: Thursday, September 14, 2023, 11:40 am - 12:20 pm

Prof. Siwarit Pongsakornrungsilp Associate Professor of Marketing School of Management Walailak University, Thailand

Keynote XV: Thursday, September 14, 2023, 12:20 - 1:00 pm

Dr. Abdul Talib Bon
Professor
Department of Production and Operations Management
Universiti Tun Hussein Onn Malaysia

1:00 Lunch Break

### September 14, 2023 (Thursday) - Session: 2:00 - 3:45 pm

2:00 - 3:45, THURSDAY, September 14

**Onsite Room 1** 

### **Keynote Speakers**

2:00 – 2:30 pm, Thursday, September 14, 2023 – Keynote XVI

Dr. Pimlapas Pongsakornrungsilp Assistant Professor of Tourism Management Walailak University, Thailand

 $2:30-3:00\ pm,\ Thursday,\ September\ 14,\ 2023-Keynote\ XXIII:$ 

Dr. Kinnaleth VONGCHANH
Senior Lecturer / Research and Head of Thermal Lab
Department of Industrial and Mechanical Engineering (GIM)
Institute of Technology of Cambodia (ITC)
Phnom Penh, Cambodia

3:00 – 3:30 pm, Thursday, September 14, 2023 – Keynote XVII

Dr. Ozlem Bak Senior Lecturer in Operations Management Brunel Business School Brunel University, UK

3:30 - 4:00 pm, Thursday, September 14, 2023 - Keynote XVIII

Professor Qile He (Horace)
Professor of Strategy and Performance Management
University of Derby, UK

### 2:00 - 3:45, THURSDAY, September 14

**Onsite Room 2** 

### Global Lean

Session Chair: Prof Fabien, CFVG Director HCMC

Speaker I - 2:00 - 2:15 pm

Carlos Guardado
Lean Expert
Black Belt Six Sigma
Gold Certification Lean
MBA in Operations Direction
Senior Quality Engineering Manager at Techtronic Industries in Vietnam

LEARNING TO SEE (VALUE & MUDA) - "NO PROBLEM IS A BIG PROBLEM"

Speaker II: 2:15 - 2:30 pm

Bao Ho Software Engineer Qlik Lund, Skane, Sweden

Speaker III: 2:30 - 2:45 pm

Kỳ Nam Nguyễn Ngọc Market & Consumer Researcher Techcombank (TCB) Vietnam

Speaker IV: 2:45 - 3:00 pm

Cu Hoang Hung Lean Director MTC Vietnam Speaker V: 3:00 – 3:15 pm

Felix Nguyen Phuc Thinh Sales Manager PEMS – Industrial Supplies & Services PEMS – An Asia Networks Holdings Company Xã Long Sơn, Ba Ria-Vung Tau, Vietnam

Speaker VI: 3:15 - 3:30 pm

Dr. Satirenjit Kaur Johl Associate Professor Department of Management and Humanities Universiti Teknologi PETRONAS Ipoh, Perak, Malaysia

Speaker VII: 3:30 - 3:45 pm

Velisia Chandra Gunawan Process Engineer and Business Strategies Enthusiast Asia Pacific Resources International Limited (APRIL) Group Jakarta, Indonesia

Speaker VIII: 3:45 - 4:00 pm

Brian Pook

International Project Portfolio Management Executive Mining, Smelting, Recycling, Minerals, Metals, Chemicals and Battery Technology Hanoi Capital Region, Vietnam

### 2:00 - 3:45, THURSDAY, September 14

**Energy** 

**Onsite Room 3** 

Session Chair: Nguyen Ngoc Minh, Department of Industrial Management, National Taiwan University of Science and Technology, Taipei, Taiwan

### ID 35 Integrated Scheduling of Operations and Maintenance for Power Networks with Load Priority: A Matheuristic Approach

Nguyen Ngoc Minh, Department of Industrial Management, National Taiwan University of Science and Technology, Taipei, Taiwan School of Industrial Engineering and Management, International University, Vietnam National University, Ho Chi Minh City, Vietnam Vincent F. Yu, Department of Industrial Management, National Taiwan University of Science and Technology, Taipei, Taiwan

### ID 104 Energy Transition: A Case for Use of Al

Manish Deshmukh, Associate Director, LTI Mindtree, Pune, India

### ID 216 Potential for producing bio coal pellets from brewers spent grain as a biomass based energy source

M. Mugoronji, Department of Chemical and Process Systems Engineering, Harare Institute of Technology, Zimbabwe
M. M. Manyuchi, Department of Chemical and Process Systems Engineering, Harare Institute of Technology, Zimbabwe
Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa
N. Sukdeo, Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

### ID 267 Sugarcane Bagasse and Cane Trash as a Fuel

Moses Jeremiah. Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

#### ID 266 Biogas Treatment and Upgrading Techniques

Moses Jeremiah Barasa Kabeyi, Industrial Engineering Department, Durban University of Technology, Durban South Africa Oludolapo Akanni. Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

### ID 328 Promoting sorghum for Gen Z: A Case Study in Surabaya, East Java, Indonesia

Lathifah Nur Karimah, Students of English Education Department, Universitas Wijaya Kusuma Surabaya, Indonesia Endang Noerhartati, Assoc Professor of Agroindustrial Technology Department, Universitas Wijaya Kusuma Surabaya, Indonesia. Muhammad Kusuma Wardhana

Alumni Magister of Literary and Cultural Studies at the University of Airlangga, Surabaya, Indonesia and Researcher Partner at Center for Sorghum Entrepreneurship (CSE UWKS)

### ID 327 Renewable Policy of Electric Bus Public Transportation in Jakarta

Mary Ismowati, Public Administration Program, Faculty of Political and Social Science, University Nasional, Jakarta, Indonesia

### 2:00 – 3:45, THURSDAY, September 14 Maintenance, Reliability and Smart Systems

Session Chair: ChihHsuan Wang, National Yang Ming Chiao Tung University, Taiwan

### ID 7 Replacement policies based on one cycle criterion

Shey-Huei Sheu, Department of Business Administration, Asia University, Taichung 41354, Taiwan Department of Medical Research, China Medical University Hospital, China Medical University, Taichung, Taiwan Department of Industrial Management, National Taiwan University of Science and Technology, Taipei 10607, Taiwan

## ID 6 Integrating feature engineering with deep learning to conduct equipment health management for semiconductor manufacturing ChihHsuan Wang, National Yang Ming Chiao Tung University, Taiwan

### ID 146 A Review for The Recycling of Domestic Water in Urban Area Versus Rural Household

I. Mafanya, PhD Candidate, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa D.V.V Kallon, Associate Professor and Head of Quality Assurance, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

### ID 134 Application of Evolutionary Algorithms for Holding Force Optimisation Using Dynamic Models for a Climbing Robot

Rujeko Masike, Lecturer Department of Industrial & Manufacturing Engineering, Harare Institute of Engineering, Harare, Zimbabwe Karamjit Kaur, Department of Electronics & Communication Engineering, Amity University Haryana, Gurgaon, India Rajesh Arora, Mechanical Engineering Department, Amity University Haryana, Gurugaon, India S.N. Sridhara, Vice Chancellor, HITTS University, Chennai, India

### ID 200 Device with Artificial Vision for the Analysis of Movements in Geriatric Patients

Taquía Gutiérrez and José Antonio, Professor, Industrial Engineering Universidad de Lima, Lima, Peru Miquel Flores and Valeria Gamarra, Bachelor in Industrial Engineering, University of Lima, Lima, Peru

Onsite Room 4

### Product Entrepreneurship Sorghum Cookies Gluten Free: Nutrition, Glycemic Index, Antioxidants, and Organoleptic Tests

Endang Noerhartati, Assoc Professor of Agroindustrial Technology Department, Universitas Wijaya Kusuma Surabaya, Indonesia Pratika Yuhyi Hernanda and Dorta Simamora, Department of Medical, Universitas Wijaya Kusuma Surabaya, Indonesia Mujianto, Department of Agroindustrial Technology, Universitas Wijaya Kusuma Surabaya, Indonesia

Lathifah Nur Karimah, Students of English Education Department, Universitas Wijaya Kusuma Surabaya, Indonesia

### The Popularity of Indonesian Sorghum Campaign in Digital Literacy Documentation

Muhammad Kusuma Wardhana, Alumni Magister of Literary and Cultural Studies at the University of Airlangga, Surabaya, Indonesia and Research partner at the Center for Sorghum Entrepreneurship (CSE UWKS)

Endang Noerhartati, Assoc Professor of Agroindustrial Technology Department, Universitas Wijaya Kusuma Surabaya, Indonesia Lathifah Nur Karimah, Students of English Education Department, Universitas Wijaya Kusuma Surabaya, Indonesia

### 2:00 - 3:45, THURSDAY, September 14

### **Operations Management**

Virtual Room 5

Session Chair: Sudhir Yadav, PhD, Professor, School of Management, Pandit Deendayal Energy University, India

#### ID 58 Industrial Productivity Improvement Techniques at Northern Agro Services Ltd: A Case Study

Durlave Roy, PGD Industrial Management, Bangladesh Institute of Management

### Exploring the Challenges Faced by Higher Education Institutions in Implementing the Philippine Quality Award Framework: **Basis for Action Planning**

Jayson M. Barlan, Ph.D., PHDME, Lyceum of the Philippines University - Batangas, Executive Director for Non-Academic Operations and Associate Professor, Lyceum of the Philippines University - Manila, Intramuros, Manila, Philippines

### Standard Product Based Manufacturing: A Case Study of Engineering Equipment Manufacturer

Nilesh Pendharkar, PhD Scholar, School of Management, Pandit Deendayal Energy University, India Sudhir Yaday, PhD, Professor, School of Management, Pandit Deendayal Energy University, India

### Order Dispatching and Delivering Decision for A Food Delivery Service

Wasapol Tritanawat and Wipawee Tharmmaphornphilas, Department of Industrial Engineering, Chulalongkorn University, Bangkok, Thailand

### Corporate Governance and Capital Structure: Evidence from Indonesian Banking

Hikmah Fitriyani, School of Economic & Business, Telkom University, Bandung, Indonesia Farida Titik Kristanti, School of Economic & Business, Telkom University, Bandung, Indonesia

#### The Impact of Capital Structure, Profitability, and Dividend Payment on Firm Value: Evidence from Indonesian Banking

Imas Nurhayati, School of Economic & Business, Telkom University, Bandung, Indonesia

Dr Farida Titik Kristanti, School of Economic & Business, Telkom University, Bandung, Indonesia

#### ID 258 Customer Satisfaction Analysis of Kopi Kenangan Using Important Performance Analysis Method

Yusuf Saputro, UIN Sunan Kalijaga, Indonesia

### Performance Evaluation of Artificial Intelligence in Decision Support System for Heart Disease Risk Prediction

Nyasha W.C Mukura and Belinda Ndlovu, Department of Informatics and Analytics, National University of Science and Technology, Bulawayo, Zimbabwe

#### **ID 160** A case study of healthcare operations in Thailand's government administration using pattern mapping for the prescription procedure for cancer

Praowpan Tansitpong, Assistant Professor, NIDA Business School, National Institute of Development Administration (NIDA), Thailand

### Engineering Maintenance Planning and Scheduling Review: A Case Study of Brick Manufacturing Company

Humphrey Matlala, Ph.D., Postgraduate School of Engineering Management, University of Johannesburg, South Africa Abiodun Bayode, Senior Lecturer, Department of Mechanical Engineering, Northwest University

### September 14, 2023 (Thursday) - Session: 4:00 - 5:45 pm

### 4:00 - 5:45, THURSDAY, September 14

**Onsite Room 1** 

### 22nd IEOM Global Supply Chain and Logistics

4:00 pm - 4:30 pm

Dr. Muhammad Hisjam Department of Industrial Engineering Faculty of Engineering Universitas Sebelas Maret (UNS) Surakarta, Indonesia

Title: Problem Based Learning for Techno-economic Analysis for Logistics System Course: Case in a State-owned Warehouse

4:30 pm - 5:00 pm

Dr. Ahad Ali Associate Professor Director of Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director of Smart Manufacturing and Lean Systems Research Group
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University, Southfield, Michigan, USA
Executive Director, IEOM Society International

4:00 - 5:45, THURSDAY, September 14

Panel

**Onsite Room 2** 

### Innovation Panel

Panel Chair Dr. Từ Văn Bình

Associate Professor, CFVG – European Excellence in Management Education
Director of Executive Education Program (EXED)
Program Manager of Master in Marketing, Sales and Services (MMSS)
Vice Dean of Graduate School of University of Economics Ho Chi Minh City, Vietnam

### 4:00 - 5:45, THURSDAY, September 14

**Data Analytics and Al** 

**Onsite Room 3** 

Session Chair: Rabiah Adawiyah, Universitas Sembilan Belas November Kolaka, Indonesia

#### ID 171 A study of Bangladesh's climate zone based on various weather features using Machine Learning

MD Habibur Rahman, Department of Mathematics, University of Chittagong, Chittagong, Bangladesh

MD Miskat Hossain Siddique, Department of Computer Science and Engineering, University of Science and Technology Chittagong, Bangladesh

### ID 186 Trends in the Development of 3D Printed Filters for Water Purification

Lindelwa. Mafanya and Daramy Vandi Von Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannes-burg 2006, South Africa

Cristina Anghel, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannes-burg 2006, South Africa

## ID 47 Systematic Literature Review (SIr) Of Models of Early Identification of Stunting Disease in Under-Free Based Expert System Rabiah Adawiyah, Andi Tenri Sumpala and Sulfikar Sallu, Universitas Sembilan Belas November Kolaka, Indonesia

## ID 293 Accident Reduction and Quality Improvement of Bangladesh Ready Made Garments Industry using Lean Rubana Ahmed and Shipa Ahmed, IEOM Society, Bangladesh

### ID 325 Renewable Policy of Electric Bus Public Transportation in Jakarta

Mary Ismowati, Public Administration Program, Faculty of Political and Social Science, University Nasional, Jakarta, Indonesia

### ID 326 Lego Assembly Line Design and Simulation - A Summer Camp Experience

Anad Ali and Don Reimer, Lawrence Technological University, Southfield, Michigan, USA Anas Ali, Michigan Islamic Academy, Ann Arbor, Michigan, USA

### ID 129 LPG Cylinder Delivery Authentication using Artificial Intelligence in Last Mile Delivery

Prithvirajan D and Mathirajan M, Department of Management Studies, Indian Institute of Science, Bangalore 560012, India

### 4:00 - 5:45, THURSDAY, September 14

**Inventory Control** 

Onsite Room 4

Session Chair: Sokunthea Sar, Sirindhorn International Institute of Technology, Thammasat University, Pathum Thani, 12120, Thailand

# ID 33 Utilizing Bullwhip Effect Analysis to Improve the Distribution Planning Method at Pt. Semen Indonesia's Distribution Center Elsa Rahma Febriani, Industrial Engineering Student, Department of Industrial Engineering, Sampoerna University, Jakarta, Indonesia Tika Endah Lestari and Filscha Nurprihatin, Industrial Engineering Lecturer, Department of Industrial Engineering, Sampoerna University, South Jakarta, Jakarta, Indonesia

# ID 36 Implementation of ABC classification and Economic Order Quantity (EOQ) to Reducing Ordering Cost: A case study on Small Medium Enterprise (SME)

Sawat Pararach and Watthanaphong Muanme, Faculty of Engineering, Thammasat School of Engineering, Thammasat University, Rangsit Campus Khlong Luang, Pathum Thani - 12120, Thailand

### ID 71 Multi-Criteria Inventory Classification with Machine Learning Algorithms in the Manufacturing Industry

Ozge Albayrak Unal and Burak Erkayman, Department of Industrial Engineering, Engineering Faculty, Ataturk University, 25240 Erzurum, Turkey

### ID 208 A Dead Stock Classification Method that Considers Shelf Life of Retail Products

Richard Li, Anthony SF Chiu, and Rosemary Seva, Professor, Dept. of Industrial and Systems Engineering, De La Salle University, Manila, Philippines

## ID 155 The relationship between TOE Factors, Overall quality factors and SMEs Performance in the UAE: Mediating and Moderating Effect of Perceived Satisfaction and Perceived Intention to Use and Organizational Culture

Saeed Ali Saeed Bin AL DADA AL SHEHHI, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia

Khadijah MD ARIFFIN, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

# ID 130 A Comparative Analysis of Heuristic Methods for Facility Location and Allocation of Buses to Facilities in Urban Road Transportation Systems

Rupkatha Ghosh and M. Mathirajan, Department of Management Studies, Indian Institute of Science, Bangalore 560012, India

### ID 332 e-Sociotourism, Social Media Tourism, Twitter, Google, Facebook, Research Trend In The Asia And Indonesia

Paisal Halim, Universitas Nasional, Indonesia

Muhammad Ikhsan Setiawan, Narotama University, Indonesia

Imam Nazarudin Latif, Universitas 17 Agustus 1945 Samarinda

Tukimun and Wahyu Mahendra TA, Fakultas Teknik, Universitas 17 Agustus 1945 Samarinda

Abdul Talib Bon, UTHM Pagoh, Malaysia

### ID 331 Housewife's Level of Independence in Rural Based on Working Time Allocation

Syafwandi, Doctor in Management, Professor in Faculty of Economic and Business University of Putra Indonesia YPTK Padang, West Sumatera, Indonesia

Yulasmi, Doctor in Management Department, Faculty of Economic and Business University of Putra Indonesia YPTK Padang, West Sumatera, Indonesia

Robby Dharma, Magister management, Faculty of Economic And business University of putra Indonesia YPTK Padang, west sumatera, Indonesia Syafiadi Rizki Abdila, PhD in civil Engineering, university of krisnadwipayana, Jakarta, Indonesia

### 4:00 - 5:45, THURSDAY, September 14

Manufacturing

**Virtual Room 5** 

Session Chair: Major Md Wahidul Haque, Chittagong Port Authority, Bangladesh

### ID 164 Workflow Analysis of a Lumber and Furniture Microenterprise: Basis for Improvement

C. K. A. Ocan, M. B. Dagohoy, M. L. E. Guillen, K. K. B. Lavador, E. R. D. Ermac and F. R. L. Eusebio, Department of Industrial Engineering, Cebu Institute of Technology – University, Cebu City, Philippines

### ID 237 A Fault Detection Framework based on The Spectrogram and Convolutional Autoencoder

Hoyeon Lee and Jaehong Yu, Department of Industrial and Management Engineering, Incheon National University, 119 Academy-Ro, Yeonsu-Gu, Songdo-dong Incheon 22012, South Korea

#### ID 168 Mapping Challenges of Quality 4.0 Implementation in Pharmaceutical Company through TISM

Mohita G Sharma, Professor, OM & SCM, IIM Sirmaur, India

#### ID 119 Quality of Bioorganic Fertilizer from Palm Oil Mill Waste Through Co-composting

Jajang Supriatna, 1,2\* Mieke Rochimi Setiawati, 3 Rija Sudirja, 3 Cucu Suherman, 4 and Xavier Bonneau5

- 1 Agricultural Science, Faculty of Agriculture, Padjadjaran University, Bandung 45363, Indonesia.
- 2 ANJ Research Center, PT. Austindo Nusantara Jaya Tbk., Belitung 33561, Indonesia
- 3 Soil Science, Faculty of Agriculture, Padjadjaran University, Bandung 45363, Indonesia.
- 4 Agronomy Department, Faculty of Agriculture, Padjadjaran University, Bandung 45363, Indonesia.
- 5 Perennial Crops Department, AbSys Research Unit, Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Montpellier 34398 Cedex 5, France

### ID 261 Experimental Investigation on Phase Change Material Based Circular Pin Fin Heat Sink for Cooling Electronic Equipment

Mir Rahimul Isiam, Md. Shahriar Shikder and Dr. Kazi Afzalur Rahman, Department of Mechanical Engineering, Chittagong University of Engineering and Technology, Raozan, 4349, Chittagong

### ID 38 Pothole Detection and Reporting System Using Deep Learning

Wellington T. Mpofu, Belinda Ndlovu, Sibusisiwe Dube and Joseph Mutengeni, Department of Informatics and Analytics, National University of Science and Technology, Bulawayo, Zimbabwe

# ID 40 Customer Churn Analytics using Classical Machine Learning Algorithms and Deep Neural Networks: A Case of Zimbabwe Banks Zvinodaishe Revesai, Mary Dzinomwa, Belinda Ndlovu, Phillip Nyoni and Sibusisiwe Dube, Department of Informatics and Analytics, National University of Science and Technology, Bulawayo, Zimbabwe

### ID 234 Minimizing Job Tardiness in One-Dimensional Cutting Stock Problem Using Mixed Integer Linear Programming (MILP)

Sokunthea Sar, Pham Duc Tai and Jirachai Buddhakulsomsiri, School of Manufacturing Systems and Mechanical Engineering, Sirindhorn International Institute of Technology, Thammasat University, Pathum Thani, 12120, Thailand

### ID 54 Improving Production Efficiency for precast concrete slabs

Theeradon Chulsom and Jongkol Srithorn, System Engineering Program, School of Industrial Engineering Institute of Engineering, Suranaree University of Technology, Nakhon Ratchasima Province, Thailand

### ID 142 Management Strategies for Food Waste Conversion into Valuable Products

- O. Awogbemi, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa
- D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

# September 14, 2023 (Thursday) - Session: 7:00 - 10:00 pm

# Conference Awards Gala Dinner Cruise Ship with Saigon River Tour

# Gala Dinner in the Indochina Queen Cruiship 14 Sep 2023

Please ask the taxi driver to drop you at

### Address:

5 Nguyễn Tất Thành, Phường 12, Quận 4, Thành phố Hồ Chí Minh (English ver: No 5 Nguyen Tat Thanh Street, Ward 12, District 4, HCMC)

Welcome from 18:00 (6:00 pm)
Departure for tour at 19:45 (7:45 pm)
Return at 21:15 (9:15 pm)





International Journal of Industrial Engineering and Operations Management



# IEOM Student Chapter at CFVG-HCM University of Economics Ho Chi Minh City, Vietnam

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Prof. Tu Van Binh,

CFVG, Ho Chi Minh City, Vietnam

Email: tvbinh@cfvg.org

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Director of Program / Activities: Le Nguyen Tam Dan

Director of Social Media: Le Quynh Anh Director of Communication: Dang Thi My Ngan

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### **Faculty Advisor**

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### IEOM Student Chapter at Universitas Sebelas Maret (UNS), Surakarta, Indonesia

### **Faculty Advisors**

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Department of Industrial Engineering Universitas Sebelas Maret (UNS), Surakarta, Indonesia

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69.

70.

71.

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Aaron Rubel
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IEOM International Conference on Smart Mobility and Vehicle Electrification October 10-12, 2023







3rd Indian International Conference on **Industrial Engineering and Operations Management** New Delhi, India, November 2-4, 2023











2nd Australian Conference on **Industrial Engineering and Operations Management** 

Nov. 14-16, 2023, Melbourne **IEOM Society** Venue: Batman's Hill Hotel on Collins







14th International Conference on **Industrial Engineering and Operations Management** 

February 12-14, 2024, Dubai, UAE IEOM Society Venue: Hyatt Regency Dubai, Host: Khalifa University









5th African International Conference on Industrial Engineering & **Operations Management** Johannesburg/Pretoria, South Africa IEOM Society April 23-25, 2024, Venue: CSIR ICC









5th South American Conference on Industrial Engineering & Operations Management Bogota, Colombia, May 7-9 2024 IEOM Society Host: Fundación Universitaria UNIR Colombia







9th North American Conference on **Industrial Engineering and Operations Management** Washington, DC, USA, June 4-6, 2024 Host: University of the District of Columbia (UDC) ue: UDC Campus, 4200 Connecticut Ave NW









7<sup>th</sup> European Conference on Industrial Engineering & **Operations Management** Augsburg / Munich, Germany July 16-18, 2024







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