

7th African International Conference on Industrial Engineering and Operations Management

~Cape Town

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May 13-15, 2026

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Industrial Engineering and Operations Management Society International

IEOM Society International, 21411 Civic Center Dr., Suite 205, Southfield, Michigan 48076, USA
Phone / WhatsApp: +1-734-530-7520, Email: info@ieomsociety.org

Welcome to the 7th African International Conference on Industrial Engineering and Operations Management Cape Town, South Africa, May 13-15, 2026

To All Conference Attendees:

IEOM Society International is pleased to welcome you to the 7th African International Conference on Industrial Engineering and Operations Management, taking place in Cape Town, South Africa, from May 13–15, 2026. The conference is hosted by the Cape Peninsula University of Technology (CPUT), with sessions held at the Cape Town Hotel School Restaurant.

This year's conference highlights key and emerging areas such as artificial intelligence, digital manufacturing, supply chain management, Industry 4.0, the Internet of Things (IoT), lean systems, Six Sigma, simulation, data analytics, automation, and interdisciplinary research. The event serves as a global platform for academics, researchers, and industry practitioners to exchange ideas, present innovations, and discuss advancements in Industrial Engineering and Operations Management.

The conference aims to foster collaboration, networking, and joint initiatives while advancing both the theory and practice of IEOM. We are delighted to share that the conference received over 425 submissions from 32 countries, with 275 papers and abstracts accepted for presentation.

This year's program features a distinguished lineup of keynote speakers representing academia, industry, and global leadership. Their expertise and insights will provide valuable perspectives on contemporary challenges and future directions in industrial engineering, manufacturing, data analytics, and supply chain digitalization.

Professor Chris Nhlapo, Vice-Chancellor, Cape Peninsula University of Technology (CPUT), Cape Town, South Africa
Professor Charles Mbohwa, Distinguished Professor, University of South Africa (UNISA), South Africa, IEOM President 2025 – 2026
Dr. Ahad Ali, Lawrence Technological University, Southfield, Michigan, USA
Christine Nicola Taphel, Chief Executive Officer, Reconstructed Living Labs (RLabs) South Africa, Cape Town, Western Cape, South Africa
Dr Guiping Hu, Professor and Department Chair, Systems Engineering & Operations Research, George Mason University, Fairfax, VA, USA
Dr Recharad Noor, Managing Director, W-Tech Manufacturing and Fibretek Manufacturing, Group Managing Director, H&M Group, Research Associate, Nelson Mandela University, Chairperson, Community Chest of the Western Cape, Chairperson, Advisory Board Meeting, Department of Industrial and Systems Engineering, Cape Peninsula University of Technology, South Africa
Dr. Jingshan Li, Head and Chair Professor, Department of Systems Engineering, City University of Hong Kong, Kowloon, Hong Kong SAR
Dr. Ram Madhav, President of India Foundation (IF), a New Delhi-based Think tank.
Prof Marshall Sheldon, Deputy Vice-Chancellor: Research, Technology Innovation and Partnerships, CPUT, Cape Town, South Africa
Dr. Mukondeleli Grace Kanakana-Katumba, DVC Teaching and Learning, Vaal University of Technology (VUT), Vanderbijlpark, South Africa
Dr. Lerato Mdaka, Associate Professor of Management Sciences, North-West University, Potchefstroom, South Africa
Dr. Xuan (Jen) Zhao, Professor in Operations and Decision Sciences, Wilfrid Laurier University, Waterloo, Ontario, Canada
Dr. Lizhi Wang, Professor of Bioengineering, Department of Systems Engineering & Operations Research, George Mason University, VA, USA
Dr. Rupa Vasudevan, Chancellor, Bharatiya Engineering Science and Technology Innovation University (BEST IU), Anantapur, AP, India
Professor Mercy Khathutshelo Makhitha, Dean, Faculty of Business and Management Sciences, CPUT, Cape Town, South Africa
Prof Nita Inderlal Sukdeo, Associate Professor, Department of Quality and Operations, Management, University of Johannesburg, South Africa
Dr. Olufemi Muibi Saibu, Professor & Director, Quality Assurance & SERVICOM Unit, University of Lagos, Nigeria
Dr. Hamieda Parker, Professor, Graduate School of Business, University of Cape Town, Rondebosch, Cape Town, South Africa
Michael Parent, Principal – Michael Parent Consulting Services, Lean Six Sigma Master Black Belt, Canton, Michigan, USA

IEOM Society International continues to expand its global footprint, now operating in 151 countries and supporting 302 student chapters across 60 countries. We remain committed to promoting student engagement, research excellence, and international collaboration.

We extend our sincere appreciation to our Conference Chair, Prof. Bingwen Yan, for his outstanding leadership and dedication. We also thank our co-chairs, program leadership, keynote speakers, sponsors, partners, authors, reviewers, track chairs, advisors, committee members, and volunteers for their invaluable contributions in making this conference possible.

We are confident that this conference will be an intellectually enriching and collaborative experience for all participants.

We wish you a successful conference and an enjoyable, memorable stay in Cape Town, South Africa.



Professor Bingwen Yan, Ph.D.
Conference Chair
Head of Department
Department of Operations Management
Cape Peninsula University of Technology
Cape Town, South Africa



Prof. Charles Mbohwa, Ph.D.
Conference Co-Chair
IEOM President 2025 – 2026
Distinguished Professor
University of South Africa (UNISA)
Pretoria, South Africa



Dr. Ahad Ali
Conference Co-Chair
Associate Professor
Director, DEng in Adv Mfg.
Director of Industrial Eng.
Lawrence Tech University, USA
Executive Director, IEOM Society



Professor Don Reimer
Program Co-Chair
Chief Operating Officer
IEOM Society International
21411 Civic Center Drive, Suite 205,
Southfield, Michigan, MI 48076, USA

Keynote Speakers

Wednesday, May 13, 2026

10:00 – 10:10, Wednesday, May 13, 2026 – Conference Chair Welcome Message:



Prof Bingwen Yan
Head of Department
Department of Operations Management
Cape Peninsula University of Technology
Cape Town, South Africa

Bingwen Yan is based at Faculty of Engineering and The Built Environment, Cape Peninsula University of Technology, Cape Town, South Africa. Bingwen Yan is a professor and the Head of the Department of Operations Management and Past Head of Industrial and Systems Engineering at the Faculty of Engineering and Built Environment, Cape Peninsula University of Technology, South Africa. His research spans a wide range of fields, including industrial engineering, engineering management, public administration and business management.

10:10 – 10:30, Wednesday, May 13, 2026 – Host University Welcome Address:

Professor Chris Nhlapo
Vice-Chancellor
Cape Peninsula University of Technology (CPUT)
Cape Town, South Africa

10:30 – 11:00, Wednesday, May 13, 2026 – IEOM Welcome and Keynote



Dr. Ahad Ali
Associate Professor and Director, Director of Doctor of Engineering in Advanced Manufacturing
Director of Industrial Engineering Programs (BSIE and MSIE)
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University, Southfield, Michigan, USA
Chief Executive Officer (CEO), IEOM Society International

Dr. Ahad Ali is an associate professor and director of industrial engineering programs (BSIE & MSIE) and director of a graduate certificate in Lean Six Sigma at A. Leon Linton Department of Mechanical, Robotics, and Industrial Engineering of the Lawrence Technological University (LTU), Southfield, Michigan, USA. He established the Siemens Electro-Matic Industrial Engineering Lab at LTU. Dr. Ali was the primary author of the ABET self-study report of the BSIE Program at LTU in 2022. He earned a BS in Mechanical Engineering from Khulna University of Engineering and Technology (KUET), Bangladesh, a Master's in Systems and Engineering Management from Nanyang Technological University, Singapore, and a Ph.D. in Industrial Engineering from the University of Wisconsin-Milwaukee, USA. Dr. Ali was an Assistant Professor in Industrial Engineering at the University of Puerto Rico – Mayaguez, a Visiting Assistant Professor in Mechanical, Industrial, and Manufacturing Engineering at the University of Toledo, and a Lecturer in Mechanical Engineering at the Bangladesh Institute of Technology, Khulna. He received an Outstanding Professor Award from the Industrial Engineering Department, University of Puerto Rico -Mayaguez. Dr. Ali has been recognized with a Fulbright Award. He has published 75 journal papers and 150 conference papers. Dr Ali conducted research projects with Chrysler, Ford, DTE Energy, New Center Stamping, Whelan Co., Delphi Automotive System, GE Medical Systems, International Truck and Engine Corporation (ITEC), and Rockwell Automation. His research interests include manufacturing systems, quality, lean, six-sigma, simulation, artificial intelligence, supply chain, and optimization. He supervised 11 doctoral students in Doctor of Engineering in Manufacturing Systems (DEMS). He is a Founder and Chief Executive Officer (CEO) of IEOM Society International. Dr. Ali is a Co-Chair of the International Conference on Industrial Engineering and Operations Management. Dr. Ali organized IEOM conferences around the globe on six continents including Dhaka, Kuala Lumpur, Istanbul, Bali, Dubai, Orlando, Detroit, Rabat, Bristol, Bogota, Paris, Washington, DC, Lima, Johannesburg, Bangkok, Pilsen, Toronto, Costa Rica, Monterrey, Sao Paulo, Riyadh, Manila, Melbourne, New Delhi, Sydney, Augsburg, Tokyo, and Muscat. He is an associate editor of the IJIEOM. Dr. Ali is a member of IEOM, INFORMS, SME, and IEEE.

11:00 – 11:30 am, Wednesday, May 13, 2026 – Keynote



Christine Taphel
Chief Executive Officer, RLabs South Africa
Reconstructed Living Lab (RLabs)
Cape Town, South Africa

Presentation Title: *Beyond the Divide: Rewiring the Future for Women and Youth*

Christine Nicola Taphel is the Chief Executive Officer of RLabs, where her visionary leadership has played a pivotal role in establishing the RLabs Innovation Lab. Collaborating with renowned institutions such as MIT, Google, London School of Economics, and the Rockefeller Foundation, Christine has been at the forefront of harnessing social innovation to drive impactful social and economic change.

Passionate about empowering the younger generation and women, Christine is a co-founder of GROW Leadership Academy, RLabs Youth Cafe, and RLabs Women. Her educational background includes a Bachelor's Degree in Psychology and Linguistics from the University of Western Cape, complemented by certificates in Effective People Management and Internet Technology from the University of Cape Town. In addition to her leadership role, Christine actively mentors startups through RLabs' Innovation & Entrepreneurship Support programs, contributing to the growth and success of emerging businesses.

Christine Nicola Taphel's journey as the CEO of RLabs and her ventures reflect a deep commitment to innovation, empowerment, and positive societal change. Her leadership continues to shape the landscape of social entrepreneurship, leaving a lasting impact on communities and individuals alike.

Beyond her role at RLabs, Christine is a versatile entrepreneur, founding Hit@Thirty1 Her Immaculate Theory, a thriving media platform dedicated to transforming the lives of women and girls, helping them discover their unique voice and design. She is also the co-founder of Maggie's Laundry and Christine's Delights, showcasing her commitment to diverse entrepreneurial ventures.

11:30 – 12:00 am, Wednesday, May 13, 2026 – Keynote



Dr Recharad Noor
Managing Director, W-Tech Manufacturing and Fibretek Manufacturing
Group Managing Director, H&M Group
Research Associate, Nelson Mandela University
Chairperson, Community Chest of the Western Cape

Chairperson, Advisory Board Meeting, Department of Industrial and Systems Engineering, Cape Peninsula University of Technology

Dr Recharad Noor is a distinguished South African industrialist, academic, and community leader whose career spans over four decades of transformative leadership in the manufacturing and operations management sectors. He currently serves as Managing Director of W-Tech Manufacturing and Fibretek Manufacturing, and as Group Managing Director of the H&M Group—an integrated portfolio of advanced manufacturing companies operating across composite materials, industrial coatings, and polymer technologies. Under his strategic stewardship, the Group has evolved from a struggling enterprise into a highly competitive and profitable industrial organisation.

Dr Noor holds a Doctor of Philosophy from Nelson Mandela University, where his research examined decentralised organisational systems, human capital development, radical transformation, and sustainability within advanced manufacturing environments. His scholarly contributions are anchored in bridging theory and practice—linking strategic management and organisational innovation with the operational realities of industrial enterprises. His book, *Radical Transformation and Sustainability for an Advanced Manufacturing Industry* (2020), co-authored with Dr Oswald Franks, Prof Brink Botha, and Prof Bingwen Yan, has become a key reference in understanding transformative approaches to manufacturing resilience, human-centred leadership, and sustainable growth in emerging economies.

Over the years, Dr Noor has been instrumental in redefining leadership and operational excellence within South Africa's manufacturing landscape. His pioneering implementation of decentralised management systems and advanced human capital development models has consistently resulted in improved productivity, workforce empowerment, and long-term organisational sustainability. His work exemplifies how engineering management principles can be strategically aligned with social innovation to foster inclusive industrial growth.

Within academia, Dr Noor serves as a Research Associate at Nelson Mandela University, contributing to studies in industrial transformation and sustainable operations management. He also holds prominent governance and advisory positions at the Cape Peninsula University of Technology, where he chairs the Advisory Board in Operations Management and Industrial Engineering. In these capacities, he plays a crucial role in strengthening the interface between industry and higher education, ensuring that academic programmes remain responsive to the evolving needs of the manufacturing and operations sectors.

Beyond academia and industry, Dr Noor has demonstrated an unwavering commitment to community development and ethical leadership. As Chairperson of the Community Chest of the Western Cape and Chairperson of the Electronic Recycling Association of South Africa, he advocates for corporate citizenship, sustainability, and environmental responsibility. His leadership extends to various non-profit and sports organisations, reflecting his holistic view of leadership as a vehicle for social transformation.

Dr Noor's thought leadership has been featured on major media platforms including ENCA, Heart FM, Good Hope FM, and KFM, where he has shared insights on sustainability, governance, and energy efficiency. His professional journey—from an apprentice fitter and turner at Murray & Roberts Engineering to the helm of a major industrial group—embodies resilience, continuous learning, and visionary leadership.

Guided by his enduring philosophy that "true transformation is not about politics or power—it is about unlocking human potential and building organisations and societies that are ethical, sustainable, and people-centred," Dr Recharad Noor continues to inspire the next generation of engineers, entrepreneurs, and community builders across Africa and beyond.

12:00 – 12:30, Wednesday, May 13, 2026 – Keynote



Dr. Jingshan Li
Head and Chair Professor
Department of Systems Engineering
City University of Hong Kong, Kowloon, Hong Kong SAR

Dr. Jingshan Li is the Head and Chair Professor in Department of Systems Engineering, City University of Hong Kong, Kowloon, Hong Kong SAR. He was the Head and Gavriel Salvendy Chair Professor in Department of Industrial Engineering, Tsinghua University, Beijing, China. He received BS, MS, and PhD degrees from Tsinghua University, Chinese Academy of Sciences, and University of Michigan, in 1989, 1992 and 2000, respectively. Before joining Tsinghua University in 2021, he was with General Motors R&D Center, University of Kentucky, and University of Wisconsin-Madison. Dr. Li has published 2 textbooks, 7 book volumes, and more than 270 refereed journal articles, book chapters, and conference proceedings. He has been the Senior Editors, Associate Editors, and Chairs of many top journals and conferences. He has been the Chairs of IEEE Technical Committees on Sustainable Production Automation, and Healthcare Management Automation. Dr. Li is an IEEE Fellow, IISE Fellow, and IEEE Distinguished Lecturer in robotics and automation. He received NSF CAREER Award, IEEE Robotics and Automation Early Career Award, and multiple Best Paper Awards from flagship journals and conferences. His primary research interests are in design, analysis, and control of production and healthcare systems.

12:30 – 13:00, Wednesday, May 13, 2026 -Keynote



Mr. Ram Madhav
President of India Foundation (IF), a New Delhi-based Think tank.

Ram Madhav is an Indian politician and social leader. Dr Madhav is currently the President of India Foundation (IF), a New Delhi-based Think tank. Previously, he has served as the National General Secretary of the BJP from 2014 to 2020 and in-charge of the elections to the legislative assembly of Jammu and Kashmir in 2024.

A renowned author and thinker, Dr Madhav has authored several books in English and Telugu that include “The New World: 21st Century Global Order and India” ; “Our Constitution Our Pride” ; “The Indian Reality” ; “Partitioned Freedom” ; “The Hindutva Paradigm – Integral Humanism and the Quest for a Non-Western Worldview” ; “Because India Comes First: Reflections on Nationalism, Identity and Culture” and “Uneasy Neighbours: India and China after 50 years of the war”. He is a regular contributor to platforms like The Indian Express, and OPEN Magazine amongst others. He had been the editor of Bharatiya Pragna, a monthly magazine in English published by Pragna Bharati, and associate editor of Jagriti, a Telugu weekly.

Widely regarded for his contributions in the field of strategic thinking, political philosophy and India’s foreign policy, Dr Madhav has travelled widely and addressed forums like the Valdai Discussion Club in Russia, R20 Forum in Indonesia, Shangri-La Dialogue in Singapore, Halifax Security Forum in Canada, Sochi Eurasian Integration Forum in Russia, BRICS Political Forum in China, and the World Peace Conference in Thailand.

Thursday, May 14, 2026

10:00 – 10:30 am, Thursday, May 14, 2026



Prof Marshall Sheldon
Deputy Vice-Chancellor: Research, Technology Innovation and Partnerships
Cape Peninsula University of Technology (CPUT)
Cape Town, South Africa

Prof Marshall Sheldon is a Deputy Vice-Chancellor: Research, Technology Innovation and Partnerships, effective 1 June 2025. She is a highly accomplished leader in South African higher education, with more than 25 years of experience spanning teaching, research and leadership. A CPUT alumna, she holds a Doctorate in Chemical Engineering from the institution and has maintained strong ties with the university throughout her career. Her leadership credentials are well established. She previously served as Dean of the Faculty of Engineering and the Built Environment at CPUT and later as Executive Dean of the Faculty of Engineering, the Built Environment and Technology at Nelson Mandela University. Throughout her distinguished career Sheldon has been a transformative force in engineering education, research and innovation. Her commitment to academic excellence is evidenced by her successful supervision of 15 Master’s and four Doctoral students,

some of whom have become successful professors themselves.

Her influence and leadership extend to numerous national and international leadership platforms. She previously served on the Western Cape Education Department (WCED) Council, the South African Renewable Energy Technology Centre (SARETEC) Governance Board, the eNtsa Governance Board, the Engineering Council of South Africa (ECSA) Deans Forum, the South African Society for Engineering Education (SASEE) board, and currently serves on the Africa Engineering Education Council, and the Executive Committee of the Global Engineering Deans Council (GEDC). She holds professional registration with the Engineering Council of South Africa (ECSA) and is a member of the South African Institution of Chemical Engineers (SAChE); Water Institute of Southern Africa (WISA), African Engineering Education Association (AEEA), and African Engineering Education Forum (AEEF).

10:30 – 11:00 am, Thursday, May 14, 2026 – Keynote



Dr. Mukondeleli Grace Kanakana-Katumba
DVC Teaching and Learning
Vaal University of Technology (VUT)
Vanderbijlpark, South Africa

Dr. Grace Mukondeleli Kanakana-Katumba is a distinguished academic leader and Industrial Engineer with over 18 years of strategic experience in higher education. Currently serving as the Deputy Vice-Chancellor for Teaching, Learning, and Student Affairs at the Vaal University of Technology, she has previously held senior leadership roles at the Tshwane University of Technology and the University of South Africa. Her leadership has shaped policy and innovation across the engineering and built environment disciplines, particularly in teaching, research, transformation, and community engagement. Dr. Kanakana-Katumba holds a DPhil in Engineering Management from the University of Johannesburg, an MBA from Nelson Mandela Metropolitan University, and a master's in systems engineering from George Washington University.

11:00 – 11:30, Thursday, May 14, 2026



Dr. Lerato Mdaka
Associate Professor of Management Sciences
Faculty of Economic and Management Sciences
North-West University
Potchefstroom, South Africa

Lerato E. Mdaka is an associate professor in the School of Management Sciences at North-West University whose work focuses on strengthening entrepreneurship ecosystems, innovation capacity, and sustainable development across Africa.

Prof. Mdaka plays an active role in strengthening international academic partnerships across Africa. She serves as the Africa Regional Chair for the Academy of Business and Emerging Markets. She is the international programme assessor for the Pan African University network supporting the development of entrepreneurship curricula across African Union institutions in Algeria, Kenya, Nigeria, Cameroon and South Africa. She also serves as an International Subject Matter Expert for the Eswatini Higher Education Council, contributing to higher education quality assurance across universities in Eswatini. Beyond Africa, She spearheads

international experiential-learning collaborations with institutions in Europe, UK, Africa, Asia, and North America, facilitating global entrepreneurship and service-learning projects that enrich interdisciplinary student experiences.

Before academia, she worked as Business Development Manager at the Research Institute for Innovation and Sustainability and the marketing manager for the Southern Africa Innovaton Summit, contributing to innovation development initiatives and industry partnerships. Lerato specializes in enterprise development and open innovation across private and public sectors and supports township-based tech startups as an Entrepreneurship Mentor at The Innovation Hub, South Africa.

Her research interests intersect digital transformation, innovation, and sustainable entrepreneurship, supported by the NRF Early-Stage Research Grant and CSIR-DSI Inter-Programme Grant and NRF Thuthuka Post Doc grant.

Prof. Mdaka's work has received several recognitions for teaching, research, and social impact. She is a recipient of the North-West University Excellence Award for Community Engagement; Excellence in Research Quality Award; Excellence in Teaching Award; the ENACTUS South Africa Faculty Advisor of the Year (2022) and National Administrator of the Year (2021) for her mentorship of student social entrepreneurs.

11:30 – 12:00, Thursday, May 14, 2026



Dr. Xuan (Jen) Zhao
Professor in Operations and Decision Sciences
Lazaridis School of Business and Economics
Wilfrid Laurier University
Waterloo, Ontario, Canada

Dr. Zhao is a professor in Operations and Decision Sciences at Lazaridis School of Business and Economics at Wilfrid Laurier University. She holds a Ph.D. in the joint fields of Management Science and Transportation/Logistics from the University of British Columbia. Her research involves utilizing the tools of Management Science/Operations Research and Economics to model, analyze, and derive insights into problems in the areas of Supply Chain Management, Marketing/OM interfaces, Revenue Management, Entrepreneurships, Sustainable Operations, Behavior Operations, and Business Analytics. Her research papers appear in prestigious refereed journals in operations such as Manufacturing & Service Operations Management (FT top 50), Production and Operations management (FT top 50), European Journal of Operational Research, Transportation Research Part E, Naval Research Logistics, as well as marketing journals such as Quantitative Marketing and Economics, Journal of Marketing and Consumer Research.

Dr. Zhao's research has been recognized and supported by National Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada, as well as multiple provincial and international grants. Research funds (total of \$1.5 million) enable her to supervise numerous post-doctoral fellows, doctoral students, and master's students. Dr. Zhao has also won numerous awards and scholarships, including the Inaugural Lazaridis Research Excellent Award, Ministry of Research Innovation post-doctoral supervision award, High-Caliber Foreign Expert of Liaoning Province China, numerous faculty merit awards and course remission awards, Canadian Administrative Science Best Paper

Award, Wiley top-cited paper award. Beyond services within Laurier, Dr. Zhao has served in NSERC Discovery Grant Committee, SSHRC Insight Development Grant Committee, inaugural NSERC Horizon program committee, as a university examiner of Lingnan University in Hong Kong, an Associate Editor of Journal of Operational Research Society, and on editorial review board of Production and Operations Management, Adjunct Professor at the University of Waterloo.

12:00 – 12:30, Thursday, May 14, 2026



Professor Charles Mbohwa, Ph.D. (IEOM President 2025 – 2026)
Distinguished Professor
University of South Africa (UNISA)
Pretoria, South Africa
Past Pro-VC, University of Zimbabwe

Former Executive Dean, Faculty of Engineering and the Built Environment, University of Johannesburg
 Professor Charles Mbohwa is a Visiting Professor at University of Johannesburg, South Africa. He was a Pro-Vice Chancellor Strategic Partnerships and Industrialisation at University of Zimbabwe and an affiliated Professor in the Faculty of Engineering and the Built Environment. He is an established researcher and professor in the field of sustainability engineering and energy. He was the Chairman and Head of Department of Mechanical Engineering at the University of Zimbabwe from 1994 to 1997 and was Vice-Dean of Postgraduate Studies Research and Innovation in the Faculty of Engineering and the Built Environment at the University of Johannesburg from 2014 to 2017. He has published more than 350 papers in peer-reviewed journals and conferences, 10 book chapters and three books. He has a Scopus h-index of 11 and Google Scholar h-index of 14. Upon graduating with his BSc Honours in Mechanical Engineering from the University of Zimbabwe in 1986, he was employed as a mechanical engineer by the National Railways of Zimbabwe. He holds a Masters in Operations Management and Manufacturing Systems from University of Nottingham and completed his doctoral studies at Tokyo Metropolitan Institute of Technology in Japan. He was a Fulbright Scholar visiting the Supply Chain and Logistics Institute at the School of Industrial and Systems Engineering, Georgia Institute of Technology, a Japan Foundation Fellow, is a Fellow of the Zimbabwean Institution of Engineers and is a registered mechanical engineer with the Engineering Council of Zimbabwe. He has been a collaborator in projects of the United Nations Environment Programme. He has also visited many countries on research and training engagements including the United Kingdom, Japan, Germany, France, the USA, Brazil, Sweden, Ghana, Nigeria, Kenya, Tanzania, Malawi, Mauritius, Austria, the Netherlands, Uganda, Namibia and Australia. He has had several awards including British Council Scholarship, Japanese Foundation Fellowship, Kubota Foundation Fellowship; Fulbright Fellowship.

12:30 – 13:00, Thursday, May 14, 2026 – Keynote



Dr. Rupa Vasudevan
Chancellor
Bharatiya Engineering Science and Technology Innovation University (BEST IU)
Anantapur, Andhra Pradesh, India

Presentation Title: Entrepreneurship and sustainability in higher education

Dr. Rupa Vasudevan is an Educationist, Sociopreneur, Founder and Co-Chairperson of BEST Group (Gatti Valley Educational Institutions). She is the Chancellor of Bharatiya Engineering Science and Technology Innovation University (BEST IU), a State Private University established in Anantapur, Andhra Pradesh. Co-Founder and Director of Evergreen Naturals – EN, a company that focuses on cheaper availability of high-quality agricultural inputs to small and marginal farmers, monitoring growth and farming practices and helping in establishing forward and backward linkages in supply chain management. She is Appointed as one of the ten academicians in the General and Executive Council of Karnataka State Higher Education Council- KSHEC, apex body on education in the State. Regional Co-Chair for ASSOCHAM – Telangana, Andhra Pradesh and Karnataka State. Founder and Global President of World Forum for Education, an independent non-profit organization working globally to advance sustainable development, humanitarian response and facilitating public good through Knowledge sharing and Education. Trustee of Apna Desh Foundation, a Foundation that spearheads initiatives, finding meaningful ways to make a difference to our farmers while documenting best traditional practices from rural areas of the states of Karnataka, Kerala and Tamil Nadu and Andhra Pradesh. Honorary Trustee of Disha Bharat, a non-profit social organisation that works in the field of value education. Member, Governing Council of Indic Academy (INDICA) – a non-traditional University for traditional knowledge systems. And Member, Governing Council of India Foundation, New Delhi.

Friday, May 15, 2026

10:00 – 10:30 am, Friday, May 15, 2026



Professor Mercy Khathutshelo Makhitha
Dean
Faculty of Business and Management Sciences
Cape Peninsula University of Technology (CPUT)
Cape Town, South Africa

Prof KM Makhitha serves as Dean of the Faculty of Business and Management Sciences at CPUT. Prior to joining CPUT, she held several leadership positions (including acting roles) at Unisa. She brings more than 25 years of higher education experience across four South African universities.

10:30 – 11:00, Friday, May 15, 2026



Prof Nita Inderlal Sukdeo
Associate Professor
Department of Quality and Operations Management
School of Mechanical and Industrial Engineering
University of Johannesburg, South Africa

Prof Nita Inderlal Sukdeo is currently an Associate Professor in the Department of Quality and Operations Management within the School of Mechanical and Industrial Engineering at the University of Johannesburg, South Africa. She obtained a Masters in Quality, from the Durban University of Technology and a PhD in Engineering Management from the University of Johannesburg. She is currently registered for a second PhD in Quality Engineering. She is an active researcher in the field of total quality management and operations management. Her field of expertise also include advanced manufacturing technologies, Artificial Intelligence in the manufacturing sector, smart factory, Quality 4.0 framework, quantitative analysis, quality management systems, quality auditing and risk assessment. She is a qualified Lead Auditor, proficient in ISO standards and certification. She is co-chairperson and director of the Society for Operations Management in Africa (SOMA). She is a professional member of the Southern African Society for Quality (SASQ). Empowering and advocating women in Engineering and STEM as the chairperson for Faculty's Women in Engineering and the Built Environment (WiEBE).

11:00 – 11:30, Friday, May 15, 2026



Dr. Olufemi Muibi Saibu
Professor & Director
Quality Assurance & SERVICOM Unit
University of Lagos, Nigeria

Professor Olufemi Muibi Saibu is a distinguished development economist and academic leader at the University of Lagos, Nigeria, where he serves as Director of the Quality Assurance and SERVICOM Unit and was the pioneer Director of the Institute of Nigeria China Development Studies. He is also a NESG-NRF Faculty Member/Senior Research Fellow and a former postdoctoral fellow at the University of Johannesburg, South Africa. With more than 15 years of teaching and research experience, his expertise spans development economics, trade and investment policy, and small business economics, with a strong focus on inclusiveness, empowerment, and innovative solutions to unemployment and poverty.

He has published widely on exchange rate dynamics, macroeconomic policy, energy economics, and socioeconomic development in Nigeria and sub-Saharan Africa, contributing to both national and international policy dialogues. Professor Saibu has successfully led major research and capacity-building projects, including an EU Erasmus-Jean Monnet programme on EU-Africa connectivity and youth empowerment. He is also recognized for his expertise in public procurement, higher education quality assurance, and curriculum development.

A member of several prestigious professional societies, he delivered his inaugural lecture in 2022, "Rethinking Nigeria's Development Process – A Choice Between Lamborghini and Ajagbe-Ejo," advocating for indigenous policy solutions to Africa's development challenges. His leadership and scholarship continue to shape economic thought and practice across Nigeria and beyond.

11:30 – 12:00, Friday, May 15, 2026 – Keynote



Dr. Hamieda Parker
Professor
Graduate School of Business
University of Cape Town
Rondebosch, Cape Town, South Africa

Professor Hamieda Parker lectures the Operations Management core course and the Global Supply Chain Management elective course on the MBA programme. She also lectures the Operations and Innovation Management Course on the Postgraduate Diploma in Management Practice programme.

She is an active researcher having completed research in diverse environments, from examining multinationals in developed countries to small micro businesses in developing country contexts. Her current research is closely linked to her interest in improving the competitiveness of the manufacturing sector and the development of innovation capabilities in firms. Her doctoral research examined collaborative new product development involving new technology-based firms and she completed the empirical work for this study as a Sainsbury Fellow based at Oxford University. As a Harvard-Mandela Fellow, she conducted research on entrepreneurship amongst the Afro-American and Immigrant communities based around Harvard University.

She previously worked as a process and product development engineer and successfully developed a number of innovative products and coordinated multifunctional teams for the resolution of production and operations related problems. Parker holds a Chemical Engineering degree from UCT and an MBA from UCT GSB. Following her MBA, she was selected to go to the Wharton School of Business as a business consultant at the Wharton Entrepreneurship Centre. While at Wharton she lectured on the basic Business Planning Course and provided strategic, operational and marketing consulting services to a portfolio of companies ranging from start-up to \$10 million in sales.

12:00 – 13:00, Friday, May 15, 2026

Awards Ceremony



**8th African Conference on
 Industrial Engineering &
 Operations Management**

Accra, Ghana, May 11-13, 2027

Host: University of Ghana



Conference Chairs

Dr. Joshua Ofori-Amanfo

Programme Coordinator, MBA Operations and Supply
 Chain Management and MCs Logistics and
 Transportation Management
 Operations & Management Information Systems Dept.
 University of Ghana Business School
 Legon, Accra – Ghana
 Phone: +233-243159615
 Email: jamanfo@ug.edu.gh, josamafo1@yahoo.com

Dr. Abeeku Sam Edu

Senior Lecturer
 Decision Science and Information Systems
 Operations & Management Information Systems Dept.
 University of Ghana Business School
 Legon, Accra, Ghana
 Telephone: +233 243 85 1124
 Email: asedu@ug.edu.gh, abeekusam.10@gmail.com

Website: www.ugbs.ug.edu.gh

Plenary Speakers (Online)

Wednesday, May 13, 2026 – 2:00 – 2:30 pm (Virtual via Zoom)



Guiping Hu, PhD
Professor and Department Chair, Systems Engineering & Operations Research
College of Engineering and Computing
George Mason University, Fairfax, Virginia, United States

Dr. Guiping Hu is a Professor and Department Chair of Systems Engineering and Operations Research at George Mason University. During 2023 – 2025, she served as the School Head of Industrial Engineering and Management at Oklahoma State University. During 2022-2023, she served as the Associate Chair of the Department of Industrial and Manufacturing Systems Engineering at Iowa State University where she was a faculty from 2009-2023. Dr. Hu's research has been supported by NSF, USDA, DOE, and DOD with over \$12M funding. She has published over 100 journal articles and 50 conference proceedings. She is an Institute of Industrial and Systems Engineers (IISE) Fellow, ELATES fellow, and an NSF IAspire Leadership Academy Fellow.

Keynote Title: System thinking to address trans-disciplinary societal challenges

Abstract: The landscape in research for industry and service sectors continues to evolve rapidly, driven by emerging opportunities and challenges with significant societal implications. As a pivotal approach to embracing these challenges and opportunities, trans-disciplinary research plays an increasingly important role, especially as systems become borderless and dynamic. During this process, it is critical to embrace and adopt system thinking to address trans-disciplinary service challenges. Dr. Hu will share an overview of industrial and service systems along with the digitalization in the era of artificial intelligence and digital twin adoption. Application domains will include supply chain design, manufacturing production, renewable energy production, sustainable agriculture, and healthcare.

14:00 – 14:30, Thursday, May 14, 2026



Lizhi Wang, PhD
Professor of Bioengineering, Department of Systems Engineering & Operations
Research, College of Engineering and Computing
George Mason University, Fairfax, Virginia, USA

Lizhi Wang is a professor in the Department of Bioengineering and the Department of Systems Engineering and Operations Research at George Mason University. Between 2007 and 2023, he worked at Iowa State University in the Department of Industrial and Manufacturing Systems Engineering as an assistant, associate, and then full professor. Between 2023 and summer of 2025, he worked at Oklahoma State University as the inaugural holder of the Ken and Lynn Case Endowed Chair position in the School of Industrial Engineering and Management. Dr. Wang is a co-founder of Crop Convergence, a startup company that offers digital twin as a decision support tool in the controlled environment agriculture industry.

Keynote Title: A systems engineering approach to digital twin models for biological systems

Abstract: Most commonly used models for biological systems are either process-based or data-driven. Process-based models simulate major physiological processes throughout the life cycle, which are explainable and insightful but require experimental measurements for parameterization. On the other hand, data-driven models use machine learning techniques to approximate the complex input-output relationship, which can often produce accurate predictions given adequate training data, but it is hard to explain how the predictions are reached. As an attempt to overcome the challenges of these two types of models and combine their strengths, we have developed a variety of digital twin models using systems engineering principles. Such a model can be considered as a special neural network with a delicately designed architecture, where every neuron represents part of a physiological process and every parameter has a biological meaning. Examples of digital twin models for plants, animals, and/or human body will be introduced to demonstrate the potential of these models.



Michael Parent
Principal – Michael Parent Consulting Services
Lean Six Sigma Master Black belt
ASQ Certified Manager of Quality/Operational Excellence

Michael Parent is an operations consultant and Principal of Michael Parent Consulting Services. Throughout his career, Michael has partnered with organizations to enhance their operational performance in critical areas of cost, quality, capacity, and production. Michael has worked with businesses in several industries and disciplines such as Manufacturing, Insurance, Warehousing, and Human Resources. Michael holds a Bachelor's Degree in Industrial and Operations Engineering from the University of Michigan in Ann Arbor and an MBA from the College of William and Mary Raymond A. Mason School of Business in Williamsburg VA. Michael is a certified Lean and Six Sigma Master Black Belt and an ASQ Certified Manager of Quality/Operational Excellence. Michael was named a 40

Under 40 "Rising Star" by the American Society for Quality.

Presentation Title: Beyond Poka-Yoke: ways to design systems to handle human error

Abstract: Human error is one of the leading issues in operations. It impacts quality, efficiency, and increases operational variability. Good design anticipates human error and handles them according to the needs of the system. This presentation presents many different ways to integrate error handling that goes beyond the traditional Lean methods of "Poka-yoke". The audience will walk away with greater knowledge and understanding of their options with regards to handling of human error.

Submissions Received from Countries and Territories

1. Australia
 2. Bangladesh
 3. Benin
 4. China
 5. Egypt
 6. Ethiopia
 7. Germany
 8. Ghana
 9. India
 10. Indonesia
 11. Ireland
 12. Jordan
 13. Kenya
 14. Kuwait
 15. Malaysia
 16. Mozambique
 17. Namibia
 18. Nigeria
 19. Palestine
 20. Peru
 21. Philippines
 22. Portugal
 23. Russia
 24. Saudi Arabia
 25. South Africa
 26. Taiwan
 27. Tanzania
 28. Turkey
 29. Uganda
 30. UK
 31. United States
 32. Zambia
 33. Zimbabwe
-

Six Sigma Yellow Belt Workshop

May 13, 2025: 6:00 – 8:00 pm

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
- Scatter 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



Dr. Ahad Ali

Associate Professor

Director, Doctor of Engineering in Advanced Manufacturing

Director of Industrial Engineering Programs (BSIE & MSIE)

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, director of doctor of engineering in advanced manufacturing and director of industrial engineering programs (BSIE & MSIE) at A. Leon Linton Department of Mechanical, Robotics, and Industrial Engineering of the Lawrence Technological University (LTU), Southfield, Michigan, USA. He established the Siemens Electro-Matic Industrial Engineering Lab at LTU. Dr. Ali was the primary author of the ABET self-study report of the BSIE Program at LTU in 2022. He earned a BS in Mechanical Engineering from Khulna University of Engineering and Technology (KUET), Bangladesh, a Master's in Systems and Engineering Management from Nanyang Technological University, Singapore, and a Ph.D. in Industrial Engineering from the University of Wisconsin-Milwaukee, USA. Dr. Ali was an Assistant Professor in Industrial Engineering at the University of Puerto Rico - Mayaguez, a Visiting Assistant Professor in Mechanical, Industrial, and Manufacturing Engineering at the University of Toledo, and a Lecturer in Mechanical Engineering at the Bangladesh Institute of Technology, Khulna. He received an Outstanding Professor Award from the Industrial Engineering Department, University of Puerto Rico -Mayaguez. Dr. Ali has been recognized with a Fulbright Award. He has published 75 journal papers and 150 conference papers. Dr Ali conducted research projects with Chrysler, Ford, DTE Energy, New Center Stamping, Whelan Co., Delphi Automotive System, GE Medical Systems, International Truck and Engine Corporation (ITEC), and Rockwell Automation. His research interests include manufacturing systems, quality, lean, six-sigma, simulation, artificial intelligence, supply chain, and optimization. He supervised 11 doctoral students in Doctor of Engineering in Manufacturing Systems (DEMS). He is a founding team member and Chief Executive Officer (CEO) of IEOM Society International. Dr. Ali is a Co-Chair of the International Conference on Industrial Engineering and Operations Management. Dr. Ali organized IEOM conferences around the globe on six continents including Dhaka, Kuala Lumpur, Istanbul, Bali, Dubai, Orlando, Detroit, Rabat, Bogota, Paris, Washington, DC, Lima, Johannesburg, Bangkok, Pilsen, Toronto, Costa Rica, Monterrey, Sao Paulo, Riyadh, Manila, Melbourne, New Delhi, Sydney, Augsburg, Tokyo, and Muscat. He is an associate editor of the IJIEOM. Dr. Ali is a member of IEOM, INFORMS, SME, and IEEE.

Conference Committee

Conference Chairs

- **Prof. Bingwen Yan**, Head of Department: Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Symphony Way, Bellville, Cape Town, South Africa
- **Professor Charles Mbohwa**, Distinguished Professor, University of South Africa (UNISA), Pretoria, South Africa and President of IEOM Society / IEOM Global Council
- **Dr. Ahad Ali**, Associate Professor, Director of Industrial Engineering Program, Lawrence Technological University, Southfield, Michigan, USA and CEO of IEOM Society International

Program Chairs

- **Professor Don Reimer**, Chief Operating Officer, IEOM Society
- **Dr. Linda Zhang**, Professor of Operations Management, IESEG School of Business, Paris La Defense, France
- **Professor Kemlall Ramdass**, Full Professor, Department of Industrial and Engineering Management, College of Science, Engineering and Technology (CSET), University of South Africa (UNISA), Pretoria, South Africa

Technical Chairs

- Dr. Thaba, UJ
- Dr. Nita, UJ

8th African IEOM Ghana Conference Chairs

Dr. Joshua Ofori-Amanfo (MCIPS)
Department of Operations & Management Information Systems
University of Ghana Business School
Legon, Accra – Ghana

Abeeku Sam Edu, PhD
Senior Lecturer
Decision Science and Information Systems
Operations & Management Information Systems Dept.
University of Ghana Business School
Legon, Accra, Ghana

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- Prof Bingwen Yan (Chair), Cape Peninsula University of Technology
- Mr Bharet Morar, Acting Head of Department: Industrial and Systems Engineering, CPU
- Prof Renitha Rampersad, Cape Peninsula University of Technology
- Prof Senthil Krishnamurthy, Cape Peninsula University of Technology
- Dr Tshifhiwa Nenzhelele, Tshwane University of Technology
- Dr Samuel Gqibani, University of Johannesburg
- Dr Blessed Sarema (Secretariat), University of the Witwatersrand

Program Committee – South Africa

- Dr. Joke Buhrmann, University of the Witwatersrand (Wits)
- Prof. Oludolapo Akanni Olanrewaju, Durban University of Technology (DUT)
- Prof. Khumbulani Mpofo, Tshwane University of Technology (TUT)
- Prof. Sarma Yadavalli, University of Pretoria (UP)
- Prof. Thomas Tengen, Vaal University of Technology (VUT)
- Professor Clinton Aigbavboa, University of Johannesburg (UJ)
- Prof Femi Adetunji, University of Pretoria

Track Chairs

ID	Track Name	Track Chair
1	Artificial Intelligence and Data Science	Dr Edward Nkadameng, University of the Witwatersrand
2	Automation, Robotics and Autonomous Systems	Dr Rumbidzai Muvunzi, Senior Lecturer, School of Mechanical, Industrial & Aeronautical Engineering, University of the Witwatersrand
3	Business Management and Operations Management	Prof. Khathutshelo Mushavhanamadi, Associate Professor, Quality and Operations Management, University of Johannesburg

4	Digital Transformation, Industry 4.0 and IoT	Dr Eric Bakama, Durban University of Technology (DUT) Prof Rendani Wilson Maladzi, Associate Professor, Head of Department: Mechanical Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology
5	Engineering Education and Curriculum Improvement	Prof Manimagalay Chetty, HOD: Department of Chemical Engineering, Cape Peninsula University of Technology
6	Engineering Management and Project Management	Prof Brink Botha, Head of Department of Management and Project Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology
7	Entrepreneurship and Innovation	Dr Lawrance Seseni (UJ)
8	Facility Planning and Layout	Mr Bharet Morar, Department of Industrial and Systems Engineering, CPUT
9	Human Factors, Ergonomics and Healthcare Systems	Dr Kefiwe Vanessa Mokwebo, University of the Wsterstern Cape (UWC)
10	Lean Six Sigma and Operations Excellence	Dr Edward Davies, Extraordinary Senior Lecturer, Department of Industrial Engineering, Nelson Mandela University, South Africa
11	Manufacturing, Assembly and Design	Prof. K. Ramdass, Department of Industrial Engineering, UNISA Florida Campus. Roodepoort
12	Quality, Reliability and Maintenance	Prof. Oludolapo Akanni Olanrewaju (DUT)
13	Simulation, Optimization and Productivity Improvement	Dr David Tshwane (CSIR)
14	Supply Chain and Logistics	Dr Rebecca Setino (Transnet Engineering)
15	Sustainability, Green Systems and Energy	Dr Nomcebo Ubisi (HSRC)
16	Case Studies and Best Practices	Prof Rozenda Hendrickse, Head of Department: Public Administration and Governance, CPUT

Competition Chairs

ID	Competition Name	Competition Chair
1	Undergraduate Student Paper Competition Sponsored by SIEMENS	Prof Nelson Sizwe Madonsela, Associate Professor, Head of Department of Quality and Operations Management, Faculty of Engineering & the Built Environment, University of Johannesburg, South Africa
2	Undergraduate Research Competition sponsored by Daikin Applied	Dr. Judith Nkuna, Senior Lecturer, Department of Quality & Operations Management, University of Johannesburg
3	Graduate Student Paper Competition Sponsored by EATON Corporation	Dr. Ipfi Nemudzivhadi, Lecturer, Department of Operations Management, Tshwane University of Technology (TUT)
4	Doctoral Dissertation Competition sponsored by Airbus	Prof Thanyani Pandelani, Assoc. Prof., Department of Mechanical, Bioresources and Biomedical Engineering, School of Engineering and the Built Environment, UNISA
5	Master's Thesis Competition	Dr. Rebecca Setino, General Supply Chain Manager at Transnet
6	Senior Design Project Competition	Dr Stanley Fore, Senior Lecturer, Department of Management and Project Management, Cape Peninsula University of Technology
7	High School STEM Competition	Dr Larancr Seseni
8	AI-ML Competition	Dr Edward Nkadameng
9	Global Design Competition sponsored by Amatrol Inc.	Dr Lawrance Seseni
10	Human Factors and Ergonomics Competition	Prof Anup Pradhan, Associate Professor, Quality & Operations Management, Engineering and the Built Environment, CPUT
11	Lean Six Sigma Competition	Dr. Mukondeleli Kanakana-Katumba, VUT
12	Simulation Competition	Dr David Tshwane
13	Supply Chain and Logistics Competition sponsored by aThingz	Dr. Save Akilimalissiga, Quality and Operations Management, University of Johannesburg, South Africa
14	Poster Competition	Prof. Ms. Hemisha Makan, Department of Transport and Supply Chain Management, University of Johannesburg

IEOM African Country Representatives

SL.	Country	Name	University
1	Algeria	Hitham Ali Yami	University of Sfax
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3	Benin	Osatohanmwun Enehizena	University of Benin
4	Botswana	Michael Mutingi	University of Botswana
5	Burkina Faso	M.T. Dandjinou	Nazi BONI University/LAMDI, Bobo-Dioulasso
6	Burundi	Mikerego Emmanuel and Jeremie Ndikumagenge	University of Burundi
7	Cameroon	Jean-Claude Mbianda	University of Yaoundé I
8	Cape Verde	Sónia Semedo	University of Cape Verde
9	Central African Republic	F.A. Muvundja	Université Catholique de Bukavu (UCB)
10	Chad	J. Mbainibeye	Université de DOBA
11	Comoros	Said Soudjay	University of Comoros, Moroni
12	Congo	Clarimon Georges Kiakondo	Faculté des sciences et technologies, Brazzaville

13	Côte d'Ivoire	M.M. Wielfrid	Institut National Polytechnique Felix Houphouët-Boigny (INPHB), Yamoussoukro
14	Democratic Republic of the Congo	G.-N.T. Longandjo	Université Nouveaux Horizons, Lubumbashi
15	Djibouti	Abdoulkader Ibrahim Idriss	University of Djibouti
16	Egypt	Noha Mostafa	The British Univeristy of Egypt
17	Equatorial Guinea	G.A. Mboro Nchama	Universidad Nacional de Guinea Ecuatorial (UNGE), Malabo
18	Eritrea	R. Kumar	Eritrea Institute of Technology, Asmara
19	Eswatini	Sandile Motsa	University of Eswatini, Kwaluseni
20	Ethiopia	Befekadu Zeleke	Bahir Dar Textile Share Company
21	Gabon	Jean Brice MANDATSY Mougomo	Ecole Normale Supérieure de l'Enseignement Technique (ENSET)
22	Gambia	M. Minteh	Ministry of Agriculture, Gambia
23	Ghana	Kwame Osei	Kwame Nkrumah University of Science and Technology
24	Guinea	Sekou Traore	Gamal Abdel Nasser University of Conakry
25	Guinea-Bissau	Amará Jaurá	CENFI Centro de Formação Industrial
26	Kenya	Joseph Onyango	Kenyatta University
27	Lesotho	Khobatha Setetemela	National University of Lesotho, Roma
28	Liberia	G. Nallo	University of Liberia Pacific, Monrovia
29	Libya	Omar Elmabrouk	Benghazi University
30	Madagascar	Marni Lafleur	University of Madagascar
31	Malawi	C. Mikeka	University of Malawi (UNIMA), Zomba
32	Mali	C.O. Bagayoko	USTTB, Bamako
33	Mauritania	A.M. Idriss	Al Aassriya Nouakchott University, Nouakchott
34	Mauritius	Devkumar Callychurn	University of Mauritius
35	Mayotte	Thibaut L'Honoré	Université de Mayotte
36	Morocco	Abdelaziz Berrado	The Ecole Mohammadia d'Ingénieurs, Mohammed V University
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38	Namibia	Michael Mutingi	Namibia University of Science and Technology
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40	Nigeria	Paul Amaechi Ozor	University of Nigeria, Nsukka
41	Reunion	Eric Fock	University of Reunion
42	Rwanda	Shyaka Gilbert	University of Rwanda
43	São Tomé and Príncipe	Eurídice Helga Aguiar	Universidade de São Tomé e Príncipe
44	Senegal	Mamadou Diouf	Université Cheikh Anta Diop
45	Seychelles	Paul Kang'Ethe	University of Seychelles
46	Sierra Leone	H. Wurie	University of Sierra Leone, Freetown
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49	South Sudan	F.N. Osman	University of Medical Sciences and Technology, South Sudan
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51	Tanzania	Elisha Kibona	University of Dar es Salaam
52	Togo	Komi Mawuli	University of Lomé
53	Tunisia	Salah BENABDALLAH	University of Tunisia
54	Uganda	Sam Kabugo	Makerere University
55	Zambia	Bupe Getrude Mwanza	University of Zambia
56	Zimbabwe	Loice K. Gudukeya	University of Zimbabwe

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- Dr Asela K. Kulatunga, University of Peradeniya, Sri Lanka

Technical Committee

Name	University /Organisation	Department
Prof Brink Botha	Cape Peninsula University of Technology (CPUT)	Management and Project Management
Prof Manimagalay Chetty	Cape Peninsula University of Technology (CPUT)	Chemical Engineering
Prof Kasongo Nyembwe	Cape Peninsula University of Technology (CPUT)	Mechanical & Mechatronic Engineering
Dr Lucrecia Valentine	Cape Peninsula University of Technology (CPUT)	Industrial and Systems Engineering
Dr Blessed Sarema	University of the Witwatersrand (Wits)	Operations Management
Prof Anup Pradhan	University of Johannesburg (UJ)	Quality & Operations Management
Prof Nita Inderlal Sukdeo	University of Johannesburg (UJ)	Quality & Operations Management
Prof Rendani Wilson Maladzhi	Durban University of Technology (DUT)	Mechanical Engineering
Prof Manduth Ramchander	Durban University of Technology (DUT)	Operations and Quality Management
Prof Ezutah Olugu	University of the Witwatersrand (Wits)	Mechanical, Industrial & Aeronautical Engineering
Dr Mncedisi Dewa	University of the Witwatersrand (Wits)	Mechanical, Industrial & Aeronautical Engineering
Dr Rumbidzai Muvunzi	University of the Witwatersrand (Wits)	Mechanical, Industrial & Aeronautical Engineering
Prof Stephen Matope	Stellenbosch University (SU)	Manufacturing & Industrial Management
Dr Tshifhiwa Nenzhelele	Tshwane University of Technology (TUT)	Gibela Research Chair
Prof Kemlall Ramdass	University of South Africa (UNISA)	Department of Industrial Engineering
Prof Adefemi A. Obalade	University of the Western Cape (UWC)	Faculty of Economic and Management Sciences
Dr Abongile Zweni	Sol Plaatje University (SPU)	Department of Public Finance
Prof Zakaria Yahia	Egypt-Japan University for Sci. and Technology	Industrial and Manufacturing Engineering (IME)
Prof David Chien-Liang Kuo	University of Taipei	Marketing and Management
Prof Davison Zimwara	National University of Science and Technology (NUST, ZW)	Industrial and Manufacturing Engineering
Prof William Goriwondo	National University of Science and Technology (NUST, ZW)	Faculty of Engineering
Dr Lameck Mugwagwa	National University of Science and Technology (NUST, ZW)	Industrial and Manufacturing Engineering
Prof Samson Mhlanga	National University of Science and Technology (NUST, ZW)	Industrial and Manufacturing Engineering

Prof Bingwen Yan	Cape Peninsula University of Technology (CPUT)	Industrial and Systems Engineering
Sohrab Nasiri	Palacký University, Olomouc, Czech Republic	Faculty of Science

Conference Schedule

Wednesday, May 13, 2026 - Morning

	Breakout Room 1	Breakout Room 2	Breakout Room 3	Virtual Zoom Room 4
08:00 - 17:00	Registration			8:00 – 11:00
8:00 - 9:30	Engineering Education and Curriculum Improvement	Business Management and Operations Management	Undergraduate Student Paper Competition Sponsored by SIEMENS Undergraduate Research Competition sponsored by Daikin Applied	Undergraduate Student Paper Competition Sponsored by SIEMENS 11:00 – 13:00 Undergraduate Research Competition Sponsored by Daikin Applied 13:00 – 14:00 Business Management and Project Management
9:30 – 10:00	Break			
10:00 - 10:10	Conference Chair Welcome Prof Bingwen Yan Head of Department Department of Operations Management Cape Peninsula University of Technology Cape Town, South Africa			
10:10 - 10:30	Host University Welcome Address and Conference Opening Professor Chris Nhlapo Vice-Chancellor Cape Peninsula University of Technology (CPUT) Cape Town, South Africa			
10:30 - 11:00	IEOM Welcome Dr. Ahad Ali Associate Professor Director, Director of Doctor of Engineering in Advanced Manufacturing Director of Industrial Engineering Programs (BSIE and MSIE) A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering Lawrence Technological University, Southfield, Michigan, USA Chief Executive Officer (CEO), IEOM Society International			
10:00 - 11:30	Keynote: Christine Nicola Taphel Chief Executive Officer Reconstructed Living Labs (RLabs) South Africa Cape Town, Western Cape, South Africa			
11:30 - 12:00	Keynote: Dr Rechard Noor Managing Director, W-Tech Manufacturing and Fibretek Manufacturing Group Managing Director, H&M Group Research Associate, Nelson Mandela University Chairperson, Community Chest of the Western Cape Chairperson, Advisory Board Meeting, Department of Industrial and Systems Engineering, Cape Peninsula University of Technology			
12:00 - 12:30	Keynote: Dr. Jingshan Li Head and Chair Professor Department of Systems Engineering City University of Hong Kong Kowloon, Hong Kong SAR			
12:30 - 13:00	Keynote: Dr. Ram Madhav President of India Foundation (IF), a New Delhi-based Think Tank			

13:00 - 14:00: Lunch Break

Wednesday, May 13, 2026 – Afternoon

14:00 – 18:00, Wednesday, May 13, 2026 Poster Competition and Poster Presentations

	Breakout Room 1	Breakout Room 2	Breakout Room 3	Virtual Zoom Room 4
14:00 - 15:30	Engineering Education and Curriculum Improvement	Artificial Intelligence and Data Science	Doctoral Dissertation Competition sponsored by Airbus	Artificial Intelligence and Data Science
15:30 - 16:00	Break			

16:00 - 18:00	Engineering Management and Project Management	Sustainability, Green Systems and Energy	Master's Thesis Competition	Supply Chain and Logistics
18:00 - 20:00	Six Sigma Yellow Belt Workshop by Dr. Ahad Ali			Business Management and Operations Management

Thursday, May 14, 2026 - Morning

	Breakout Room 1	Breakout Room 2	Breakout Room 3	Virtual Zoom Room 4
08:00 - 17:00	Registration			8:00 – 11:00: Competitions
8:00 - 9:30	Human Factors, Ergonomics and Healthcare System	Manufacturing, Assembly and Design	Supply Chain and Logistics	Doctoral Dissertation Competition
9:30 – 10:00	Break			High School STEM Competition
10:00 - 10:30	Host Welcome Prof Marshall Sheldon Deputy Vice-Chancellor: Research, Technology Innovation and Partnerships Cape Peninsula University of Technology (CPUT) Cape Town, South Africa			Human Factors & Ergo Competition
10:30 - 11:00	Keynote Dr. Mukondeleli Grace Kanakana-Katumba DVC Teaching and Learning Vaal University of Technology (VUT) Vanderbijlpark, South Africa			Master's Thesis Competition
11:00 - 11:30	Keynote: Dr. Lerato Mdaka Associate Professor of Management Sciences Faculty of Economic and Management Sciences North-West University Potchefstroom, South Africa			Simulation Competition
11:30 - 12:00	Keynote: Dr. Xuan (Jen) Zhao Professor in Operations and Decision Sciences Lazaridis School of Business and Economics Wilfrid Laurier University Waterloo, Ontario, Canada			Supply Chain Competition
12:00 - 12:30	Keynote: Professor Charles Mbohwa, Ph.D. Distinguished Professor University of South Africa (UNISA) Pretoria, South Africa IEOM President 2025 – 2026			11:00 – 14:00
12:30 - 13:00	Keynote: Dr. Rupa Vasudevan Chancellor Bharatiya Engineering Science and Technology Innovation University (BEST IU) Anantapur, Andhra Pradesh			Simulation, Optimization and Productivity Improvement

13:00 - 14:00: Lunch Break

Thursday, May 14, 2026 - Afternoon

	Breakout Room 1	Breakout Room 2	Breakout Room 3	Virtual Zoom Room 4
14:00 - 15:30	Simulation, Optimization and Productivity	Entrepreneurship and Innovation	Automation, Industry 4.0 and IoT	Human Factors, Ergonomics and Healthcare System
15:30 - 16:00	Break			
16:00 - 18:00	Sustainability, Green Systems and Energy	Quality, Reliability and Maintenance	Supply Chain and Logistics	Quality and Lean Six Sigma
18:00 – 20:00				Sustainability, Green Systems and Energy

Friday, May 15, 2026 - Morning

	Breakout Room 1	Breakout Room 2	Breakout Room 3	Virtual Zoom Room 4
08:00 - 17:00	Registration			8:00 – 9:30
8:00 - 9:30	Simulation, Optimization and Productivity Improvement	Sustainability, Green Systems and Energy	Lean Six Sigma and Operations Excellence	Manufacturing, Assembly and Design
9:30 – 10:00	Break			
10:00 - 10:20	Host Welcome Professor Mercy Khathutshelo Makhitha Dean Faculty of Business and Management Sciences			10:00 – 11:30
				Engineering Management and Project Management

	Cape Peninsula University of Technology (CPUT) Cape Town, South Africa	12:00 – 13:30
10:30 - 11:00	Keynote: Prof Nita Inderlal Sukdeo Associate Professor Department of Quality and Operations Management School of Mechanical and Industrial Engineering University of Johannesburg, South Africa	Engineering Education and Curriculum Improvement
11:00 - 11:30	Keynote: Dr. Olufemi Muibi Saibu Professor & Director Quality Assurance & SERVICOM Unit University of Lagos, Nigeria	
11:30 - 12:00	Keynote: Dr. Hamieda Parker Professor, Graduate School of Business University of Cape Town Rondebosch, Cape Town, South Africa	
12:00 - 13:00, May 15th - Awards Ceremony		

12:00 – 14:00: Lunch Break and Awards

Friday, May 15, 2026 - Afternoon

	Breakout Room 1	Breakout Room 2	Breakout Room 3	Virtual Zoom Room 4
14:00 - 15:30	Sustainability, Green Systems and Energy	Engineering Education and Curriculum Improvement	Engineering Management and Project Management	Industry 4.0 and IoT
15:30 - 16:00	Break			
16:00 - 18:00	Business Management and Operations Management	Digital Manufacturing, Industry 4.0 and IoT	Artificial Intelligence and Data Science	Sustainability, Green Systems and Energy
18:00 - 20:00				Sustainability, Green Systems and Energy

May 13, 2026 (Wednesday)

07:00 - 17:00 Registration and Networking

May 13, 2026 (Wednesday) - Session: 8:00 – 9:30**8:00 – 9:30, Wednesday****Onsite Room 1**

Session Chair:

Engineering Education and Curriculum Improvement**ID 116 A Behavioral Architecture for Student Attendance and Engagement: The NAT Framework for Ethical Nudging in Higher Education**

Zanele Nqobile Hadebe and Nokuthula Mavela, Centre for Excellence in Learning and Teaching, Faculty of Engineering and the Built Environment Durban University of Technology, Durban, South Africa

Rendani Wilson Maladzhi, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa

ID 119 A Pedagogy for Transitioning Engineering Technologists into the 4IR Profession [A case of engineering tuition in an ODL university]

Ngaka Mosia and Unisa, South Africa

ID 133 A System Dynamics View of the Influence of Industry 4.0 on Engineering Technology education in a VUCA world: A causal loop diagram perspective

Ngaka, Mosia and Unisa, South Africa

ID 129 Application of an Adaptive Results-Driven Curriculum [A case of ODeL engineering tuition]

Ngaka, Mosia and Unisa, South Africa

ID 211 Application of an Adaptive Results-Driven Curriculum [A case of ODeL engineering tuition]

Crisantia, Nyaka and Unisa, South Africa

ID 258 Application of the Case method in engineering education

Matshapo, Mokoka and Unisa, South Africa

ID 406 Determinants of Long-Term Learning Retention in Higher Education: A Systematic Review of Strategies and Challenges

Lebogang Puree Bopape, Nompumelelo Chili, Mohohlo Tsoeu, Thandeka Makhanya and Christopher Mcineka, Lecturer, Electronic and Computer Engineering, Faculty of Engineering and Built Environment, Durban University of Technology, Durban, South Africa

ID 407 Integrating AI Chatbots and Web Content in Teaching and Learning: Barriers, Opportunities and Strategies: Systematic Review

Christopher Thembinkosi Mcineka, Nompumelelo Chili, Thandeka Makhanya, Lebogang Bopape and Mohohlo Tsoeu, Electronic and Computer Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa

May 13, 2026 (Wednesday) - Session: 8:00 – 9:30**8:00 – 9:30, Wednesday****Onsite Room 2**

Session Chair:

Business Management and Operations Management**ID 3 Semi-Automating Quality Testing Using Machine Learning: A Case Study of a South African FMCG Company**

Mbidzo Ladzani and Gbeminiyi John Oyewole, School of Mechanical, Industrial, and Aeronautical Engineering, University of the Witwatersrand, Johannesburg, South Africa

ID 44 Leadership-Driven Operations Management for Sustainable Mining: A Review

Caleb Wisdom Mulaudzi and Hilda Kundai Chikwanda, Graduate School of Technology Management, Faculty of Engineering and the Built Environment, University of Pretoria, Pretoria, South Africa

ID 75 Building Adaptability to Ensure the Successful Implementation Digital Transformation TechnologiesJürgens Frerk and Nelson Sizwe Madonsela, Faculty of Engineering and the Built Environment, University of Johannesburg, P.O. Box 524, Auckland Park, 2006, South Africa
Corner Kingsway and University Road, Auckland Park, South Africa**ID 130 Enhancing Order Fulfillment in Electric Motor Gate Manufacturing: A South African Simulation Study**

Andani Gudumi, Department of Industrial Engineering, Operations Management and Mechanical Engineering, Faculty of Engineering, Vaal University of Technology, Vanderbijlpark, South Africa

Asser Letsatsi Tau, Department of Operations Management, Faculty of management Science, Tshwane University of Technology, Pretoria, South Africa

Emmanuel Innocents Edoun and Solly Poee, Tshwane School for Business and Society, Pretoria, South Africa

ID 162 Simulation Modelling of An International Airport Check-In Process for Improvement: A South African Case Study

Andani Gudumi and Asser Letsatsi Tau, Department of Operations Management, Faculty of Management Science, Tshwane University of Technology, South Africa

ID 194 Challenges faced by SMEs in providing sustainable youth employment opportunities in Mbashe Local Municipality

Onikho Myendeki, Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa

Adeel Sambo, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa

May 13, 2026 (Wednesday) - Session: 8:00 – 9:30

8:00 – 9:30, Wednesday

Onsite Room 3

Session Chair:

Undergraduate Student Paper Competition Sponsored by SIEMENS

ID 49 Enhancing Road Safety Infrastructure: An Intelligent Aerial Traffic Observation and Automated Citation System

Tanyaradzwa Tanatswa Mushonga and Samkeliso Suku Dube, Department of Computer Science, Faculty of Applied Sciences, National University of Science and Technology, Bulawayo, Zimbabwe

ID 288 Optimizing Industrial Energy Consumption for SMEs in Sub-Saharan Africa Using Data-Driven Demand Side Management

Anthony Ijoot, Department of Electrical and Computer Engineering, College of Engineering, Design, Art and Technology (CEDAT), Makerere University, Kampala, Uganda

Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech Automation Technologies Limited, Nairobi, Kenya

Undergraduate Research Competition sponsored by Daikin Applied

ID 8 Bin Packing Problem: Optimization Methods and Applications

Pfarello Ramaleba, Xihlovo Manganye, Thutoentle Kenalemang, Bakang Diphoko, Esihle Dylan Qomfo and Lebogang Collin Lojane, Department of Mathematical and Computer Science, Sol Plaatje University

May 13, 2026 (Wednesday) - Session: 8:00 – 9:30

8:00 – 11:00, Wednesday

Virtual Zoom Room 4

Session Chair: Dr. Mizanur Rahman, IEOM Sydney

Undergraduate Student Paper Competition Sponsored by SIEMENS

ID 9 Productivity Improvement in a Toilet Paper Processing Company Applying SLP, Standardization and Planned Maintenance

Mario Alejandro Chirinos-Galvez, Carlos Antonio Jara-Valencia, Jorge Antonio Corzo-Chavez and Gino Viacava-Campos, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

ID 10 Production Management Model based on Standardization and Autonomous Maintenance to improve Efficiency in an LPG filling plant

Naomi Abigail Del Castillo-Tapia, Angie Lizbeth Casablanca-Dominguez, Gino Viacava-Campos and Jorge Antonio Corzo-Chavez, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Peru

ID 11 Improving On-Time Delivery in a Metalworking Company through: 5S, SMED and Jidoka

Emmanuel Paredes-Aymara, Sthefany Amanqui-Quinto, Gino Viacava-Campos and Jorge Antonio Corzo-Chavez, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

ID 45 Determining Short-Form Video Key Characteristics that Affect the Private and Public Tertiary Students' Cognitive Engagement in Classroom Learning

Cruz Andrei Joseph D., Dela Rosa, Wendel C., Genabe Kurt Brian P. and Zipagan Princess Jasmin A., 4th Year Faculty of Engineering Students Department of Industrial Engineering, University of Santo Tomas (UST), Manila, Philippines
Carlos Ignacio P. Lugay Jr., PhD, PIE, ASEAN ENGR., UST Faculty of Engineering Faculty Member, Department of Industrial Engineering, University of Santo Tomas (UST), Manila, Philippines

ID 88 Determining Factors Affecting the Satisfaction of Physically Challenged Undergraduate Students on Campus Accessibility: A Structural Equation Modeling Approach

Godwin M. Bagon, Harold Anjelo R. Espeleta, Celina Denise Q. Go, Jayvert Lloyd G. Manongsong, and Carlos Ignacio P. Lugay, Jr., Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Espana Blvd., Sampaloc, Manila, Philippines

ID 99 Exploring Consumer Readiness and Satisfaction in the Adoption of QR Ph Standard

Yves Adam B. Alvarez, Jean Russel V. Cabusas, Denyael Day C. Dacanay, Franz Angelo Lewis T. Dar, Raymond Vincent E. De Jesus, Shaun Matthew C. De Leon, John Lester B. Dela Paz, Frederick Norman Raei A. Dimaano and Maricar M. Navarero, Industrial Engineering Program, College of Engineering and Architecture, Technological Institute of the Philippines, Quezon City, Philippines

ID 176 Scroll, Shop, repeat: An Analysis of the Psychological and Behavioral Drivers Influencing Purchase Intention Among Filipino Digital Consumers in NCR

Jesselyn B. Alcaín, MS, UST Faculty of Engineering - Faculty Member, Department of Industrial Engineering, University of Santo Tomas, Manila, Philippines

Mharielle D.A. Bustamante, Chelsey Joyce P. Cortez, Kate Lorien A. De Guzman and Jessca Rwen Gamboa, 4th Year Faculty of Engineering Students, Department of Industrial Engineering, University of Santo Tomas, Manila, Philippines

ID 177 The Design of a Hydro Docking System for a Small Town Harbour

Samkelisiwe Muthwa, Noxolo Nxumalo and Pinky Nzama, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment Mangosuthu University of Technology, Durban, South Africa

Vuyo Katiya, Co Supervisor, Department of Mechanical Engineering

John Zvidzayi, Supervisor, Department of Mechanical Engineering

ID 179 Analyzing the Factors Influencing Customer Decision to Revisit Coffee Shops: A Combined Analysis Using Service Quality Model and the Theory of Planned Behavior

Engr. Jesselyn B. Alcaín, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

Caelyn Adelle C. Babaran, Earl Christian L. Banawa, Gerald G. Buela, and Jansen Rafael P. Galvez, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

ID 182 Assessing Service Quality, Perceived Risk, and Value: Predicting Continued Usage of Modern Jeepneys among Commuters in the National Capital Region

Engr. Jesselyn B. Alcaín, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

Darren Josh L. Briones, John Kenneth L. Garces, David Jacob A. Genetia, Juliana Kate Unidad, and Dave Villanueva, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

ID 207 Critical Path Method and Economic Analysis of a Smart Leak Detection System for Desalination Water Networks in Saudi Arabia

Reem N Alsaadi, Asrar A Al-shahrani, Jawharah A Al-Qasebah, Manar M Al-shahrani, Retaj S Al-muawi, Rand S Shukban, Wed I shuflout, Mays A Alshahrani and Ghaida N Alghamdi, Undergraduate Student in the Industrial Engineering, Department, College of Engineering University of Bisha Bisha 61922, Saudi Arabia

Khaled Ali Abuhasel, Full Professor in the Industrial Engineering Department, College of Engineering, University of Bisha, Bisha, Saudi Arabia

ID 214 Factors Affecting Commuters on the Usage Intention of MRT-3 in EDSA, Philippines: A PLS-SEM Approach

Jesselyn Alcaín, Michael Hachijin L. Monsanto, Andrea Denisse M. Solomon, Diana Marie Supremo, and Johann Sebastien M. Vizconde Department of Industrial Engineering, University of Santo Tomas, Sampaloc, Manila, 1008, Philippines

ID 224 Determining Factors That Can Significantly Affect the Achievement of Student Outcomes in the University of Santo Tomas Engineering Student Internship Program

Angeles, Jan Adrian E., De La Rosa, Ricardo Rogelio N. IV and Taniegra, Elton John M., University of Santo Tomas - Faculty of Engineering Philippines

ID 272 Leveraging Internet of Things (IoT) to control Urban Flooding in Nairobi

Kellie Atina, Third year Computer Science Student, Strathmore University, Nairobi, Kenya

Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech Automation Technologies Limited, Nairobi, Kenya

May 13, 2026 (Wednesday) - Session: 11:00 – 13:00**11:00 – 13:00, Wednesday****Virtual Zoom Room 4**

Session Chair: Dr. Mizanur Rahman, IEOM Sydney

Undergraduate Research Competition Sponsored by Daikin Applied**ID 103 Factors That Influence the Compliance of Motorcycle Delivery Riders in Metro Manila to Road Safety**

Krizzah Ysabelle A. Briso, Hani P. Columbano, Isabelle Marie R. Coruña, Leslie V. Llarena, and Carlos Ignacio P. Lugay Jr., PhD, PIE, ASEAN Engr., Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, España Blvd., 1015, Manila, Philippines

ID 108 Understanding Generation of Food Waste in the National Capital Region Through Social Practice Theory: Analyzing Middle Class Household Behaviors

Margareth Alexis P. Balasabas, Joaquin Rafael E. Dumanil, Austin Julian O. Gabano, Fiona Mikamei G. Luto, and Ninna S. Ocampo, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008 Metro Manila, Philippines

ID 271 Waste to Energy and Clean Water: Evaluation of Low-Cost Microbial Fuel Cells for Sustainable Development

Noreen Cheroni Koech, School of Computing and Engineering Sciences, Strathmore University, Nairobi, Kenya

Charity Adoyo Juma and Trevor Kariuki Chege, School of Biological Sciences, School of Mechanical, Manufacturing and Materials Engineering Jomo Kenyatta University of Agriculture and Technology

ID 281 Mitigating Water Pollution in Kenyan Inland Water Bodies: Practical, Community-Driven Solutions

Dexter Kimathi, Computer Science Student, Strathmore University, Nairobi, Kenya

Stefan Ngatia Mari, Electrical and electronics engineering student, Strathmore University, Nairobi, Kenya

Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech Automation Technologies Limited, Nairobi, Kenya

ID 356 Waste to Energy and Clean Water: Evaluation of Low-Cost Microbial Fuel Cells for Sustainable Development

Noreen Cheroni Koech, School of Computing and Engineering Sciences, Strathmore University, Nairobi, Kenya
Charity Adoyo Juma and Trevor Kariuki Chege, School of Biological Sciences, School of Mechanical, Manufacturing and Materials Engineering
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

May 13, 2026 (Wednesday) - Session: 11:00 – 13:00**13:00 – 14:00, Wednesday****Virtual Zoom Room 4**

Session Chair: Dr. Mizanur Rahman, IEOM Sydney

Engineering Management and Project Management**ID 349 How to Transition Firms to a Sustainable Ecosystem**

Dambuwo Sekgokwa Dombo, University of South Africa, South Africa

ID 350 Strategic Management Insights Driven by Cutting-Edge Perspectives in Strategy, Operations, and Governance

Dambuwo Sekgokwa Dombo, University of South Africa, South Africa

ID 351 Examining the Mental Aspects That Influence Waste Reduction [How might "bottom-up" EGB efforts help firms become more "green?"]

Dambuwo Sekgokwa and Dombo, University of South Africa, South Africa

ID 364 The South African Insurance Industry's Preparedness for Climate Change

Leuba Harold Thomas Modiba, University of Johannesburg, South Africa

9:30 – 10:00 – Networking Break**May 13, 2026 (Wednesday) - Session: 10:00 – 13:00****Opening, Welcome and Keynotes**

10:00 - 10:10 - Conference Chair Remarks

Prof Bingwen Yan
Head of Department
Department of Operations Management
Cape Peninsula University of Technology
Cape Town, South Africa

10:10 - 10:20 - Host University Welcome Address and Conference Opening

Professor Chris Nhlapo
Vice-Chancellor
Cape Peninsula University of Technology (CPUT)
Cape Town, South Africa

10:30 - 11:00 - IEOM Welcome and Keynote

Dr. Ahad Ali
Associate Professor
Director, Director of Doctor of Engineering in Advanced Manufacturing
Director of Industrial Engineering Programs (BSIE and MSIE)
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University, Southfield, Michigan, USA
Chief Executive Officer (CEO), IEOM Society International

11:00 - 11:30 Keynote:

Christine Taphel
Chief Executive Officer, RLabs South Africa
Reconstructed Living Lab (RLabs)
Cape Town, South Africa

11:30 - 12:00 Keynote:

Dr Recharad Noor
Managing Director, W-Tech Manufacturing and Fibretek Manufacturing
Group Managing Director, H&M Group
Research Associate, Nelson Mandela University
Chairperson, Community Chest of the Western Cape
Chairperson, Advisory Board Meeting, Department of Industrial and Systems Engineering, Cape Peninsula
University of Technology

12:00 - 12:30 Keynote:

Dr. Jingshan Li
Head and Chair Professor
Department of Systems Engineering
City University of Hong Kong
Kowloon, Hong Kong SAR

12:30 - 13:00 Keynote:

Mr. Ram Madhav
President of India Foundation (IF), a New Delhi-based Think Tank

13:00 - 14:00 Lunch Break

14:00 – 18:00, Wednesday, May 13, 2026
Poster Competition and Poster Presentations

ID 161 A Data-Driven Reliability-Centered Quality Framework for Predictive Maintenance in Smart Industrial Systems
Naif Almakayeel, Industrial Engineering Department, College of Engineering, King Khalid University, Abha, Saudi Arabia

ID 15 AI-Driven Administrative Automation in Internal Logistics: A Framework for Adoption and Organisational Transformation
Michelle Smit, Department of Industrial Engineering, Stellenbosch University, South Africa

ID 31 Can Nigerian Engineering and Technology Students address our Sustainability issues? An Empirical Assessment of them Entrepreneurial Mindset
Funke Adedeji, Department of Engineering and Technology Management, University of Pretoria, SA, South Africa

ID 76 Design of a Hydro Docking System for a Small Town Harbour
Samkelisiwe Muthwa, Noxolo Nxumalo and Pinky Nzama, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment
Mangosuthu University of Technology, Durban, South Africa

ID 256 Establishing Strategic Regional Value Chains in Africa's Industrial Parks & Special Economic Zones for Advancement of The Africa Free Trade Agreement Regional Value Chain Strategy
Thakaramahlaha Lehohla, Wits Mining Institute, South Africa

ID 42 Implementation of Cleaner Production Methodology for Reduction of Energy Consumption and Waste Sand in Foundries
Mendon Dewa, Department of Industrial Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology
Durban, South Africa

ID 7 Multi-Response Optimization of Precipitation Hardening Variables for Al-Zn-Mg-Sn Alloy as Sacrificial Anode: A Desirability Function Approach
Lasisi E Umoru, Department of Materials Science and Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria
Oludolapo A Olanrewaju, Institute of System Science, Durban University of Technology, Durban, South Africa
Oladeji O Ige, Department of Materials Science and Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria
Institute of System Science, Durban University of Technology, Durban, South Africa

Department of Industrial Engineering, Durban University of Technology, Durban, South Africa

ID 225 Optimizing Reverse Logistics in Aluminium (An Industry Specific case in South Africa)

Ngaka Mosia, Industrial Engineering and Engineering Management, College of Science, Engineering, and Technology, School of Engineering University of South Africa, Gauteng, South Africa

ID 132 Prioritizing, accelerating, and scaling up green energy infrastructure development for industrialization and socio-economic growth-case study: East African energy sector

Eng. Joel Nadebu Ouma, Senior Electrical Engineer, State Department for Public Works, Nairobi, Kenya
Eng. Japheth Davies Bwire, Senior Engineer, EirGrid PLC, Ireland

ID 16 The Implementation of AI Assistants to Reduce Redundant Administrative Tasks in Team Operations

Michelle Smit, Department of Industrial Engineering, Stellenbosch University, South Africa

May 13, 2026 (Wednesday) - Session: 14:00 – 15:30

14:00 – 15:30, Wednesday

Onsite Room 1

Session Chair

Engineering Education and Curriculum Improvement

ID 259 Curriculum development for Collaborative Virtual Exchange projects

Matshepo, Mokoka and Unisa, South Africa

ID 91 Design Thinking for Teaching in Engineering Education: A Human-Centred, Semester-Ready Model for Large, Low-Attendance Classes

Innocentia Gugulethu Mkhize and Mbuyu Germain Ntunka, Department of Chemical Engineering, Faculty of Engineering & the Built Environment Durban University of Technology, Durban, South Africa
Rendani Wilson Maladzhi, Department of Mechanical Engineering, Faculty of Engineering & the Built Environment, Durban University of Technology Durban, South Africa

ID 226 Disruptive Technologies Enhancing Learners' Experience in Teaching and Learning

Zanele Mpanza, University of South Africa, South Africa

ID 294 Educators' Perspectives on Integrating Indigenous Knowledge in Sustainability Education

Carin Zvandasara, Corrinne Shaw and Brandon Collier-Reed, Department of Mechanical Engineering, University of Cape Town, Cape Town, South Africa

ID 218 Engineering Education in Zimbabwe: Challenges, Progress, and Future Prospects

Hagreaves Kumba, Industrial Engineering Department, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban South Africa
Oludolapo Akanni, Industrial Engineering Department, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban South Africa
Anesu Nicholas Charamba, School of Electrical and Information Engineering, University of the Witwatersrand, Johannesburg, South Africa
Ratidzo Pasipamire, Department of Mechanical Engineering, Faculty of Engineering and Geosciences, Midlands State University, Zvishavane, Zimbabwe
Egina Nyati, Department of Electrical and Electronic Engineering, Faculty of Engineering and Geosciences, Midlands State University, Zvishavane, Zimbabwe

ID 296 Framing Sustainability Curriculum in First Year Mechanical Engineering

Carin Zvandasara, Corrinne Shaw and Brandon Collier-Reed, Department of Mechanical Engineering, University of Cape Town, Cape Town, South Africa

ID 262 From Theory to Practice [The Role of Virtual, Augmented, and Mixed Reality in Transforming Engineering Education]

Matshepo, Mokoka and Unisa, South Africa

May 13, 2026 (Wednesday) - Session: 14:00 – 15:30

14:00 – 15:30, Wednesday

Onsite Room 2

Session Chair:

Artificial Intelligence and Data Science

ID 223 A literature-based strategy framework to bridge the AI skills gap in South African SMMEs and improve operational efficiency

Refilwe Sophy Matlakala, Department of Quality & Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

Daramy Vandri Von Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

ID 275 Adapting the EU AI Act to African Financial Services: Extraterritorial Reach and Proportional- Risk Sandboxes

Racheal Osieko, Undergraduate student Bachelor of Laws, School of Law, Stefan Ngatia Mari, Electrical and electronics engineering student
Strathmore University, Nairobi, Kenya
Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech
Automation Technologies Limited, Nairobi, Kenya

ID 2 AI-Driven Regulatory Frameworks for Intelligent Mineral Resource Management: A Research Agenda

Oludolapo A Olanrewaju, Institute of System Science, Durban University of Technology, Durban, South Africa
Felix Mora-Camino, Institute of System Science, Durban University of Technology, Durban, South Africa
Department of Industrial Engineering, Durban University of Technology, Durban, South Africa
Oladeji O Ige, Department of Materials Science and Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria
Institute of System Science, Durban University of Technology, Durban, South Africa
Department of Industrial Engineering, Durban University of Technology, Durban, South Africa

ID 66 Application of Ai and Gis In Wastewater Treatment

T. Kampila., Sustainable Technology Environmental Management Company, Harare, Zimbabwe
M. M. Manyuchi. Sustainable Technology Environmental Management Company, Harare, Zimbabwe
Sustainability and Future Technologies Center, University of South Africa, Pretoria, South Africa
Germany Biomass Research Center, Leipzig, Germany
W. Stinner., Germany Biomass Research Center, Leipzig, Germany
N. Sukdeo, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg,
South Africa
C. Mbohwa, Sustainable Technology Environmental Management Company, Harare, Zimbabwe

ID 222 Application of Artificial Intelligence Techniques in Geothermal Energy Management Systems for Improved Performance: A Review

Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech
Automation Technologies Limited, Nairobi, Kenya
Shubi F. Kaijage, Associate Professor of Electronics Engineering and Information, School of Computational and Communication Science and
Engineering (CoCSE), The Nelson Mandela African Institution of Science and Technology (NM-AIST), Arusha, Tanzania
Joel Nadebu Ouma, Senior Superintending Engineer, The State Department for Public Works, Nairobi, Kenya
Shakiru Idrissa Kajugus, Director Business Development, Mathew Mwangomba, General Manager, Tanzania Geothermal Development Company
Limited (TGDC), Dar es Salaam, Tanzania

ID 206 Big Data Analytics [A case of Healthcare Operations in SA]

Ngaka Mosia, Humbulani Phuluwa, Ramdass Kemlall and Mmushi Sombane, Industrial Engineering and Engineering Management, College of
Science, Engineering, and Technology, School of Engineering, University of South Africa, Gauteng, South Africa

ID 212 Comparative Evaluation of Adaptive Traffic Signal Control Using HCM, SIDRA, and Simulation-Based Models

Bingwen Yan, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology
Cape Town, South Africa

May 13, 2026 (Wednesday) - Session: 14:00 – 15:30

14:00 – 15:30, Wednesday

Onsite Room 3

Session Chair:

Doctoral Dissertation Competition sponsored by Airbus

ID 65 Application of Smart Technology, Iot, Gis And Ai In Sustainable Critical Minerals Development

C. Mudyazhezha., Sustainable Technology Environmental Management Company, Harare, Zimbabwe
M. M. Manyuchi., Sustainable Technology Environmental Management Company, Harare, Zimbabwe
Sustainability and Future Technologies Center, University of South Africa, Pretoria, South Africa
Germany Biomass Research Center, Leipzig, Germany
W. Stinner., Germany Biomass Research Center, Leipzig, Germany
N. Sukdeo, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg,
South Africa
C. Mbohwa, Sustainable Technology Environmental Management Company, Harare, Zimbabwe

ID 320 Evaluation of Undulation Damage Through Finite Element Simulation and Experimental Validation

S. Nqabisaa, Mechanical and Mechatronic Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology
Cape Town, South Africa
G.J. Oliverb, Mechanical and Mechatronic Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology
Cape Town, South Africa

ID 318 Social Media Adoption and SME Performance in Emerging Economies: Evidence from SME Mining Suppliers in Zambia

Beenzu Siachinji, The Copperbelt University, School of Business, Zambia
Yvonne Kabeya-Saini, Witwatersrand University, Business School, South Africa
Stella Zulu-Chisanga, The Copperbelt University, School of Business, Zambia
Bruce Mwiya, Kwame Nkrumah University, School of Business, Zambia
Chanda Sichinsambwe, The Copperbelt University, School of Business, Zambia

ID 187 Vibration Analysis of a Mobility Scooter Suspension System on Brick Paving for Adaptive Magneto-Rheological Damper Control
Malwande Sityoshwana, Mechanical and Mechatronics Engineering Department, Faculty of Engineering and the Built Environment, Cape Peninsula

University of Technology, Cape Town, South Africa
 Olukayode Ayodele and Modify Kaunda, Mechanical and Mechatronics Engineering Department, Faculty of Engineering and the Built Environment
 Cape Peninsula University of Technology, Cape Town, South Africa

May 13, 2026 (Wednesday) - Session: 14:00 – 15:30

14:00 – 15:30, Wednesday

Virtual Zoom Room 4

Session Chair:

Artificial Intelligence and Data Science

ID 174 Exploring Opportunities for Artificial Intelligence Integration in Small and Medium Enterprises in South Africa

Khathutshelo Mushavhanamadi, Professor, Department of Quality and Operations Management, Faculty of Engineering, University of Johannesburg
 Johannesburg, South Africa

Eric Mikobi Bakama, Department of Operations and Quality Management, Faculty of Management Sciences, Durban University of Technology
 Durban, South Africa

Kgomotso Portia Penane, Department of Quality and Operations Management, Faculty of Engineering, University of Johannesburg, South Africa

ID 285 Integrated Neural Network and Fuzzy Logic Control for Water Treatment Optimization in Power Generation Plants: A Conceptual Framework with Application Case Studies

Nkululeko Jama, University of Johannesburg, South Africa

ID 304 Navigating the Complexities of New Leadership: Challenges, Strategies, And Development Pathways

Kouroush Jenab, Selva Staub, Saeid Moslehpour, Sam Khoury

Department of Engineering Sciences, Morehead State University, KY, USA

Department of International Trades and Businesses, Muş Alparslan University, Türkiye

Department of Electrical and Computer Engineering, University of Hartford, Hartford, CT, USA

Spring Hill College, Mobile, AL, USA

ID 193 Predicting Machine Failures and Failure Modes Using Supervised Machine Learning Techniques

Eng. Majd Faris Al-atrash, Amman, Jordan

ID 348 AI-driven innovations in training delivery and assessment (From Training Systems to Intelligent Learning Ecosystems)

Dambuwo Sekgokwa Dombo, University of South Africa, South Africa

ID 352 Strategies for integrating multiple Gen AI tools in small businesses

Dambuwo Sekgokwa Dombo, University of South Africa, South Africa

ID 400 A Data-Driven Unsupervised Machine Learning Technique on Bulk Water Distribution Underground Big-diameter Steel Pipelines

Mthunzi Lushozi, School of Mechanical, Industrial and Aeronautical Engineering, University of Witwatersrand, Johannesburg, South Africa

Gbeminiyi John Oyewole, School of Mechanical, Industrial and Aeronautical Engineering, University of Witwatersrand, Johannesburg, South Africa

15:30 - 16:00 Lunch Break

May 13, 2026 (Wednesday) - Session: 16:00 – 17:30

16:00 – 18:00, Wednesday

Onsite Room 1

Session Chair

Engineering Management and Project Management

ID 63 A Data-Driven Model for Forecasting Cost and Schedule Overruns in Infrastructure Projects

Akinlo Olorunju Mogbojuri, Department of Industrial Engineering, Durban University of Technology, South Africa

Institute of System Science, Durban University of Technology, South Africa

Oludolapo Akanni Olanrewaju2, Institute of System Science, Durban University of Technology, South Africa

ID 28 An Assessment of Workers' Attitudes Towards Safety in the Kwazulu-Natal Province: A Systematic Review

Ayodeji Olatunji Aiyetan, Nathaniel Ayinde Olatunde, Nolwazi Philile Mhlongo and Mxolisi Perseverance Khumalo, Construction Management and

Quantity Surveying Department, Durban University of Technology, South Africa

ID 192 Assessing the Impact of Professional Registration on Ethical Standards among Built Environment Professionals

Ornella Tambwe, Clinton Aigbavboa, and Ntsindiso Mphoqo, CIDB Centre for Excellence & Sustainable Construction Management and Leadership
 in the Built Environment, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 78 Customer Retention in Digital Commerce: A Systematic Review of Frameworks, Methods, and Engineering Design Implications

Michelle Smit, Department of Industrial Engineering, Stellenbosch University, Stellenbosch, South Africa

ID 131 Enhancing Construction Management Education Through Industry Integrated Project-Based Learning: Insights from Student Reflections and Mentor Assessments

Hlumela Zungu, Department of Construction Management & Quantity Surveying, Durban University of Technology, Durban, South Africa

ID 97 Enterprise Resource Planning Lifecycle Management and Implementation – A Systematic Literature Review

Jamie Lamprecht and Mia Mangaroo-Pillay, Industrial Engineering, Faculty of Industrial Engineering, Stellenbosch University, Cape Town, South Africa

ID 83 Evaluating Effective Project Management Strategies for Sustaining Market Competitiveness within the E-commerce Industry

R. L. Devaraj, B. B. S. Makhanya and J.H.C Pretorius, Postgraduate School of Engineering Management, University of Johannesburg, Johannesburg, South Africa

ID 80 Integrating Water and Energy Usage in Airport Performance Management

Sunita Kruger, University of Johannesburg, South Africa

ID 378 Leveraging Digital Tools for Forecasting and Monitoring Railway Infrastructure Projects to Improve Project Delivery

K.F Chabalala, B.B.S Makhanya and J.H.C Pretorius, Postgraduate school of Engineering Management, University of Johannesburg Johannesburg, South Africa

May 13, 2026 (Wednesday) - Session: 16:00 – 17:30

16:00 – 18:00, Wednesday

Onsite Room 2

Session Chair:

Sustainability, Green Systems and Energy

ID 27 An Assessment of the Economic Impact of Green Buildings in the South African Construction Industry

Ayodeji Olatunji Aiyetan, Nathaniel Ayinde Olatunde and Ntokozo Snothile Nkosi, Construction Management and Quantity Surveying Department, Durban University of Technology, South Africa

ID 30 Hydropower plants in remote area in Mozambique: The impact of rural electrification provided by mini-grids

Miguel Mêque Uamusse, Estevão Alberto Junior Pondja, Jonas Valente Matsinhe, Clemencio Nhantubo, Acacio Jose Zimbico and Marcelino Rodrigues, Center of Studies in Oil and Gas Engineering Technology (CS-OGET), Faculdade de Engenharia, Eduardo Mondlane University Maputo, Mozambique

Julietta Arnaldo Muchuane, PhD Student in Physics (Energy, including Renewables) at the University of Nairobi, University Assistant at Lúrio University, Faculty of Architecture and Physical Planning – Nampula

ID 61 Optimization and Techno-Economic Assessment of Hybrid Renewable Energy Systems for Precision Agriculture: A Review of Tools, Algorithms, and Sustainability

Michael Emezirinwune, Institute of System Science, Durban University of Technology, Durban, South Africa

Olubayo Babatunde and Oludolapo Olanrewaju, Department of Industrial Engineering, Durban University of Technology, Durban, South Africa
Institute of System Science, Durban University of Technology, Durban, South Africa

ID 67 Generation of Heavy Metals Contaminants in The Mining Sector and Impact on The Environment

G. Mpofu., Sustainable Technology Environmental Management Company, Harare, Zimbabwe

M. M. Manyuchi., Sustainable Technology Environmental Management Company, Harare, Zimbabwe

Sustainability and Future Technologies Center, University of South Africa, Pretoria, South Africa

Germany Biomass Research Center, Leipzig, Germany

W. Stinner., 3Germany Biomass Research Center, Leipzig, Germany

N. Sukdeo, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

C. Mbohwa, 1Sustainable Technology Environmental Management Company, Harare, Zimbabwe

ID 68 An Assessment of Environmental Challenges and Opportunities for Minerals in The Energy Transition

Mercy Manyuchi, University of South Africa, South Africa

ID 69 Environmental Impacts for Potential to Produce Battery Materials From Waste Biomass

R. Bhandu., Sustainable Technology Environmental Management Company, Harare, Zimbabwe

M. M. Manyuchi., 1Sustainable Technology Environmental Management Company, Harare, Zimbabwe

Sustainability and Future Technologies Center, University of South Africa, Pretoria, South Africa

Germany Biomass Research Center, Leipzig, Germany

W. Stinner., Germany Biomass Research Center, Leipzig, Germany

N. Sukdeo, 4Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

C. Mbohwa, 1Sustainable Technology Environmental Management Company, Harare, Zimbabwe

May 13, 2026 (Wednesday) - Session: 16:00 – 17:30

16:00 – 18:00, Wednesday

Onsite Room 3

Session Chair:

Master's Thesis Competition

ID 135 Adaptive Protection Scheme for Enhancing System Protection in Distribution Networks with Distributed Generation

Eng. Bwire Davies Japheth, Postgraduate Student, Jomo Kenyatta University of Agriculture and Technology, Kenya

ID 114 Methodology for Investigating the Upgrade and Commissioning of Existing Engine Testing Benches in an Undergraduate Teaching Laboratory

Thuso Desiree Seome, Samuel Gqibani and Mikateko Reuben Shuma, Department of Mechanical and Industrial Engineering, University of Johannesburg, South Africa

ID 77 Public Perceptions of Electric Vehicle Adoption in Gauteng, South Africa: A Sustainable Development Goals Perspective

Stephanie Heyns, Trynos Gumbo, Khethani Ravele and Retsepile Kalaoane, Department of Urban and Regional Planning, Faculty of Engineering and Built Environment, University of Johannesburg, Johannesburg, South Africa

ID 81 The integration of technology and human activities during the structural forensic engineering process

Annlize Marnewick, University of Johannesburg, South Africa

ID 391 Evaluation of the Potential Implication of Simulation Modeling in Enhancing Maintenance Monitoring and Decision Making of Road Infrastructure

Sinah Marungane, Department of Industrial Engineering, Faculty of Engineering and the Built Environment, Tshwane University of Technology Pretoria, South Africa

May 13, 2026 (Wednesday) - Session: 16:00 – 17:30

16:00 – 17:30, Wednesday

Virtual Zoom Room 4

Session Chair:

Supply Chain and Logistics

ID 62 Improvement of The Otif level of A Lubricant Distributor Company Through Poka Yoke, Abc And Slp Analysis

Ayora Córdova and Alejandro Leonardo, Industrial Engineering, University of lima, Lima, Perú
Campos Rivera and Jose Rodrigo, Industrial Engineering, University of lima, Lima, Perú
Rafael Mauricio Villanueva Flores, University of lima, Lima, Perú

ID 82 Port Performance Indicators and their Macroeconomic Spillovers: An SLR

Jan-Louis Grundlingh, Mia Mangaroo-Pillay, and Leila Goedhals-Gerber, Department of Industrial Engineering, Stellenbosch University, South Africa

ID 89 The Analysis of Logistics Strategies to Reduce Product Damage During Transportation: A Case of Takealot

Khanyelwa Masemola, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa
Save Akilimalissiga, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa
Khathutshelo Mushavhanamadi, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa

ID 110 Implementation of Process Standardization and Demand Forecasting to Increase Inventory Turnover in a Peruvian Textile Company

Farit Gianpierre Espinoza Espino, Bachelor in Industrial Engineering, Faculty of Engineering, Universidad de Lima, Lima, Perú
Valeria Vargas Rugel, Bachelor in Industrial Engineering, Faculty of Engineering, Universidad de Lima, Lima, Perú
Paul Sanchez Soto, Research Professor, Universidad de Lima, Lima, Perú

ID 160 The Effect of Branding Strategy on the Performance of Small South African Logistics Companies

Omphile Kgakgamatso Vanessa Sekgetho, Johannesburg Business School, University of Johannesburg, South Africa
Darlington Peter Onojaefe, Graduate Centre for Management, Cape Peninsula University of Technology, Cape Town, South Africa

ID 168 HybridNet-SCR: Network-Aware, Constraint-Guided Multi-Agent Control for Disruption-Resilient Supply Chains

Rashid Abrar Tanzil, Department of Industrial Engineering and Management, Khulna University of Engineering & Technology, Bangladesh
Shaikh Shehab Ahamed, Department of Industrial Engineering and Management, Khulna University of Engineering & Technology, Bangladesh
Shabin Rahman, Department of Industrial Engineering and Management, Khulna University of Engineering & Technology, Bangladesh
Rafia Nur Rimti, Department of Industrial Engineering and Management, Khulna University of Engineering & Technology, Bangladesh
Mohammad Shahad Raihan, Department of Industrial Engineering and Management, Khulna University of Engineering & Technology, Bangladesh
Shahir Rahman, Department of Mechanical Engineering, Bangladesh University of Engineering & Technology, Bangladesh

ID 216 A Development of an Agile Supply Chain Network Model

Koketso Masenya, Department of Industrial Engineering and Engineering Management, School of Engineering, College of Sciences Engineering and Technology, University of South Africa (UNISA), Gauteng, South Africa
Ngaka Mosia, Department of Industrial Engineering and Engineering Management, School of Engineering, College of Science, Engineering, and Technology, University of South Africa (UNISA), Gauteng, South Africa

ID 268 Supply Chain Resilience Under Geopolitical Chokepoint Disruption: A Multiple Case Study of the GCC Countries During the 2026 Strait of Hormuz Crisis

Abdulaziz Alshalfan, Kuwait University, Kuwait

ID 291 Meta Logistics: A Conceptual Framework for Integrating Experiential Learning and Industry Engagement in Logistics Education

Marcus Molepo, Lecturer, Logistics and Supply Chain Management, IIE Rosebank College, South Africa

ID 301 Supply Chain as a Driver of Cost and Sustainability in the Automotive Industry in South Africa

Tharelelo Mokgokong, Industrial Engineering, Faculty of Engineering and the Built Environment, Tshwane University of Technology, Pretoria,

South Africa

T Kunene and F Chiroma, Department of Mechanical, Robotics and Industrial Engineering, University of Johannesburg, Johannesburg, South Africa
V Hashe, Department of Mechanical Engineering, Walter Sisulu University, Johannesburg, South Africa

ID 358 AI-Driven Supply Chain Optimization: Evidence from Digital Logistics Operations

Abdullah Sheikh, Department of Marketing, Raj Sooin College of Business, Wright State University, 279 Rike Hall, 3640 Colonel Glenn Highway, Dayton, OH 45435, USA

Sadath Ali Syed, Department of Engineering, Drew Hall, McNeese State University, 4205 Ryan St, Lake Charles, Louisiana, 70609, USA

ID 394 Cold Chain Logistics Performance in Saudi Arabia: Evidence from The Pharmaceutical Industry

Yasmina Sagga, Operation and Supply Chain Management, S.A Jeddah

Ghaliya Alhazmi, Operation and Supply Chain Student, SA, Jeddah

Leen Alabsi, Operation and Supply Chain Student, SA, Jeddah

Talah Alzuabi, Operation and Supply Chain Student, SA, Jeddah

Manar Sharaf Aldeen, Operation and Supply Chain Student, SA, Jeddah

May 13, 2026 (Wednesday) - Session: 18:00 – 19:30

18:00 – 19:30, Wednesday

Virtual Zoom Room 4

Session Chair:

Business Management and Operations Management

ID 109 A multi-objective scheduling expert system for a multi-constrained intermittent hybrid flow shop

Kudakwashe Masuka, Harare Institute of Technology, Zimbabwe

ID 316 A risk management framework to support organisational performance in the public sector in South Africa

Ms Polite Mukonori, Department of Operations Management, College of Economic and Management Sciences, University of South Africa, South Africa

Sugandren Naidoo, Department of Operations Management, College of Economic and Management Sciences, University of South Africa, South Africa

ID 315 The relationship between employee well-being, absenteeism and individual performance: A case study

Ms Dhaaruni Ankiyah, Department of Operations Management, College of Economic and Management Sciences, University of South Africa, South Africa

Sugandren Naidoo, Department of Operations Management, College of Economic and Management Sciences, University of South Africa, South Africa

ID 390 Analysis of the Influence of Perceived Usefulness, Perceived Ease of Use, Perceived Trustworthiness, Service Quality, and Brand Image on Customer Satisfaction in Using Telemedicine

Muhammad Rizky Akmal Prasetya and Faranita Mustikasari, Business Management Program, Binus Business School Master Program, Bina Nusantara University, Jakarta, Indonesia

ID 389 The Design of a Hydro Docking System for a Small Town Harbour

Vuyo Sangoma Katiya, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment, Mangosuthu University of Technology, Durban, South Africa

John Zvidzayi, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment, Mangosuthu University of Technology Durban, South Africa

May 14, 2026 (Thursday)

07:00 - 17:00 Registration and Networking

May 14, 2026 (Thursday) - Session: 8:00 – 9:30

8:00 – 9:30, Thursday

Onsite Room 1

Session Chair:

Human Factors, Ergonomics and Healthcare System

ID 101 Automated Multi-Modal Wearable Device for Real-Time Workforce Monitoring

Cynthia A. Madamombe, Industrial and Manufacturing Engineering, Faculty of Engineering, National University of Science and Technology Bulawayo, Zimbabwe

Blessed Sarema, School of Mechanical, Industrial and Aeronautical Engineering, Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, South Africa

Takudzwa M. Muhla, Industrial and Manufacturing Engineering, Faculty of Engineering, National University of Science and Technology, Bulawayo, Zimbabwe

ID 18 Designing Inclusive Mobile Government Services in the Middle East: A User Experience-Centered Framework

Abdulrahman Khamaj, Industrial Engineering Department, College of Engineering and Computer Science, Jazan University, Jazan, Saudi Arabia

ID 6 Effects of Forearm Posture on Grip Strength and Endurance in Young Male Adults

Abdulelah M Ali, Department of Industrial Engineering, Jazan University, Jazan, Saudi Arabia

ID 47 Fractional-Order Modeling of Infectious Diseases Incorporating Human Factors and Healthcare Capacity Constraints

Akeem Olarewaju Yunus and Oludolapo Akanni Olanrewaju, Institute of Systems Science (ISS), Durban University of Technology, Durban, South Africa

ID 21 Rethinking Technostress in the Digital Mobility: A Conceptual Review of Mobile Work Systems among Knowledge Workers

Aliyu Mustapha Olanrewaju, Department of Industrial and Organisational Psychology, College of Economics and Management Sciences, University of South Africa, South Africa

Maphala Betty Portia, Department of Industrial and Organisational Psychology, College of Economics and Management Sciences, University of South Africa, South Africa

May 14, 2026 (Thursday) - Session: 8:00 – 9:30

8:00 – 9:30, Thursday

Onsite Room 2

Session Chair:

Manufacturing, Assembly and Design

ID 34 An Overview: Applying Blockchain Technology to Improve Traceability in Manufacturing

Gcina Nzima and Jan-Harm Pretorius, Postgraduate School of Engineering Management, University of Johannesburg, Johannesburg, South Africa
Louwrence Erasmus, Command, Control and Integrated Systems, Defense and Security Cluster, Council for Scientific and Industrial Research Pretoria, South Africa

ID 266 Improving quality and productivity in industrial production of finished leather production

Steadyman Chikumba, University of South Africa, South Africa

ID 175 The utilization of biodegradable polymers in the additive manufacturing of biomedical products

Kudzai Mudada, Stellenbosch, South Africa

ID 137 Ultrasonic Welding of Cu–Al Dissimilar Joints for Heat Pump Applications

António B. Pereira, TEMA - Centre for Mechanical Technology and Automation, Department of Mechanical Engineering, University of Aveiro, Aveiro, Portugal

Gonçalo Rodrigues, Department of Mechanical Engineering, University of Aveiro, Aveiro, Portugal

Bernardo Mascate, Bosch Termotecnologia, S.A., Aveiro, Portugal

ID 426 Exploring the utilization of biodegradable polymers in additive manufacturing products

Kudzai Mudada
Industrial Engineering
Faculty of Engineering
Stellenbosch University
Stellenbosch, South Africa

Stephen Matope
Professor: Advanced Manufacturing Engineering
Industrial Engineering Department
Faculty of Engineering

May 14, 2026 (Thursday) - Session: 8:00 – 9:30

8:00 – 9:30, Thursday

Onsite Room 3

Session Chair:

Supply Chain and Logistics

ID 41 Servitization of Manufacturing in a disruptive era: Assessing resilience strategies in South Africa's FMCG sector

Jonas Mathabatha, Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology Cape Town, South Africa

ID 282 Supplier Relationship Management Practices and Performance Outcomes in the Rubber Industry: Evidence from a Developing Economy

Joseph Boateng Arhin, Ghana Rubber Estates Ltd, Procurement Department, Takoradi
Nana Agyeman-Prempeh, Ghana Communication Technology University, Business School, Department of Procurement, Logistics and Supply Chain Management
Emmanuel Udekwe, University of the Western Cape, Faculty of Economics and Management Science, Department of Management and Entrepreneurship
Felix Anim, Anglo Gold Chirano Ltd., Supply Chain Department

ID 24 Supplier Quality Enhancement and Delivery Reliability in Aerospace Manufacturing: A 4IR Technologies Case Study of Aerospace Company

Kemlall R. R andass and Azeez T. Mafutau, Industrial and Engineering Management, Faculty of Engineering and the Built Environment, University of South Africa, Roodepoort, South Africa

ID 289 What Drives Supply Chain Innovation in Public Healthcare? Evidence from Tertiary Hospitals in an Emerging Economy using a Multimethodological Approach

Nana Agyeman-Prempeh, Ghana Communication Technology University, Business School, Department of Procurement, Logistics and Supply Chain Management
 Abdullah Bayat, Faculty of Economics and Management Science, Department of Marketing and Entrepreneurship. South Africa
 Abdalla Mohammed Bashir, Faculty of Economics and Management Science, Department of Marketing and Entrepreneurship. South Africa
 Emmanuel Udekwe, Faculty of Economics and Management Science, Department of Marketing and Entrepreneurship. South Africa
 Joseph Boateng Arhin, Ghana Communication Technology University, Business School, Department of Procurement, Logistics and Supply Chain Management

May 14, 2026 (Thursday) - Session: 8:00 – 11:00**8:00 – 11:00, Thursday****Virtual Zoom Room 4**

Session Chair: Dr. Mizanur Rahman, IEOM Australia

Competitions

Doctoral Dissertation Competition

ID 314 A Systems-Level Evaluation of Critical Chain Project Management in Engineering Projects of The Corps of Engineers, Armed Forces of The Philippines: Basis for Framework Development and Policy Formulation

Romalyn L Galingan, Philippine Military Academy, Philippine

ID 14 Developing a performance management scorecard for private secondary schools in the eThekweni Municipality

Debapriyo Nag, MANCOSA Durban, South Africa

High School STEM Competition

ID 35 Bacterial Cellulose Based Scaffolds for Controlled Oxygen Delivery in Low-Resource Regions

Aarna Dwivedi, Goutham Koppolu, United States

ID 257 Azhagu: A Self-Powered Closed-Loop Wearable for Adaptive Cold Plasma Therapy in Atopic Dermatitis

Harini Senthil, High School, National Model Matriculation Higher Secondary School, Coimbatore, India

Human Factors and Ergonomics Competition

ID 79 Analysis of the Road Discipline Adherence Behavior for Filipino Motorcycle Riders through Multiple Regression

Yoshiki B. Kurata, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines
 Russel Christian T. Robles, Jan Lester D. Jalova, Sean Jericho V. Leoncio and Matt Rosswell C. Rojas, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

ID 102 Evaluation and Comparison of Occupational Stress and Cognitive Workload of Staff Nurses assigned in Ward Rooms in the Inpatient Department between Level 3 Public and Private Hospitals in the National Capital Region, Philippines

Ronieca Marie M. Nicandro, Julia Theresa F. Gavino, Yumiko Hyacinth Mae Paderes and Emmanuel P. Nicolas, 4th Year Industrial Engineering Students, Department of Industrial Engineering, University of Santo Tomas – Manila, Manila, Philippines

ID 107 Examining the Drivers of Digital Purchase Intention in the Philippines through Multiple Linear Regression Analysis

Johanne Simone G. Calderon, Ma. Sophia S. Chuaquico, Jonathan R. Garcia, Lyka P. Lavarias, and Yoshiki B. Kurata, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

Master's Thesis Competition

ID 196 Application of an Integrated Lean–DMAIC Framework with Automation for Cargo Offloading Cycle Time Reduction: A Logistics Case Study

Wandile Masango, Department of Industrial Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology Durban, 4000, South Africa
 Matchidiso Moso, Department of Industrial Engineering, Durban University of Technology, Durban, 4000, South Africa
 Oludolapo Olanrewaju, Department of Industrial Engineering, Durban University of Technology, Durban, 4000, South Africa

ID 163 Machine Learning-based Throughput Optimization for Serial Production Lines

Mosab Ghaleb Mohammed Adwan, Anas Toma and Ramiz Assaf, An-Najah National University, Palestinian Territory

ID 379 Enhancing Construction Safety through the Early Integration of Construction Health and Safety Agents (CHSAs)

Viwe Anda Mngambi, Simphiwe Gogo and Innocent Musonda, Center of Applied Research and Innovation in the Built Environment (CARINBE) Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Poster Competition**ID 20 The modern microbiota revolution**

Mohamed Ibrahim El-Saeed Issa, Faculty of Human Medicine, Al-Azhar University, Cairo, Egypt

Simulation Competition**ID 122 Application of 5S and SMED to Improve Productivity in PET Flake Production in a Peruvian Textile Company**

Stefany Isabel Estela Meza and Dayan Melanie Aponte Sebastián, Industrial Engineering, Faculty of Engineering, University of Lima, Lima, Peru
Paul Angello Sanchez-Soto and Carlos Alberto Galvez Zarate, Research Professors, Faculty of Engineering, University of Lima, Lima, Peru

Supply Chain and Logistics Competition sponsored by aThingz**ID 33 AI-Enabled Decision Making in Global Supply Chain Operations: A Practitioner Case Study**

Santanu Manna, Operations Head – Supply Chain, India

ID 353 Delivery Speed vs. Cost Trade-offs in E-Commerce Logistics

Albatool Molah, Operation and Supply Chain Student, SA, Jeddah
Liyan Hassanain, Operation and Supply Chain Student, SA, Jeddah
Sara Taib, Operation and Supply Chain Student, SA, Jeddah
Sara Alaradi, Operation and Supply Chain Student, SA, Jeddah

May 14, 2026 (Thursday) - Session: 11:00 – 13:00**11:00 – 13:00, Thursday****Virtual Zoom Room 4**

Session Chair: Dr. Mizanur Rahman, IEOM Australia

Simulation, Optimization and Productivity Improvement**ID 171 Characterization of Downtimes in the Automotive Industry in South Africa**

John Zvidzayi, Mangosuthu University of Technology, Department of Mechanical Engineering, South Africa

ID 284 Evaluating Thermal Performance and Optimization of Power Generation Boilers Using Process Modelling: A Quantitative Analysis of Air Heater Leakage and Coal Quality Effects

Nkululeko Patrick Jama, Opeyeolu Timothy Laseinde and Lagouge Tartibu, Department of Mechanical and Industrial Engineering Technology University of Johannesburg, Johannesburg, Republic of South Africa

ID 124 Improvement Model to Increase Operational Efficiency in a Pizzeria Using SLP, TOC and 5S

Erwin Renato Fernández Pizango and Aldo André Peralta Cabanillas, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Peru
Paul Angello Daniel Sánchez Soto and Carlos Alberto Gálvez Zárata, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Peru

ID 121 Improvement of logistics service level through 5S, ABC classification, SLP and LPS in the real estate logistics area

Giacomo Gómez Sánchez Angeldonis y Rodrigo Arcaya Huayamares, Universidad de Lima, Faculty of Engineering, Lima, Perú
Paul Angello Daniel Sanchez-Soto, Universidad de Lima, Faculty of Engineering, Lima, Perú
Carlos Alberto Galvez Zarate, Universidad de Lima, Faculty of Engineering, Lima, Perú

ID 12 Improving the Production Efficiency of The New Jersey Barrier Manufacturing Process Using Lean Manufacturing Tools. A Case Study

Italo Jose Bazan-Zevallos, Kiara Edith Regalado-Llatas, Marcos Fernando Ruiz-Ruiz and Juan Carlos Quiroz-Flores, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

ID 13 Increasing the Rate of Orders Delivered on Time by Applying Work Standardization and 5s In a Metalworking Company

Jhon Hayro Condor-Ponce, Sebastián Matías Gutiérrez-Rabanal, Marcos Fernando Ruiz-Ruiz and Juan Carlos Quiroz-Flores Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

ID 312 Modeling and Optimization of Oil Production Using an Intelligent Black Oil Reservoir Simulator

Jamal Adetola and Alexandre L. Dahoue, National University of Science, Technology, Engineering and Mathematics (UNSTIM), National Higher School of Mathematical Engineering and Modeling (ENSGMM), BP 2282, Abomey, Bénin
Koffi Wilfrid Houédanou, Department of Mathematics, Faculty of Science and Technology (FAST), University of Abomey-Calavi, 04 BP 1525, Cotonou, Bénin
Mohamed Allaoui, Department of Economic Sciences, University of Comoros, Comoros

ID 287 Modelling Plant Performance and Availability Through Maintenance and Workforce Dynamics: A System Dynamics Approach

Nkululeko Jama University of Johannesburg, South Africa

ID 276 The Conversion of Open Cycle Diesel Power Generation to Cogeneration and Organic Rankine Cycle Plants; With Sustainability Assessment

Wambua Kennedy, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Nairobi, Nairobi, Kenya

ID 360 Characterization of Downtimes in the Automotive Industry in South Africa

John Zvidzayi, Mangosuthu University of Technology, Department of Mechanical Engineering, South Africa

9:30 – 10:00 – Networking Break

May 14, 2026 (Thursday) - Session: 10:00 – 13:00

Keynotes

10:00 – 10:30 - Host Welcome

Prof Marshall Sheldon
Deputy Vice-Chancellor: Research, Technology Innovation and Partnerships
Cape Peninsula University of Technology (CPUT)
Cape Town, South Africa

10:30 - 11:00 Keynote:

Dr. Mukondeleli Grace Kanakana-Katumba
DVC Teaching and Learning
Vaal University of Technology (VUT)
Vanderbijlpark, South Africa

11:00 - 11:30 Keynote:

Dr. Lerato Mdaka
Associate Professor of Management Sciences
Faculty of Economic and Management Sciences
North-West University
Potchefstroom, South Africa

11:30 - 12:00 Keynote:

Dr. Xuan (Jen) Zhao
Professor in Operations and Decision Sciences
Lazaridis School of Business and Economics
Wilfrid Laurier University
Waterloo, Ontario, Canada

12:00 - 12:30 Keynote:

Professor Charles Mbohwa, Ph.D. (IEOM President 2025 – 2026)
Distinguished Professor
University of South Africa (UNISA)
Pretoria, South Africa

12:30 - 13:00 Keynote:

Dr. Rupa Vasudevan
Chancellor
Bharatiya Engineering Science and Technology Innovation University (BEST IU)
Anantapur, Andhra Pradesh

13:00 - 14:00 Lunch Break

May 14, 2026 (Thursday) - Session: 14:00 – 15:30**14:00 – 15:30, Thursday****Onsite Room 1**

Session Chair

Simulation, Optimization and Productivity Improvement**ID 181 A Performance Analysis of a Commercial Filling Station using ARENA Simulation: A South African Case Study**

Asser Letsatsi Tau, Department of Operations Management, Faculty of Management Sciences, Tshwane University of Technology, Pretoria, South Africa

Emmanuel Innocents Edoun and Solly Pooe, Tshwane School for Business and Society, Pretoria, South Africa

Delia Malejane, Department of Industrial Engineering, Operations Management and Mechanical Engineering, Faculty of Engineering, Vaal University of Technology, Vanderbijlpark, South Africa

ID 213 An Integrated Production Planning and Quality Control Framework for Job-Shop Manufacturing: A Case Study of a Precision Machining SME

Bingwen Yan, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology Cape Town, South Africa

ID 290 Design of a Tool Wear Monitoring and Adaptive Speed Control System for CNC Lathe Machining

Kudzanai Nkala, Innocent Mapindu, Antony Foya and Davison Zimwara, Industrial and Manufacturing Engineering, Faculty of Engineering

National University of Science and Technology, Bulawayo, Zimbabwe

Eriyeti Murena, Industrial Engineering, Faculty of Engineering and Built Environment, Tshwane University of Technology, South Africa

ID 70 Evaluation of Modelling Techniques for Colocation Data Center Selection

Tshepo Mageza, Ricky Swanepoel, and Jan-Harm C. Pretorius, Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 92 Experimental and Kinetic Study of CO₂ Absorption in a NaOH Spray Dryer System

Lawrence Koech, Kasturie Premllal, Douw Faurie and Brilliant Vunene Chauke, Chemical, Metallurgical and Materials Engineering, Faculty of Engineering & the Built Environment, Tshwane University of Technology, Pretoria, South Africa

ID 139 The Role of Governance and Institutional Management Capacity in the South African Agricultural Cooperatives

Simo Khumalo, University of Johannesburg, South Africa

May 14, 2026 (Thursday) - Session: 14:00 – 15:30**14:00 – 15:30, Thursday****Onsite Room 2**

Session Chair:

Entrepreneurship and Innovation**ID 227 Bridging the Institutional Divide Amidst Endemic Socio-Economic Hardships**

Zanele Mpanza, University of South Africa, South Africa

ID 308 Integrating Entrepreneurial Innovation and Operations Management for Climate Adaptation: A Conceptual Framework

Makhosi Maphanga and Tshepo Mabotja, Department of Operations Management, Faculty of Economic and Management Sciences University of South Africa, Pretoria, South Africa

ID 134 The Entrepreneurial Ecosystem as Curriculum: A Partnership Centred Model for South African Universities

Kgaugelo Ntini, Department of Enrolment and Student Administration, Verifications Unit, University of Pretoria, Pretoria, South Africa

Rendani Wilson Maladzhi and Kazeem Bello, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment Durban University of Technology, Durban, South Africa

ID 74 AI-Driven Slotting Strategies and Picking Productivity in Distribution Centres: A Systematic Review

Malcolm Smith, Mia Mangaroo-Pillay, and Vanya Jansen, Department of Industrial Engineering, Stellenbosch University, South Africa

ID 402 Research and Innovation Ecosystem for Sustainable Development

Vennan Sibanda and Eriyeti Murena, Department of Industrial and Manufacturing Engineering, National University of Science and Technology Zimbabwe

Saziso Ndllovu, Department of Innovation and Business Development, National University of Science and Technology, Zimbabwe

ID 412 Barriers, Opportunities and Strategies in Entrepreneurship Education: A Systematic Review

Mohohlo Samuel Tsoeu, Lebogang Puree Bopape, Thandeka Makhanya, Christopher Thembinkosi Mcineka and Nompumelelo Innocentia Chili Durban University of Technology, Department of Electronic and Computer Engineering, Durban, South Africa

May 14, 2026 (Thursday) - Session: 14:00 – 15:30**14:00 – 15:30, Thursday****Onsite Room 3**

Session Chair:

Automation, Industry 4.0 and IoT

ID 198 Developing an IoT-enabled Hospital smart workspace

Masingita Onica Mohlala and Ngaka Mosia, Industrial Engineering and Engineering Management, School of Engineering and the Built Environment University of South Africa, Florida, South Africa

ID 199 Exploring the continuum of human-robot collaboration

Masingita Onica Mohlala and Ngaka Mosia, Industrial Engineering and Engineering Management, School of Engineering and the Built Environment University of South Africa, Florida, South Africa

ID 200 Integrating Cyber-Physical Systems in Manufacturing

Masingita Onica Mohlala and Ngaka Mosia, Industrial Engineering and Engineering Management, School of Engineering and the Built Environment University of South Africa, Florida, South Africa

ID 204 Establishing Resilience for Manufacturing Systems Through Smart Technology Strategies

Masingita Onica Mohlala, Ramdass Kemlall and Ngaka Mosia, Industrial Engineering and Engineering Management, School of Engineering and the Built Environment, University of South Africa, Florida, South Africa

ID 230 Designing of an IoT based Facility Layout Safety and Productivity Enhancement Monitoring System

Tererai John, Chirere National University of Science and Technology, Zimbabwe

ID 260 The Impact of Digital transformation on Teaching and Learning practices

Matshapo, Mokoka and Unisa, South Africa

ID 292 Adaptive Neuro-Fuzzy Inference System-Based Predictive Maintenance and Remaining Useful Life Estimation for Industrial Air Compressors: A Case Study of Delta Beverages

Nicole K. Piti, Department of Mechatronics, Chinhoyi University of Technology, Chinhoyi, Zimbabwe
Doubt Simango, Department of Mechatronics, Chinhoyi University of Technology, Chinhoyi, Zimbabwe
Anesu N. Charamba, Department of Mechatronics, Chinhoyi University of Technology, Chinhoyi, Zimbabwe

May 14, 2026 (Thursday) - Session: 14:00 – 15:30

14:00 – 15:30, Thursday

Virtual Zoom Room 4

Session Chair:

Human Factors, Ergonomics and Healthcare System

ID 319 Improving Labor Productivity in a Furniture Workshop through an Integrated Ergonomic Assessment Using REBA, NMQ, and 3DSSPP Simulation

Nikcol Kclery Morales-Yllapuma, Maria Teresa Noriega-Aranibar and Jorge Luis Yupanqui-Marujo, Faculty of Industrial Engineering, University of Lima, Lima, Peru

ID 217 Application of a proactive workplace risk management strategy

Koketso Masenya, Department of Industrial Engineering and Engineering Management, School of Engineering, College of Sciences Engineering and Technology, University of South Africa (UNISA), Gauteng, South Africa
Ngaka Mosia, Industrial Engineering and Engineering Management, School of Engineering, College of Science, Engineering, and Technology University of South Africa, Gauteng, South Africa

ID 96 Brain Rot or Relaxation? The Impact of Short Videos, Attention Fragmentation, and Emotional Desensitization on Senior High School and College Students' Cognitive and Psychological Health

Yasser U. Guro, Mary Jeannette Juan, John Paulo G. Sillano, and Arabella Vergara, Industrial Engineering, University of Santo Tomas, Philippines
Engr. Damirson A. Co, MSIE, PIE, Department of Industrial Engineering, University of Santo Tomas, Sampaloc, Manila, Philippines

ID 273 Co-Designing Strength-Based Digital Stories to Enhance Communication for Autistic Children in Nairobi, Kenya

Nehema Mburuki, Masters in Data Science & Analytics, Faculty of Mathematical Sciences, Strathmore University, Nairobi, Kenya
Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech Automation Technologies Limited, Nairobi, Kenya
Stefan Ngatia Mari, Electrical and electronics engineering student, Strathmore University, Nairobi, Kenya

ID 280 Inadequate Access to Mental Healthcare in Nairobi, Kenya

Lauryn Maina, Third year Law Student, Strathmore University, Nairobi, Kenya
Stephan Mari, Electrical and electronics engineering student, Strathmore University, Nairobi, Kenya
Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech Automation Technologies Limited, Nairobi, Kenya

ID 404 Exploration of green ergonomics utilising the system dynamics approach with the lenses of 5.0

Carol Dineo Diale-Makgetla PhD., Senior Lecturer, Industrial and Organisational Psychology, College of Economic and Management Sciences University of South Africa, Tshwane, South Africa
Professor Hartmut Von der Ohe PhD., Associate Professor, Department of Industrial Psychology, University of South Africa, Pretoria South Africa
Dr. Victor Aladesanmi PhD., Post Doctoral Fellow, Department of Industrial Psychology, University of South Africa, Pretoria South Africa

15:30 - 16:00 Lunch Break

May 14, 2026 (Thursday) - Session: 16:00 – 18:00**16:00 – 18:00, Thursday****Onsite Room 1**

Session Chair

Sustainability, Green Systems and Energy**ID 94 Sustainability and Cost-Effectiveness Assessment of Solar PV Systems: A Case Study of Western Cape, South Africa**

Sue-Ann Muller, Department of Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology, Cape Town 7535, South Africa

Bingwen Yan, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology 7535 Cape Town, South Africa

Tinashe Tendayi, Department of Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology, Cape Town 7535, South Africa

ID 117 Transitioning Firms to a Sustainable Ecosystem

Ngaka, Mosia and Unisa, South Africa

ID 125 Towards Sustainable Filter Production: Manufacturing Practices and Operational Improvements

Palesa Gladys Shamase, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology, Cape Town, South Africa

Lucrecia Valentine, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology Cape Town, South Africa

Bharet Morar, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology Cape Town, South Africa

Rumbidzai Muvunzi, School of Mechanical, Industrial and Aeronautical Engineering, University of the Witwatersrand, Johannesburg, South Africa

Blessed Sarema, School of Mechanical, Industrial and Aeronautical Engineering, University of the Witwatersrand, Johannesburg, South Africa

ID 166 Evaluating Frameworks for Advancing SDG 7: Supporting Affordable and Clean Energy Access Worldwide

Connie Mocumi, Faculty of Engineering and the Built Environment, University of Johannesburg, Gauteng, South Africa

Gift Laolang, Faculty of Engineering and the Built Environment, Walter Sisulu University, East London, Eastern Cape

Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, KwaZulu-Natal

ID 167 Operational Insights into Green Financing Adoption in South African Construction

Linda Malifete, Clinton Aigbavboa and Khathutshelo Mushavanamadi, Department of Quality and Operations Management, Department of Quantity surveying and Construction Management, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

Samuel Adeniyi Adekunle, Department of Civil Engineering, Faculty of Engineering and Technology, William VS Tubman, Harper, Liberia

ID 178 Smart Solar Street Lighting Systems for Resilient Urban Infrastructure: An Industrial Engineering Approach to Cape Town's Energy Security

Silver Takudzwa Machisa, Department of Industrial and Engineering Systems, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology, Bellville 7535, Cape Town, South Africa

Bingwen Yan, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology Cape Town, 7535, South Africa

Rumbidzai Muvunzi, School of Mechanical, Industrial & Aeronautical Engineering, University of the Witwatersrand, Braamfontein 2000, Johannesburg, South Africa

Senthil Krishnamurthy, Department of Electrical, Electronic and Computer Engineering, Faculty of Engineering and the Built Environment Cape Peninsula University of Technology, Bellville 7535, Cape Town, South Africa

ID 180 Artificial Neural Network Regression-based Modelling of a Charging Solid State Hydrogen Compression Unit

Douw G Faurie, Kasturie Premllal and Andrei Kolesnikov, Department of Chemical, Metallurgical, and Materials Engineering, Tshwane University of Technology, Pretoria, Republic of South Africa

Mykhaylo Lototsky, HySA Systems, South African Institute for Advanced Materials Chemistry, University of the Western Cape, Cape Town, Republic of South Africa

ID 197 Biomethane Market and Future Prospects

Moses Jeremiah Barasa Kabeyi, Department of Industrial Engineering Department, Durban University of Technology, Durban South Africa

Oludolapo Akanni Olanrewaju, Industrial Engineering Department and Institute of System science, Durban University of Technology, Durban, South Africa

ID 202 Smart Grids and their Role in Smart Mobility

Moses Jeremiah Barasa Kabeyi, Department of Industrial Engineering, Durban University of Technology, Durban South Africa

Oludolapo Akanni. Olanrewaju, Industrial Engineering Department and Institute of Systems Science, Durban University of Technology, Durban, South Africa

May 14, 2026 (Thursday) - Session: 16:00 – 18:00**16:00 – 18:00, Thursday****Onsite Room 2**

Session Chair:

Quality, Reliability and Maintenance

ID 191 Adoption of Machine Learning–Driven Predictive Maintenance for Optimal Operational Reliability in Water Infrastructure Systems: A Bibliometric Review

Gift Laolang, Faculty of Engineering, Built Environment & Information Technology, Walter Sisulu University, East London, Eastern Cape
Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, KwaZulu-Natal

ID 71 Effect of Process Parameters on Quality of Needle-Punched Nonwoven Components for Automotive Applications

Nontsikelelo Yvonne Dumakude, Department of Industrial and Systems Engineering, Faculty of Engineering and the Built Environment
Cape Peninsula University of Technology, Cape Town, 7535, South Africa
Bingwen Yan, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology
Cape Town, 7535, South Africa
Desiree V. Jaftha, Department of Industrial and Systems Engineering, Faculty of Engineering and the Built Environment,
Cape Peninsula University of Technology, Cape Town, 7535, South Africa

ID 300 Green Customers through Consumer Psychology principles: A Bibliometric Analysis within Quality, Reliability and Maintenance Framework

Betty Portia Maphala PhD., Industrial and Organisational Psychology, College of Economic and Management Sciences, University of South Africa
Tshwane, South Africa
Carol Dineo Diale-Makgetla PhD., Industrial and Organisational Psychology, College of Economic and Management Sciences,
University of South Africa, Tshwane, South Africa

ID 159 Lifecycle-Based Maintenance Optimisation in Aging Mining Operations: A Data-Driven Approach to Enhancing Reliability and Efficiency

Shoni Whitney Mathivha, Jan Harm C Pretorius and Leon Pretorius, Postgraduate School of Engineering Management,
Faculty of Engineering and Built Environment, University of Johannesburg, South Africa

ID 173 Organisational readiness for digital technologies adoption in health care facilities: Bibliometric and Conceptual Review

Amanda Yenge, Faculty of Engineering and the Built environment, Durban University of Technology, Durban, South Africa
Iruka Chijindu Anugwo, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa
Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa
Gift Laolang, Faculty of Engineering and the Built Environment, Walter Sisulu University, East London, South Africa

ID 32 Sustainable Procurement for Corporate Organizations when Incorporating Small Medium Enterprise Using Competitive Global Strategies in Gauteng, South Africa

Khanti Dyonase, Operations and Quality Management, Durban University of Technology, South Africa

ID 127 The Impact of Mean Time to Repair on Overall Equipment Effectiveness: Evidence from a Food Manufacturing Facility

Tinashe Tendayi, Lecturer, Department of Industrial Engineering & Systems Engineering, Cape Peninsula University of Technology
Bellville, Cape Town, South Africa
Blessed Sarema, Lecturer, School of Mechanical, Industrial and Aeronautical Engineering, University of the Witwatersrand, Johannesburg,
South Africa
Lucrecia Valentine, Programme Coordinator for Postgraduate Research, Department of Industrial Engineering & Systems Engineering,
Cape Peninsula University of Technology, Bellville, Cape Town, South Africa
Rumbidzai Muvunzi, School of Mechanical, Industrial and Aeronautical Engineering, University of the Witwatersrand, Johannesburg, South Africa

ID 64 Transforming South African public healthcare: A service Provider's Perspective- A Case Study of Haterbeeskop Clinic

Manduth Ramchander, Operations and Quality Management, Faculty of Management Sciences, Durban University of Technology
KwaZulu Natal, South Africa
Sibahle Shandu, Operations and Quality Management, Faculty of Management Sciences, Durban University of Technology, KwaZulu Natal,
South Africa

May 14, 2026 (Thursday) - Session: 16:00 – 18:00

16:00 – 18:00, Thursday

Onsite Room 3

Session Chair:

Supply Chain and Logistics

ID 23 A Blockchain-Enabled Market Access Model to Enhance Sustainable Livestock Prosperity for Small-Scale Poultry Farmers in Rural South Africa

Sebonkile Thaba, Nsovo Ricki Mathebula and Gamuchirai Makanaka Nyandoro, Logistics and Supply Chain Management,
College of Business and Economics, University of Johannesburg, Johannesburg, South Africa

ID 50 Applying Operations Research Techniques Based on Heuristic Algorithms for Optimal Supplier Selection

Abdulhadi A. Altherwi, Industrial Engineering Department, College of Engineering and Computer Sciences, Jazan University, Jazan, Saudi Arabia

ID 72 Decision-Making Framework Linking Supplier Selection for Competitiveness – Systematic Literature Review

Ndivhuwo Nemtajela, Department of Operations Management, College of Economic and Management Sciences, University of South Africa
Pretoria, South Africa

ID 306 Digital Transformation and Inventory Performance in Perishable Agri-Food Retail SMEs: Evidence from uMgungundlovu

Municipality

Thobeka Jali, University of Kwa-Zulu Natal, South Africa

ID 43 Operational Risk Integration for Regulatory-Driven Export Sustainability: An Operations Management Study of the South African Citrus Supply Chain

Lucrecia Valentine, Department of Industrial and Systems Engineering, Faculty of Engineering and the Built Environment,

Cape Peninsula University of Technology, 7535 Cape Town, South Africa

Bingwen Yan, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology

7535 Cape Town, South Africa

Samantha Phologane, Department of Industrial and Systems Engineering, Faculty of Engineering and the Built Environment,

Cape Peninsula University of Technology, 7535 Cape Town, South Africa

ID 405 Shaping Intelligent Supply Chains: AI Adoption in Higher Education Institutions in South Africa

Dominique B Bowers, Department of Information Systems, Faculty of Economic and Management Science, University of the Western Cape

Cape Town, South Africa

Abdullah Bayat, Department of Management and Entrepreneurship, Faculty of Economic and Management Science, University of the Western Cape

Cape Town, South Africa

May 14, 2026 (Thursday) - Session: 16:00 – 18:00

16:00 – 18:00, Thursday

Virtual Zoom Room 4

Session Chair:

Quality and Lean Six Sigma

ID 267 Implementing lean manufacturing and a continuous improvement culture for adaptability in SME manufacturing

Steadyman Chikumba, University of South Africa, South Africa

ID 265 Integration of quality control and process flow processes to improve throughput in a medium scale steel processing

Steadyman Chikumba, University of South Africa, South Africa

ID 286 Advanced Sensor Technologies for Turbine Valve Condition Monitoring: A Comprehensive Review with Experimental Validation

Nkululeko Jama, University of Johannesburg, South Africa

ID 195 Optimisation of Medical Device Design Transfer Procedure

Nkhodeni Mukwevho, Cape Peninsula University of Technology, South Africa

ID 22 The Relationship Between an Iso 17025:2017 Accredited Laboratory and Operational Performance: A Case of Perishable Product Export Control Board (Ppecb) Testing Laboratory

Gcinumuzi Zimu, DUT, South Africa

ID 362 The Effectiveness of the Manufacturing process of Automotive Door Hinges: Case study

John Zvidzayi, Mangosuthu University of Technology, Department of Mechanical Engineering, South Africa

ID 392 Integrating GPR and Geotechnical Investigation for Subsurface Failure Diagnosis: An FMEA and Asset Integrity Management Framework — A Case Study at Obafemi Awolowo University

Damilola G. Bobola, Department of Civil Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria

Adeyemi B. Fajobi, Department of Civil Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria

Oladeji. O. Ige, Department of Materials Science and Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria

Department of Industrial Engineering, Durban University of Technology, Durban, South Africa

Institute of System Science, Durban University of Technology, Durban, South Africa

Oludolapo. A. Olanrewaju, Department of Industrial Engineering, Durban University of Technology, Durban, South Africa

Institute of System Science, Durban University of Technology, Durban, South Africa

May 14, 2026 (Thursday) - Session: 18:00 – 19:30

18:00 – 19:30, Thursday

Virtual Zoom Room 4

Session Chair:

Sustainability, Green Systems and Energy

ID 231 Comparative Life Cycle Assessment of Bagasse-to-Energy Conversion Pathways for Sustainable Power Generation

Charo Safari Karisa, Faculty of engineering, Department of Mechanical and Manufacturing Engineering, University of Nairobi, Kenya

Denis Kioko, Faculty of Engineering, Department of Mechanical and Manufacturing Engineering, University of Nairobi, Kenya

ID 278 Design and Modelling of a Campus-Scale Microgrid for the University of Nairobi

Moses Jeremiah Barasa Kabeyi, Department of Industrial Engineering, Durban University of Technology, Durban South Africa

Ariel Amani, Faculty of Engineering, Department of Mechanical and Manufacturing Engineering, University of Nairobi, Nairobi, Kenya

Patrick Webuye, Faculty of Engineering, Department of Mechanical and Manufacturing Engineering, University of Nairobi, Nairobi, Kenya

ID 123 Deterministic Mixed Integer Linear Programming Model for Optimizing Municipal Waste to Energy Supply Chain Networks Under Capacity and Demand Constraint

Vedant Santosh Mahadik, Vivekanad College of Human Excellence, Koregaon, Satara, Maharashtra, India

ID 126 Development of Plastic Waste Reverse Logistics Facility Location Model

Bright Udoette and Oladunni S. Okunade, Department of Industrial and Production Engineering, University of Ibadan

ID 274 Dynamic Analysis of Hybrid Water and Energy System in Smart Cities

Linda Mphahlele, Department of Mechanical Engineering Science, University of Johannesburg, Johannesburg, South Africa

Motsi Matlakala, Department of Mechanical Engineering Science, University of Johannesburg, Johannesburg, South Africa

Shelly Thandiwe Mona, Product Development Technology Station, Central University of Technology, Free State, South Africa

ID 363 Assessment of the Implementation of Building Energy Management Systems in Residential Buildings: Property Managers' Viewpoint

Thabo Khafiso and Molusiwa Stephan Ramabodu, Department of Construction Management & Quantity Surveying, Faculty of Engineering and the Built Environment, Durban University of Technology, Kwazulu-Natal, South Africa

Clinton Aigbavboa,

Sustainable Human Settlement and Construction Research Centre, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Samuel Adekunle, Department of Civil Engineering, Tubman University, Harper, Liberia

May 15, 2026 (Friday)

07:00 - 17:00 Registration and Networking

May 15, 2026 (Friday) - Session: 8:00 – 9:30

8:00 – 9:30, Friday

Onsite Room 1

Session Chair:

Simulation, Optimization and Productivity Improvement

ID 48 Mathematical Modelling and Fractional-Order Analysis of Zika Virus Transmission Dynamics with Vaccine Acceptance and Public Awareness

Oludolapo Akanni Olanrewaju and Akeem Olanrewaju Yunus, Institute of Systems Science (ISS), Durban University of Technology, Durban, South Africa

ID 184 Modelling and Performance Evaluation of Precast Concrete Segments Production Using Discrete-Event Simulation

Asser Letsatsi Tau, Department of Operations Management, Faculty of Management Sciences, Tshwane University of Technology, Pretoria, South Africa

Emmanuel Innocents Edoun and Solly Pooe, Tshwane School for Business and Society, Pretoria, South Africa

ID 190 Optimization and Analysis of a Single-Cylinder Four-Stroke Engine Crankshaft for A 3-Wheeler Vehicle

Adeleke Tunde Basit, Institute of Systems Science, Durban University of Technology, Durban, South Africa.

Olanrewaju Oludolapo Akanni, Institute of Systems Science, Durban University of Technology, Durban, South Africa.

Abarikwuu Anulika Ebere, Department of Mechanical Engineering, College of Engineering, Bells University of Technology, Ota, Ogun State, Nigeria

ID 189 Optimization, Design and Analysis of Steering Knuckle Component tailored for Nigerian Roads

Adeleke Tunde Basit, Institute of Systems Science, Durban University of Technology, Durban, South Africa

Olanrewaju Oludolapo Akanni, Institute of Systems Science, Durban University of Technology, Durban, South Africa

Awodoyin Emmanuel Tomisin, Department of Mechanical Engineering, Bells University of Technology, Ota, Nigeria

ID 128 Triple Source Energy – Continuous Sustainable Power for an off-grid Facility

Dennit Quewan Adams, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment,

Cape Peninsula University of Technology, Cape Town, South Africa

Gerrit Rohwäder, Final Year Student – Industrial Engineering, Department of Industrial Engineering, Hochschule Dusseldorf,

University of Applied Science, Dusseldorf, Germany

Lene Gimbel, Final Year Student – Industrial Engineering, Department of Industrial Engineering, Hochschule Dusseldorf,

University of Applied Science, Dusseldorf, Germany

May 15, 2026 (Friday) - Session: 8:00 – 9:30

8:00 – 9:30, Friday

Onsite Room 2

Session Chair:

Sustainability, Green Systems and Energy

ID 203 Plastic Wastes to Energy Pathways

Moses Jeremiah Barasa Kabeyi, Oludolapo Akanni Olanrewaju, Industrial Engineering Department and Institute of System science, Durban

University of Technology, Durban South Africa

ID 208 Energy Harvesting from A Typical Wastewater Treatment Plant

Josphine Muringi Kimotho, Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Nairobi, Nairobi, Kenya

ID 209 Design and Modelling of a Campus-Scale Microgrid for the University of Nairobi

Ariel Amani, Faculty of Engineering, Department of Mechanical and Manufacturing Engineering, University of Nairobi, Nairobi, Kenya
Patrick Webuye, Faculty of Engineering, Department of Mechanical and Manufacturing Engineering, University of Nairobi, Nairobi, Kenya
Moses Jeremiah Barasa Kabeyi, Department of Industrial Engineering, Durban University of Technology, Durban South Africa

ID 232 Hydrometallurgical recovery of Lithium metal from LiCoO₂ cathode active material of spent LIBs for the stationary energy storage systems (SESSs) applications

Ogunmefun, O. Anthony, Teffo, M. Linda, Mavhungu, M. Lucey, Sadiku, E. Rotimi and Mkatshwa, S. Francisca, Department of Chemical, Metallurgical and Materials Engineering, Tshwane University of Technology, Pretoria West Campus, South Africa

ID 299 Green Psychology of Entrepreneurship: A Scoping Review of Biospheric Values, Self-Efficacy and Afrocentrism in Sustainability, Green Systems and Energy

Carol Dineo Diale-Makgetla PhD., Industrial and Organisational Psychology, College of Economic and Management Sciences University of South Africa, Tshwane, South Africa
Betty Portia Maphala PhD., Industrial and Organisational Psychology, College of Economic and Management Sciences, University of South Africa Tshwane, South Africa

ID 307 Evaluating the Role of Electric Vehicles in Grid Modernization and Renewable Energy Sources Integration for a Decarbonized South African Power Grid

Anesu Charamba, Department of Mechatronics, School of Engineering Sciences and Technology, Chinhoyi University of Technology, Chinhoyi, Zimbabwe

May 15, 2026 (Friday) - Session: 8:00 – 9:30

8:00 – 9:30, Friday

Onsite Room 3

Session Chair:

Lean Six Sigma and Operations Excellence

ID 106 Critical Success Factors for Lean Six Sigma Sustainability in Manufacturing: A Longitudinal Capability Development Perspective

Bingwen Yan, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology Cape Town, 7535, South Africa
Vuyokazi Maku, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology Cape Town, 7535, South Africa

ID 188 Examining the impact of introducing Lean Six Sigma in Manufacturing industry: A case of a company A, a Manufacturing Organisation in South Africa

Xihlovo Baloyi, Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa

ID 1 Investigating the Causes of Poor Performance of Underground Mining Tunnel Cycle Times Using the Lean Six Sigma Methodology

Kennedy Modiri Mereothle, Industrial Engineering Practitioner, Beng Tech Honours Industrial Engineering, UNISA'22
Khumbuzile Nedohe, Lecturer, Department of Mechanical and Industrial Engineering Technology, Faculty of Engineering & the Built Environment, University of Johannesburg, South Africa
Able Mashamba, Senior Lecturer, Department of Mechanical and Industrial Engineering Technology, Faculty of Engineering & the Built Environment, University of Johannesburg, South Africa

ID 357 The Impact of Service Innovations on Consumer Shopping Habits and Store Loyalty: A South African Grocery Retail Perspective

Kamogelo Thuto Zwane, Kamohelo Nompula and Lawrance Seseni, College of Business and Economics, School of Management, Department of Business Management, University of Johannesburg, Auckland Park, South Africa

ID 401 Organisational readiness for digital technologies adoption in health care facilities: Bibliometric and Conceptual Review

Amanda Yenge, Faculty of Engineering and the Built environment, Durban University of Technology, Durban, South Africa
Iruka Chijindu Anugwo, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa
Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa
Gift Laolang, Faculty of Engineering and the Built Environment, Walter Sisulu University, East London, South Africa

ID 425 Transforming South African Public Healthcare: A Service Provider's Perspective- A Case Study of Haterbeeskop Clinic.

Prof Manduth Ramchander
Operations and Quality Management
Faculty of Management Sciences
Durban University of Technology
KwaZulu Natal, South Africa

Sibahle Shandu

Operations and Quality Management
Faculty of Management Sciences
Durban University of Technology
KwaZulu Natal, South Africa

ID 428 Effect of Process Parameters on Quality of Needle-Punched Nonwoven Components for Automotive Applications

Nontsikelelo Yvonne Dumakude
Department of Industrial and Systems Engineering
Faculty of Engineering and the Built Environment
Cape Peninsula University of Technology
Cape Town, 7535, South Africa

Bingwen Yan
Department of Operations Management
Faculty of Business and Management Sciences
Cape Peninsula University of Technology
Cape Town, 7535, South Africa

Desiree V. Jaftha
Department of Industrial and Systems Engineering
Faculty of Engineering and the Built Environment
Cape Peninsula University of Technology
Cape Town, 7535, South Africa

Doice Moyo
Director
Nangomso Holdings Ltd
Newcastle, United Kingdom

May 15, 2026 (Friday) - Session: 8:00 – 9:30

8:00 – 9:30, Friday

Virtual Zoom Room 4

Session Chair:

Manufacturing, Assembly and Design

ID 112 Evaluating the Impact of Production Challenges on Quality in The Automotive Manufacturing Industry in South Africa

Mpho Hlongwane and S Gqibani, P Anup, School of Engineering Management, Faculty of Engineering and the Built Environment
University of Johannesburg, Johannesburg, South Africa

ID 295 Finite Element Analysis and Structural Validation of an Automated Eccentric-Shaft Rebar Handling Mechanism for Steel Cooling Beds

M. Marange, A. Musarurwa and L. Gudukeya, Department of Industrial and Mechatronics Engineering, University of Zimbabwe,
P.O. Box MP 167, Mount Pleasant, Harare, Zimbabwe

ID 111 Laser-Wire Additive Manufacturing: A Review of Applications and Research Gaps

Simon Robel, Faculty of Mechanical Engineering, Chemnitz University of Technology, 09111 Chemnitz, Germany
Prof. Stephen Matope, Department of Industrial Engineering, Stellenbosch University, Stellenbosch, South Africa

ID 113 Qualitative methodology for aligning production and quality KPIs in an automotive manufacturing in South Africa

M Hlongwane, S Gqibani and P Anup, School of Engineering Management, Faculty of Engineering and the Built Environment, South Africa

ID 170 The impact of weld quality analysis in the Automotive Supply Chain in South Africa

John Zvidzayi, Mangosuthu University of Technology, Department of Mechanical Engineering, South Africa

ID 347 An Investigation on The Flow Properties of Some Pulverized Nigerian Coals

A.T. Oyeniran, T. L., Department of Mechanical Engineering Obafemi Awolowo University, Ile-Ife, Nigeria
Akpomejoro, A. A. Daniya, Department of Materials Science and Engineering Obafemi Awolowo University, Ile-Ife, Nigeria
Department of Industrial and Engineering Management, University of South Africa, Pretoria, South Africa
C. Mbohwa, Department of Industrial and Engineering Management, University of South Africa, Pretoria, South Africa

ID 361 The impact of weld quality analysis in the Automotive Supply Chain in South Africa

John Zvidzayi, Mangosuthu University of Technology, Department of Mechanical Engineering, South Africa

9:30 – 10:00 – Networking Break

May 15, 2026 (Friday) - Session: 10:00 – 11:30

10:00 – 11:30, Friday

Virtual Zoom Room 4

Session Chair:

Engineering Management and Project Management

ID 302 Integrating Digital Technologies and Lean Construction for Waste Management in Developing Countries: A Bibliometric Review

Nthethele Thakhisi, Chikezirim Okorafor and Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, KwaZulu Natal
Gift Laolang, Faculty of Engineering and the Built Environment, Walter Sisulu University, East London, Eastern Cape

ID 37 Managing the Transition to Digital Radio Networks in Smart Grids: An Asset and Change Management Case Study

Thapelo Thakhudi and Khaled Aboalez, Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment University of Johannesburg, Johannesburg, South Africa

ID 283 Patterns and Risk Dynamics of Construction Site Accidents in Kenya

Joseph Kisia Osome, Prisca Tente, Charles Kahanji, and Erastus Misheng'u Mwanaumo, Department of Civil & Environmental Engineering, University of Zambia, P. O. Box 32379, Lusaka, Zambia

ID 39 Process improvement through bottleneck elimination in an edible oil manufacturing environment

Dr. Steadyman Chikumba, University of South Africa, South Africa
Trevor Shihundla, Adjunct Academic, University of South Africa, South Africa

ID 156 Service Level Improvement Through TPM and EOQ Model in a Fumigation Company

Diego Eduardo Bonifaz Salazar and Jorge Luis Matos Rojas, Universidad de Lima, Facultad de Ingeniería, Lima, Peru
Paul Angello Daniel Sanchez Soto and Carlos Alberto Galvez Zarate, Universidad de Lima, Facultad de Ingeniería, Lima, Peru

ID 164 The Mediating Role of Total Quality Management in Enhancing Supply Chain Integration and Its Impact on Sustainable Performance in the Manufacturing Industry

Mohammed Alquraish, Industrial Engineering Department, College of Engineering, University of Bisha, Bisha 61922, Saudi Arabia

ID 183 Identifying context-relevant factors for addressing delayed payment to contractors in the construction industry

Winston I Chapanda, Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa
Edoghogho Ogbeifun, Civil Engineering Department, Faculty of Engineering, University of Jos
Jan-Harm C. Pretorius, Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

May 15, 2026 (Friday) - Session: 12:00 – 13:30

12:00 – 13:30, Friday

Virtual Zoom Room 4

Session Chair:

Engineering Education and Curriculum Improvement

ID 220 Digital Competencies for Pedagogy programs in the new Normal

Koketso Masenya, Department of Industrial Engineering and Engineering Management, School of Engineering, College of Sciences Engineering and Technology, University of South Africa (UNISA), Gauteng, South Africa
Ngaka Mosia, Industrial Engineering and Engineering Management, School of Engineering, College of Science, Engineering, and Technology, University of South Africa, Gauteng, South Africa

ID 90 From Syllabus to Startup Mindset: Embedding Entrepreneurial Thinking Without Overhauling the Curriculum

Lucy Khumalo, Mbuyu Germain Ntuka and Innocentia Gugulethu Mkhize, Department of Chemical Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa
Rendani Wilson Maladzhi and Kazeem Bello, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment Durban University of Technology, Durban, South Africa
Mohohlo Samuel Tsoeu, Department of Electronic and Computer Engineering, Faculty of Engineering and the Built Environment Durban University of Technology, Durban, South Africa

ID 118 A Theory-Heavy Engineering Through Micro-Embedded Design Thinking

Rosheena Jeawon and Zanele Nqobile Hadebe, Centre of Excellence in Learning and Teaching, Faculty of Engineering and the Built Environment Durban University of Technology, Durban, South Africa
Rendani Wilson Maladzhi, Department of Mechanical Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa

ID 388 AI-Driven Innovations in Training Delivery and Assessment

Mosia Ngaka, Department of Industrial Engineering and Engineering Management, College of Science, Engineering & Technology University of South Africa, Johannesburg, South Africa
Bongumenzi Mncwango, Department of Industrial Engineering and Engineering Management, College of Science, Engineering & Technology

University of South Africa, Johannesburg, South Africa
Kemlall Ramdass, Department of Industrial Engineering and Engineering Management, College of Science, Engineering & Technology
University of South Africa, Johannesburg, South Africa

ID 393 Pedagogical Challenges and Technology Enhanced Learning in an Open Distance Learning Environment

Mosia Ngaka, Department of Industrial Engineering and Engineering Management, College of Science, Engineering & Technology
University of South Africa, Johannesburg, South Africa
Bongumenzi Mncwango, Department of Industrial Engineering and Engineering Management, College of Science, Engineering & Technology
University of South Africa, Johannesburg, South Africa
Kemlall Ramdass, Department of Industrial Engineering and Engineering Management, College of Science, Engineering & Technology
University of South Africa, Johannesburg, South Africa

May 15, 2026 (Friday) - Session: 10:00 – 13:00

Keynotes

10:00 – 10:30, Friday, May 15, 2026 – Welcome Address

Professor Mercy Khathutshelo Makhitha
Dean
Faculty of Business and Management Sciences
Cape Peninsula University of Technology (CPUT)
Cape Town, South Africa
Host Welcome by Dean of Business and Management Sciences, CPUT

10:30 - 11:00 Keynote:

Prof Nita Inderlal Sukdeo
Associate Professor
Department of Quality and Operations Management
School of Mechanical and Industrial Engineering
University of Johannesburg
South Africa

11:00 - 11:30 Keynote:

Dr. Olufemi Muibi Saibu
Professor & Director
Quality Assurance & SERVICOM Unit
University of Lagos, Nigeria

11:30 - 12:00 Keynote:

Dr. Hamieda Parker
Professor
Graduate School of Business
University of Cape Town
Rondebosch, Cape Town, South Africa

12:00 - 14:00 Lunch Break and Awards

May 15, 2026 (Friday) - Session: 14:00 – 15:30

14:00 – 15:30, Friday

Onsite Room 1

Session Chair:

Sustainability, Green Systems and Energy

ID 86 Multi-Objective Optimization of Hybrid Renewable Energy Microgrids with Robust Dispatch under Solar and Wind Variability and Demand Response Integration

Adebayo Dosa, Department of Industrial Engineering, Durban University of Technology, Durban 4001, South Africa
 Institute of Systems Science, Durban University of Technology, Durban 4001, South Africa
 Oludolapo Akanni Olanrewaju, Institute of Systems Science, Durban University of Technology, Durban 4001, South Africa
 Felix Mora – Camino, Institute of Systems Science, Durban University of Technology, Durban 4001, South Africa
 Industrial Engineering Department, Universidade Federal Fluminense in Niteroi, Rio de Janeiro 24020, Brazil

ID 87 Robust and Resilient Multi-Objective Dispatch of Hybrid Renewable Microgrids Under Extreme Solar and Wind Uncertainties with Integrated Demand Response

Adebayo Dosa, Department of Industrial Engineering, Durban University of Technology, Durban 4001, South Africa
 Institute of Systems Science, Durban University of Technology, Durban 4001, South Africa
 Oludolapo Akanni Olanrewaju, Institute of Systems Science, Durban University of Technology, Durban 4001, South Africa
 Felix Mora – Camino, Institute of Systems Science, Durban University of Technology, Durban 4001, South Africa
 Industrial Engineering Department, Universidade Federal Fluminense in Niteroi, Rio de Janeiro 24020, Brazil

ID 93 Techno-Economic Feasibility Study of a Solar Photovoltaic System with Battery Backup for Commercial Applications

Rutendo Rose Nzuwa, Department of Industrial and Engineering Systems, Faculty of Engineering and the Built Environment, Cape Peninsula University of Technology, Bellville 7535, Cape Town, South Africa
 Bingwen Yan, Department of Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology Cape Town, 7535, South Africa
 Rumbidzai Muvunzi, School of Mechanical, Industrial & Aeronautical Engineering, University of the Witwatersrand, Braamfontein 2000, Johannesburg, South Africa
 Senthil Krishnamurthy, Department of Electrical, Electronic and Computer Engineering, Faculty of Engineering and the Built Environment Cape Peninsula University of Technology, Bellville 7535, Cape Town, South Africa

ID 317 Life Cycle Impact Assessment of a Solar PV/Fuel Cell/Hydrogen Storage Hybrid Energy System for Seawater Desalination in South Africa

Olubayo Babatunde, Department of Industrial Engineering, Durban University of Technology, Durban, South Africa
 Institute of System Science, Durban University of Technology, Durban, South Africa
 Desmond E. Ighravwe, Department of Industrial Engineering, Durban University of Technology, Durban, South Africa
 Institute of System Science, Durban University of Technology, Durban, South Africa
 Department of Mechanical Engineering, Bells University of Technology, Ota 112104, Nigeria
 Michael Emezirinwune and Oludolapo Olanrewaju, Institute of System Science, Durban University of Technology, Durban, South Africa

ID 340 A Hierarchy-Based Sustainable Operations Management Model for Manufacturing Improvement Initiatives in South Africa: [Five-capital framework perspective]

Eric Amankwa, Department of Applied Management, Administration & Ethical Leadership, Faculty of Management Studies, University of Fort Hare Alice, South Africa

ID 355 Water Desalination versus Conservation

Lindelwa Siwisa, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa
 Daramy Vandi Von Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg South Africa

May 15, 2026 (Friday) - Session: 14:00 – 15:30

14:00 – 15:30, Friday

Onsite Room 2

Session Chair:

Engineering Education and Curriculum Improvement

ID 95 Inclusive Engagement by Design: A No-Data Framework for Supporting Diverse Students at Scale in Engineering Education

Innocentia Gugulethu Mkhize and Lucy Khumalo, Department of Chemical Engineering, Faculty of Engineering & the Built Environment Durban University of Technology, Durban, South Africa
 Rendani Wilson Maladzhi, Department of Mechanical Engineering, Faculty of Engineering & the Built Environment, Durban University of Technology, Durban, South Africa

ID 104 Minimal Viable Assessment: Redesigning Feedback for Learning Without Increasing Marking Load

Mbuyu Germain Ntunka, Department of Chemical Engineering, Faculty of Engineering & the Built Environment, Durban University of Technology Durban, South Africa
 Mohohlo Samuel Tsoeu, Department of Electronic and Computer Engineering, Faculty of Engineering & the Built Environment Durban University of Technology, Durban, South Africa
 Rendani Wilson Maladzhi, Department of Mechanical Engineering, Faculty of Engineering & the Built Environment, Durban University of Technology, Durban, South Africa

ID 261 Pedagogical Innovations in the 4th Industrial Revolution [A digitalization and innovation intervention in education]
Matshhepo, Mokoka and Unisa, South Africa

ID 105 Project-Based Learning at Low Cost: A “Micro-PBL” Blueprint for Overcrowded Modules
Mbuyu Germain Ntunka, Department of Chemical Engineering, Faculty of Engineering & the Built Environment, Durban University of Technology
Durban, South Africa
Rendani Wilson Maladzhi and Kazeem Bello, Department of Mechanical Engineering, Faculty of Engineering & the Built Environment
Durban University of Technology, Durban, South Africa

ID 120 Student Barriers for Transitioning a Curriculum Delivery Grid in a Distance Education Setting
Ngaka, Mosia and Unisa, South Africa

ID 201 Virtual Exchange Formats in Teaching and Learning (A Disruptive Technologies Application)
Masingita Onica Mohlala, Kgabo Mokgohloa and Ngaka Mosia, Industrial Engineering and Engineering Management,
School of Engineering and the Built Environment, University of South Africa, Florida, South Africa

ID 408 Improving Student Class Attendance and Engagement: Barriers, Opportunities and Strategies: A Systematic Literature Review
Nompumelelo Chili, Lebogang Bopape, Christopher Mcineka, Thandeka Makhanya and Mohohlo Tsoeu, Faculty of Engineering and the Built
Environment, Durban University of Technology, Durban, South Africa

ID 410 Critical Barriers to Engineering Student Success: A Systematic Literature Review
Thandeka Makhanya, Lebogang Bopape, Christopher Mcineka, Nompumelelo Chili and Mohohlo Tsoeu, Department of Electronic and Computer
Engineering, Durban University of Technology, Durban, South Africa

ID 411 Digital Transformation in Engineering Education: A Systematic Review of University Operations
Lebogang Puree Bopape, Nompumelelo Chili, Mohohlo Tsoeu, Thandeka Makhanya and Christopher Mcineka, Lecturer, Electronic and Computer
Engineering, Faculty of Engineering and Built Environment, Durban University of Technology, Durban, South Africa

May 15, 2026 (Friday) - Session: 14:00 – 15:30

14:00 – 15:30, Friday

Onsite Room 3

Session Chair:

Engineering Management and Project Management

ID 98 Assesment of Building Information Modelling Implementation on Construction Project Performance in Nigeria
Akinola, V.O., Department of Building, School of Environmental Technology, Federal University of Technology, Akure, Nigeria

ID 100 Appraisal of BIM Software Utilization for Project Delivery in Tertiary Institutions in South West Nigeria
Akinola, V.O., Department of Building, School of Environmental Technology, Federal University of Technology, Akure, Ondo State, Nigeria
Akinola, J.A., Department of Quantity Surveying, School of Environmental Design & Management and Technology,
Federal University of Technology & Environmental Technology, Iyin- Ekiti, Ekiti State, Nigeria
Afuye, I.T., Department of Building, School of Environmental Technology, Bamidele Olumilua University of Education Science and Technology,
Ekiti State, Nigeria

ID 305 Implementation of the 5s Method Using A Kaizen Approach to Improve Efficiency in A Sme in The Metalworking Sector
Rodolfo Morocho-Caballero, Facultad de Ingeniería, Universidad de Lima, Peru
Fabiola Mariafernanda Sanchez-Picho, Facultad de Ingeniería, Universidad de Lima, Peru
Javier Saul Cordova-Ramos, Research Professor, Facultad de Ingeniería, Universidad de Lima, Peru

ID 40 Improving on operational performance of an engineering training facility using sound planning and maintenance practices
Steadyman Chikumba, University of South Africa, South Africa

ID 346 Practical Application and Implications of Transformative Learning in an Engineering Classroom: Step-by-step Guide to the Ten Phases
Major Mabuza, Department of Chemical Engineering Technology, Faculty of Engineering and the Built Environment, University of Johannesburg
Johannesburg, Republic of South Africa

ID 403 Industry-Integrated Project-Based Learning in Construction Management: Student Reflections and Mentor Assessments as Evidence of Practice-Readiness
Hlumela Zungu, Department of Construction Management & Quantity Surveying, Durban University of Technology, Durban, South Africa

May 15, 2026 (Friday) - Session: 14:00 – 15:30

14:00 – 15:30, Friday

Virtual Zoom Room 4

Session Chair:

Industry 4.0 and IoT

- ID 279 A Hybrid Virtual Force Field Framework for Fast Autonomous Navigation of Unmanned Vehicles Using Event-Based Vision in Dynamic Environments**
Ibrahim Akanbi and Michael Ayomoh, Industrial and Systems Engineering, Faculty of Engineering and the Built Environment, University of Pretoria Pretoria, South Africa
- ID 38 Assessing Construction 4.0 Awareness, Adoption Barriers, and Benefits in the Eswatini Construction Sector**
Fisokuhle Ndlangamandla and Khaled Aboalez, Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa
- ID 313 Modeling and Analysis of Process Parameters Affecting Flexural Behavior of FDM-Printed Wood/PLA Composites**
Jahid Hasan Ashik and Mst. Nazma Sultana, Department of Industrial Engineering and Management, Khulna University of Engineering & Technology, Khulna-9203, Bangladesh
- ID 359 A Hybrid Theoretical Framework for Technology Adoption in the Construction Industry**
Siphosenkosi Zanoxolo Makaula, College of Science, Engineering and Technology, University of South Africa, Johannesburg, South Africa
- ID 387 Assessment of the adoption of cyber-physical systems in the South African Construction Industry**
Ramabodu Stephan Molusiwa, Department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environment Durban University of Technology, KwaZulu-Natal, South Africa
K'homotho Nester Mokhojane, Department of But Environment, Faculty of Engineering and the Built Environment, Central University of Technology Free State, South Africa
Thabo Khafiso, Scelo Mhlongo, Department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environment Durban University of Technology, KwaZulu-Natal, South Africa
- ID 409 Overview of Automation Technologies in Small medium enterprises: Bibliometric Analysis**
Mr. Semanga Mabuza, Department of Quality & Operations Management, Faculty of Engineering & Built Environment, University of Johannesburg Johannesburg, South Africa
Dr. Takalani Tshabalala, Department of Quality & Operations Management, Faculty of Engineering & Built Engineering, University of Johannesburg Johannesburg, South Africa
Prof. Nita Sukdeo, Department of Quality & Operations Management, Faculty of Engineering & Built Engineering, University of Johannesburg Johannesburg, South Africa

15:30 - 16:00 Lunch Break

May 15, 2026 (Friday) - Session: 16:00 – 17:30

16:00 – 17:30, Friday

Onsite Room 1

Session Chair

Business Management and Operations Management

- ID 205 Investigating and enhancing business processes and the quality of life of waste pickers**
Vuyiseka Vuyokazi Sityoshwana, Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa
Adeel Sambo, Department of Operations Management, Faculty of Business and Management Sciences Cape Peninsula University of Technology, Cape Town, South Africa
- ID 210 Dynamics of maintaining Sustainable collaborations in the public sector**
Nyaka Crisantia Dinah, Industrial Engineering and Engineering Management, College of Science, Engineering, and Technology, School of Engineering, University of South Africa, Gauteng, South Africa
Ngaka Mosia, Industrial Engineering and Engineering Management, College of Science, Engineering, and Technology, School of Engineering University of South Africa, Gauteng, South Africa
- ID 215 Maintenance Protocols for Improved Operational Efficiency: A Performance Review on Rail Operation's Systems**
Ramatsobane Dineo Johanna Lediga, Khathutshelo Mushavhanamadi, Save Akilimalissiga and Thabiso Mokoena, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment Engineering, University of Johannesburg, Johannesburg, South Africa
- ID 219 Investigating the Role of Continuous Quality Improvement in Shaping Agile Service Organisations**
Thabiso Mokoena, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa
- ID 264 Investigating and enhancing business processes and the quality of life of waste pickers**
Vuyiseka Vuyokazi Sityoshwana, Operations Management, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa
Adeel Sambo, Department of Operations Management, Faculty of Business and Management Sciences Cape Peninsula University of Technology, Cape Town, South Africa
- ID 269 Optimizing Waste-to-Energy Feedstock Logistics in Ghana: An Operations and Circular Economy Framework**
Joseph Ogudi and Marianna Kharlamova, Department of Environmental Safety and Product Quality Management, Institute of Environmental Engineering, RUDN University, 6 Miklukho-Maklaya St., 117198 Moscow, Russian Federation, Russia
- ID 321 A Smart Proactive Facilities Management Framework for Critical Plant Systems in Student Accommodation**
Mary Kgabi, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg,

South Africa

ID 354 A Bibliometric Analysis of Hybrid Work using Scopus and VOSviewer software for the period 2015 to 2025

Mpho Vincent Kubheka, Obanagetse Thebole Pataki and Lawrance Seseni, Department of Business Management, College of Business and Economics, University of Johannesburg, Johannesburg, South Africa

May 15, 2026 (Friday) - Session: 16:00 – 17:30**16:00 – 17:30, Friday****Onsite Room 2**

Session Chair:

Digital Manufacturing, Industry 4.0 and IoT**ID 19 The Influence of Future of Work Research Institutes on Bridging the Academia-Industry Gap in the Fourth Industrial Revolution**

Siphokazi July, Industrial Engineering, Faculty of Engineering and Built Environment, Tshwane University of Technology, Pretoria, South Africa
Mukondeleli Grace Kanakana, Industrial Engineering, Faculty of Engineering and Built Environment, Vaal University of Technology

Vanderbijlpark, South Africa

Tlotlo Keatlaetse Ramasu, Industrial Engineering, Faculty of Engineering and Built Environment, Tshwane University of Technology

Pretoria, South Africa

Tshifiwa Gift Nenzhelele Ramasu, Industrial Engineering, Faculty of Engineering and Built Environment, Tshwane University of Technology

Pretoria, South Africa

ID 25 Process Optimization in Cement Packaging Using Smart Manufacturing Techniques

Kemlall R Ramdass, Industrial and Engineering Management, Faculty of Engineering and the Built Environment, University of South Africa
Roodepoort, Florida, South Africa

ID 46 Developing a Digital Twin Framework for Supplier Selection Criteria: A Conceptual Review

Ndivhuwo Nemtajela, Department of Operations Management, College of Economics and Management Sciences, University of South Africa

Pretoria, South Africa

ID 84 An SLR on the Implementation of Industry 4.0 Within the South African Automotive Industry

Johann Wahl, Mia Mangaroo-Pillay and Edward Davies, Department of Industrial Engineering, Faculty of Engineering, Stellenbosch University

Stellenbosch 7600, South Africa

ID 115 Barriers and Enablers of Sustainable Smart Manufacturing in Resource-Constrained SMEs

Rendani Wilson Maladzhi, Kazeem Aderemi Bello and Mfanafuthi Mthandeni Mkhize, Department of Mechanical Engineering

Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa

Lucy Khumalo and Mbuyu Germain Ntuka, Department of Chemical Engineering, Faculty of Engineering and the Built Environment

Durban University of Technology, Durban, South Africa

ID 138 Euler-Angle-Based Programming of Robotic Trajectories under Axial Rotation Constraints Automation, Robotics and
Autonomous Systems António Pereira Universidade de Aveiro Portugal

ID: 165 AI-Based Defect Detection Model Development to Enable Zero Defect Manufacturing in Ethiopian Steel Industries

Mehret Getachew, A Dissertation Submitted to College of Technology and Built Environment, Addis Ababa university in Partial Fulfillment of Doctor
of Philosophy in Industrial Engineering, Ethiopia

Birhanu Beshah, Associate professor of industrial engineering, Addis Ababa University, College of Technology and Built Environment

School of Mechanical and Industrial Engineering, Ethiopia

Ameha Mulugeta, Assistant professor of industrial engineering, Addis Ababa University, College of Technology and Built Environment

School of Mechanical and Industrial Engineering, Ethiopia

May 15, 2026 (Friday) - Session: 16:00 – 17:30**16:00 – 17:30, Friday****Onsite Room 3**

Session Chair:

Artificial Intelligence and Data Science**ID 221 Creating an Artificial Intelligence (AI) Readiness Model to assist South African SMME's to Adopt AI effectively**

Refilwe Sophy Matlakala, Department of Quality & Operations Management, Faculty of Engineering and the Built Environment

University of Johannesburg, Johannesburg, South Africa

Daramy Vandi Von Kallon, Department of Mechanical and Industrial Engineering Technology, Faculty of Engineering and the Built Environment

University of Johannesburg, Johannesburg, South Africa

ID 136 Data-Driven Analysis of Maintenance activities for Fleet optimization

Dakalo Malada, Tshwane University of Technology, South Africa

ID 186 Forecasting Accuracy and Training Dynamics of the Multilayer Perceptron for Demand-Responsive Energy Management

Kenneth C. Nwala, Department of Industrial Engineering, Durban University of Technology, Durban 4001, South Africa

Institute of System Science, Durban University of Technology, Durban 4001, South Africa

Moses J.B Kabeyi, Department of Industrial Engineering, Durban University of Technology, Durban 4001, South Africa
Institute of System Science, Durban University of Technology, Durban 4001, South Africa
Oludolapo A. Olanrewaju, Institute of System Science, Durban University of Technology, Durban 4001, South Africa

ID 26 Leveraging Photogrammetry Technology and Artificial Intelligence Technology for Pothole Detection

Joseph Musa, The University of Zambia, Zambia

ID 29 Optimizing Fleet Management Systems Using Artificial Intelligence and Machine Learning

Kemlall R. Ramdass and Azeez T. Mafutau, Industrial and Engineering Management, Faculty of Engineering and the Built Environment
University of South Africa, Roodepoort, South Africa

ID 263 The Integration of Artificial Intelligence Solutions to Bridge Occupational Health and Safety (OHS) Compliance Gaps in South African Small and Medium Enterprises (SMEs)

Refilwe Sophy Matlakala, Department of Quality & Operations Management, Faculty of Engineering and the Built Environment
University of Johannesburg, Johannesburg, South Africa

Daramy Vandi Von Kallon, Department of Mechanical and Industrial Engineering Technology, Faculty of Engineering and the Built Environment
University of Johannesburg, Johannesburg, South Africa

May 15, 2026 (Friday) - Session: 16:00 – 17:30**16:00 – 17:30, Friday****Virtual Zoom Room 4**

Session Chair:

Sustainability, Green Systems and Energy**ID 185 Evaluating Challenges in Implementing SDG 7 in Existing Building in Johannesburg**

Connie Mocumi, Faculty of Engineering and the Built Environment, University of Johannesburg, Gauteng, South Africa
Gift Laolang, Faculty of Engineering and the Built Environment, Walter Sisulu University, East London, Eastern Cape
Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, KwaZulu-Natal

ID 293 Evaluating Challenges in Implementing SDG 7 in Existing Building in Johannesburg

Connie Mocumi, Faculty of Engineering and the Built Environment, University of Johannesburg, Gauteng, South Africa
Gift Laolang, Faculty of Engineering and the Built Environment, Walter Sisulu University, East London, Eastern Cape
Motheo Meta Tjebane, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, KwaZulu-Natal

ID 270 Nanotechnology, An approach for surface water treatment in rural areas

Blessing George Akpan, Department of Operations and Quality Management, Faculty of Management Science, Durban University of Technology
Durban, South Africa
Raveen Rathilall, Department of Operations and Quality Management, Faculty of Management Science, Durban University of Technology
Durban, South Africa

ID 228 Performance Assessment of Thermal Power Plants with and Without Cogeneration: A Case Study of Kipevu III and Rabai Power and Simple Rankine Cycle System Design for Kipevu III

Ondari Okemwa, Student Mechanical Engineer, Faculty of Engineering, University of Nairobi, Nairobi, Kenya
Donell Agwanda, Student Mechanical Engineer, Faculty of Engineering, University of Nairobi, Nairobi, Kenya

ID 277 The Unplugged Ecosystem: Wireless Frameworks for Sustainable IoT

Titus Muli, School of Computing and Engineering Sciences, Strathmore University, Nairobi, Kenya
Stefan Mari, School of Computing and Engineering Sciences, Strathmore University, Nairobi, Kenya
Jared Nganyi, Industrial Process Automation, Embedded Systems and Robotics Engineering, Technical Engineering Consultant, Embedtech
Automation Technologies Limited, Nairobi, Kenya

ID 36 Towards Sustainable Asset Modernisation: An Energy Management Systems (EMS)-Based Integration Framework

Tshepho Kobe and Khaled Aboalez, Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment
University of Johannesburg, Johannesburg, South Africa

ID 341 Barriers to the Adoption of Building Energy Management Systems in Residential Buildings: A Property Manager's Perspective

Thabo Khafiso, Department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environment
Durban University of Technology, KwaZulu-Natal, South Africa
Molusiwa Stephan Ramabodu, Department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environment
Durban University of Technology, KwaZulu-Natal, South Africa

IEOM Student Chapters around the World

Algeria

1. Adrar University

Australia

2. Queensland University of Tech., Brisbane
3. UNSW-Canberra
4. University of Melbourne
5. University of Wollongong
6. University of Adelaide

Bahrain

7. University of Bahrain

Bangladesh

8. Ahsanullah University of Sci & Tech (AUST)
9. Bangladesh Institute of Management (BIM)
10. Bangladesh University of Textiles (BUTEX)
11. BUET
12. CUET
13. Daffodil International University (DIU)
14. DUET, Gazipur
15. European University of Bangladesh
16. International Islamic University of Chittagong
17. IUBAT
18. Jessore University of Science and Technology
19. Khulna University (KU)
20. Khulna University of Eng and Tech (KUET)
21. Military Institute of Science and Technology
22. National Institute of Textile Eng & Res (NITER)
23. Rajshahi University (RU)
24. SUST
25. University of Chittagong
26. World University Bangladesh (WUB)
27. BAUST
28. American International University-Bangladesh (AIUB)
29. BGMEA University of Fashion and Technology (BUFT)
30. IUB – Independent University, Bangladesh

Bolivia

31. Universidad Católica Boliviana

Botswana

32. University of Botswana

Brazil

33. Federal University of Sao Carlos (UFSCar)
34. Federal University of Santa Catarina (UFSC)
35. University of Sao Paulo (USP) – Sao Carlos
36. Federal Institute of Sao Paulo, Sorocaba
37. FACENS University, Sorocaba

Canada

38. Concordia University
39. Humber Institute of Tech and Adv Learning
40. Polytechnic Montreal
41. University of New Brunswick at Fredericton
42. University of Waterloo
43. University of Windsor
44. Wilfrid Laurier University

Colombia

45. Fundación Univ. Tecn. Comfenalco, Cartagena, Bolívar
46. University of Rosario, Bogota
47. University of Quindio
48. Universidad de San Buenaventura, Cali, Valle
49. Institución Universitaria Colegios de Colombia
50. Escuela Colombiana de Ingeniería Julio Garavito
51. Universidad Católica de Colombia
52. Universidad Santo Tomás de Aquino
53. Fundación Universitaria Internacional de La Rioja
54. Universidad América
55. Universidad Militar Nueva Granada (UMNG)
56. Universidad Cooperativa de Colombia (UCC)
57. Universidad del Norte
58. Corporación Universitaria Minuto de Dios – UNIMINUTO
59. Fundación Universitaria de Popayán
60. Universidad Nacional Abierta y a Distancia (UNAD)

Costa Rica

61. University of Costa Rica

Czech Republic

62. University of West Bohemia, Pilsen

Ecuador

63. Technical University of Ambato
64. Universidad San Francisco de Quito

Egypt

65. Zagazig University
66. Fayoum University
67. British University in Egypt

El Salvador

68. Escuela Superior de Economía y Negocios (ESEN), El Salvador

Ethiopia

69. Bahir Dar Institute of Technology
70. Addis Ababa University Institute of Technology
71. Mekelle University

Finland

72. University of Vaasa

France

73. IESEG School of Management
74. Lorraine University, Metz

Germany

75. Technical University Applied Sciences Augsburg

Ghana

76. Technological Education Institute (TEI), Larissa
77. Ho Technical University
78. University of Ghana

Greece

79. Accra Technical University

Haiti

80. Université Quisqueya

India

81. College of Eng and Tech, Bhubaneswar, Odisha, India
82. College of Engineering Guindy, Chennai
83. Guru Nanak Dev Engineering College
84. Pandit Dendayal Petroleum Univ., Gujrat
85. P.D.A. College of Engineering, Gulbarga
86. Vellore Institute of Technology
87. Vidya Jyothi Institute of Technology, Hyderabad
88. Universal College of Eng & Tech (UCET), Guntur
89. National Institute of Technology (NIT), Warangal
90. Jawaharlal Nehru Technological University Hyderabad
91. IITS, India
92. Birla Institute of Tech & Sciences (BITS Pilani)
93. Amrita School of Business – Bangalore
94. Amrita school of Arts and Sciences, Mysuru
95. Amrita School of Business, Coimbatore
96. Aligarh Muslim University, Aligarh
97. Mahant Bachittar Singh College Eng & Tech, Jammu
98. Baba Banda Singh Bahadur Eng College
99. Ramaiah University of Applied Sciences
100. Nawab Shah Alam Khan College Eng & Tech (NSAKCET)
101. Global Institute Of Eng and Technology, Hyderabad
102. VNR Vignana Jyothi Institute of Eng and Technology
103. Siddhartha Institute of Engineering & Technology
104. Osmania University – The University College of Eng
105. VJTI Mumbai – Veermata Jijabai Technologic. Institute
106. BML Munjal University, Gurugram, India
107. AKTU University, Kanpur, India
108. Mufakkhamjah College of Eng. and Tech, Hyderabad
109. Methodist College of Engineering and Technology

110. Vardhaman College of Engineering

111. Dr B R Ambedkar National Institute of Technology, Jalandhar

112. B. V. Raju Institute of Technology, Vishnupur, Narsapur

113. Anjuman College of Engineering and Technology

114. Bharatiya Eng. Science & Technology Innovation University, (BESTIU), Gownivaripalli, Gorantla, Andhra Pradesh

115. HITAM - Hyderabad Institute of Technology and Management

116. JNTUH University College of Management Hyderabad, JNTUH

117. Siddaganga Institute of Technology, Tumakuru, Karnataka

Indonesia

118. Atma Jaya Catholic University
119. Bina Nusantara University (Binus), Indonesia
120. Institut Teknologi Bandung
121. Institut Teknologi Sepuluh Nopember (ITS)
122. Sampoerna University, Jakarta
123. Shipbuilding Institute of Polytechnic Surabaya
124. Tarumanagara University
125. UIN Sultan Syarif Kasim, Riau
126. Universitas Diponegoro (Undip)
127. Universitas Gadjah Mada (UGM)
128. Universitas Iqra Buru
129. UIN Sunan Kalijaga, Yogyakarta
130. Universitas Islam Negeri Alauddin Makassar
131. Universitas Sebelas Maret (UNS), Surakarta
132. University of Indonesia
133. Universitas Sumatera, Utara Medan
134. Narotama University, Surabaya
135. Universitas Pakuan, Bogor
136. Trilogi University
137. Universitas Muhammadiyah Riau
138. Universitas Muhammadiyah Palembang
139. Universitas Putera Batam, Kepulauan Riau

Ireland

140. Atlantic Technological University

Iran

141. MehrAstan University, Guilan
142. University of Eyvanekey
143. Technical and Vocational University (TVU)
144. University of Tehran

Iraq

145. Babylon University

Israel

146. Sapir Academic College
147. Shamoon College of Engineering (SCE), Ashdod

Italy

148. University of Bologna
149. University of Salento

Japan

150. Ashikaga University
151. Gunma University

Jordan

152. Hashemite University

Kenya

153. Kenyatta University, Nairobi

Kuwait

154. Gulf University of Science and Technology

Libya

155. Libyan Academy

Malaysia

156. Universiti Malaysia Sabah (UMS)
157. Universiti Putra Malaysia (UPM)
158. Universiti Teknologi Malaysia (UTM)
159. Universiti Tun Hussein Onn Malaysia (UTHM)
160. Universiti Utara Malaysia (UUM)
161. University of Malay (UM)

IEOM Student Chapters around the World

Mexico

162. Instituto Politécnico Nacional (IPN), Mexico
163. Universidad del Caribe, Cancun
164. Tecnológico de Monterrey, Campus Monterrey
165. Universidad Industrial de Santander
166. Universidad Iberoamericana
167. Universidad de Guanajuato
168. UJED, Mexico (#297)

Morocco

169. Akhawayn University
170. Ecole Mohammadia d'Ingénieurs (EMI)
171. Sidi Mohamed Ben Abdellah University of Fez
172. N. School of Appl Sci. Kenitra, Ibn Tofail Univ
173. Ecole Supérieure De Technologie, Fez
174. INPT

Mozambique

175. Eduardo Mondlane University

Namibia

176. National Univ. of Sci. and Tech. in Windhoek

Nepal

177. Kathmandu University
178. Tribhuvan University

Nigeria

179. Covenant University
180. University of Ibadan
181. University of Nigeria, Nsukka
182. University of Benin
183. Olabisi Onabanjo University

Oman

184. SQU - Sultan Qaboos University
185. MEC - Middle East College
186. GCET – Global College of Engineering and Technology

Pakistan

187. Dawood University of Eng and Technology, Karachi
188. Government College University Faisalabad
189. Mehran University of Eng and Tech, Jamshoro, Sindh
190. Riphah International University, Lahore Campus
191. University of Engineering and Technology, Lahore
192. UOT – Nowshera
193. Information Technology Univ. of the Punjab, Lahore
194. Sindh Institute of Management & Technology (SIMT), Karachi
195. NED University of Engineering & Technology, Karachi

Panama

196. Quality Leadership University (QLU) - #298
197. ULatina

Papua New Guinea

198. Papua New Guinea University of Technology

Paraguay

199. National University of Asuncion
200. Universidad del Cono Sur de las Américas
201. Colegio Técnico Nacional, Asunción

Peru

202. National Univ of San Antonio Abad, Cusco
203. Universidad de Lima (ULima)
204. Universidad Peruana de Ciencias Aplicadas (UPC)
205. Universidad Ricardo Palma (URP)
206. Pontificia Universidad Católica del Perú (PUCP)
207. Universidad Privada del Norte (UPN)
208. Universidad Continental (UContinental)
209. Universidad de Ingeniería y Tecnología (UTEC)
210. Universidad Nacional de Ingeniería (UNI)
211. University of San Martín de Porres (USMP)
212. Universidad Nacional Tecnológica de Lima Sur

213. Universidad Nacional de San Agustín de Arequipa

Philippines

214. Bulacan State University, Malolos City, Bulacan
215. LPU Laguna
216. Mapua University
217. De La Salle University (DLSU) Manila
218. Adamson University
219. CEBU Technological University
220. University of San Jose-Recoletos
221. Quezon City University
222. De La Salle Lipa

Portugal

223. ISEL – Instituto Superior De Engenharia de Lisboa
224. FCT NOVA

Puerto Rico

225. Polytechnic University of Puerto Rico

Qatar

226. Qatar University
227. Hamad bin Khalifa University, Doha

Saudi Arabia

228. Alfaisal University
229. Effat University
230. King Abdulaziz University (KAU)
231. King Abdulaziz University, Rabigh
232. King Fahd University of Petroleum and Minerals (KFUPM)
233. King Khalid University, Abha
234. King Saud University (KSU)
235. Umm Al-Qura University (UQU)
236. Princess Nourah University (PNU)
237. Prince Sattam Bin Abdulaziz University
238. Prince Sultan University (PSU)
239. Taibah University
240. University of Tabuk
241. Taibah University
242. University of Business and Technology
243. King Khalid University, Abha
244. University of Bisha
245. Taif University
246. Al-Yamamah University
247. Al-Yamamah University, Al Khobar
248. Mustaqbal University
249. AlMaarefa University, Riyadh

Singapore

250. SUSS

South Africa

251. Durban University of Technology (DUT)
252. Tshwane University of Technology (TUT)
253. University of Johannesburg (UJ)
254. University of South Africa (UNISA)
255. Vaal University of Technology (VUT)
256. CPUT

Sri Lanka

257. University of Kelaniya
258. University of Peradeniya

Sudan

259. Sudan University of Science and Tech Khartoum

Thailand

260. Chulalongkorn University, Bangkok
261. Chiang Mai University

Turkey

262. Turkish-German University
263. Uskudar University

UAE

264. University of Science & Technology of Fujairah

UK

265. University of Derby
266. University of the West of England, Bristol

USA

267. Central Connecticut State University
268. Eastern Michigan University
269. Lawrence Technological University, Michigan
270. University of the District of Columbia
271. Indiana State University
272. Florida Polytechnic University
273. Buffalo State College
274. Southern Arkansas University
275. Western Michigan University
276. Loyola University Chicago
277. Minnesota State University, Mankato
278. Central State University
279. University of Central Florida
280. Minnesota State University, Mankato
281. University of Texas – San Antonio (UTSA)
282. Capitol Technological University
283. Frostburg State University
284. Business School of Southern Arkansas University
285. Binghamton University State University of New York City
286. Georgia Tech (# 296)

Venezuela

287. Catholic University Andrés Bello, Caracas

Vietnam

288. CFVG, Ho Chi Minh City, Vietnam

Zambia

289. University of Zambia
290. Copperbelt University
291. Evelyn Hone College

Zimbabwe

292. University of Zimbabwe, Harare
293. National University of Science and Technology
294. Harare Institute of Technology (HIT)
295. Women's University in Africa (WUA)
296. Chinhoyi University of Technology (CUT)

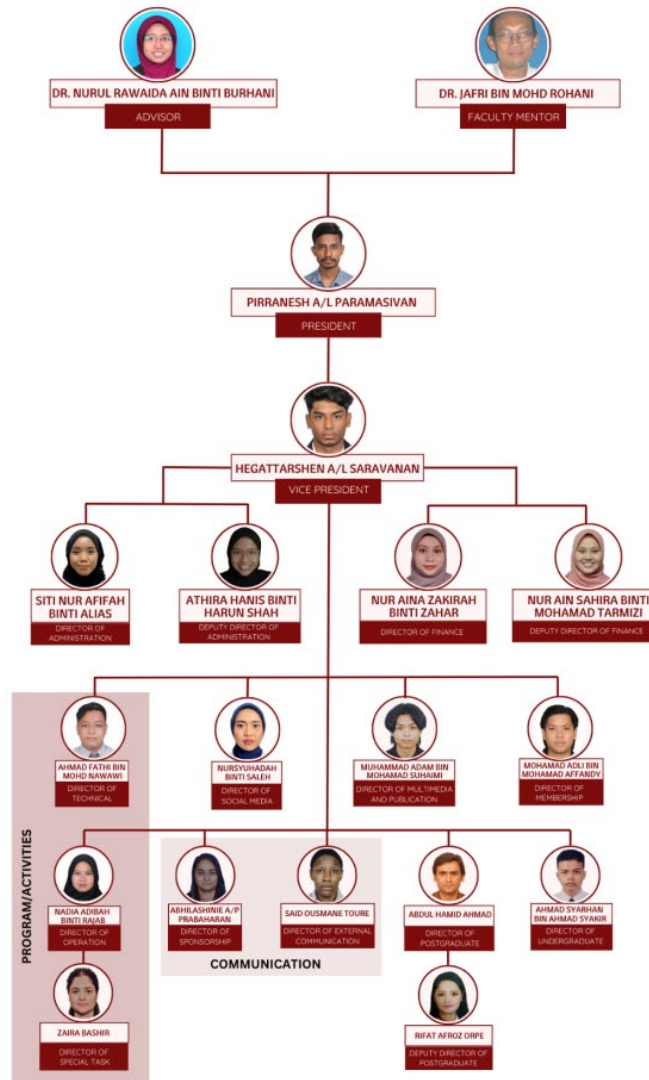
High School Chapters

297. Bay Area of San Francisco & San Jose, CA
298. Arongghata, Khulna, Bangladesh
299. Ironwood High School, Glendale, Arizona, USA

IEOM Student Chapter at University of Tabuk, Saudi Arabia



IEOM ORGANIZATIONAL CHART

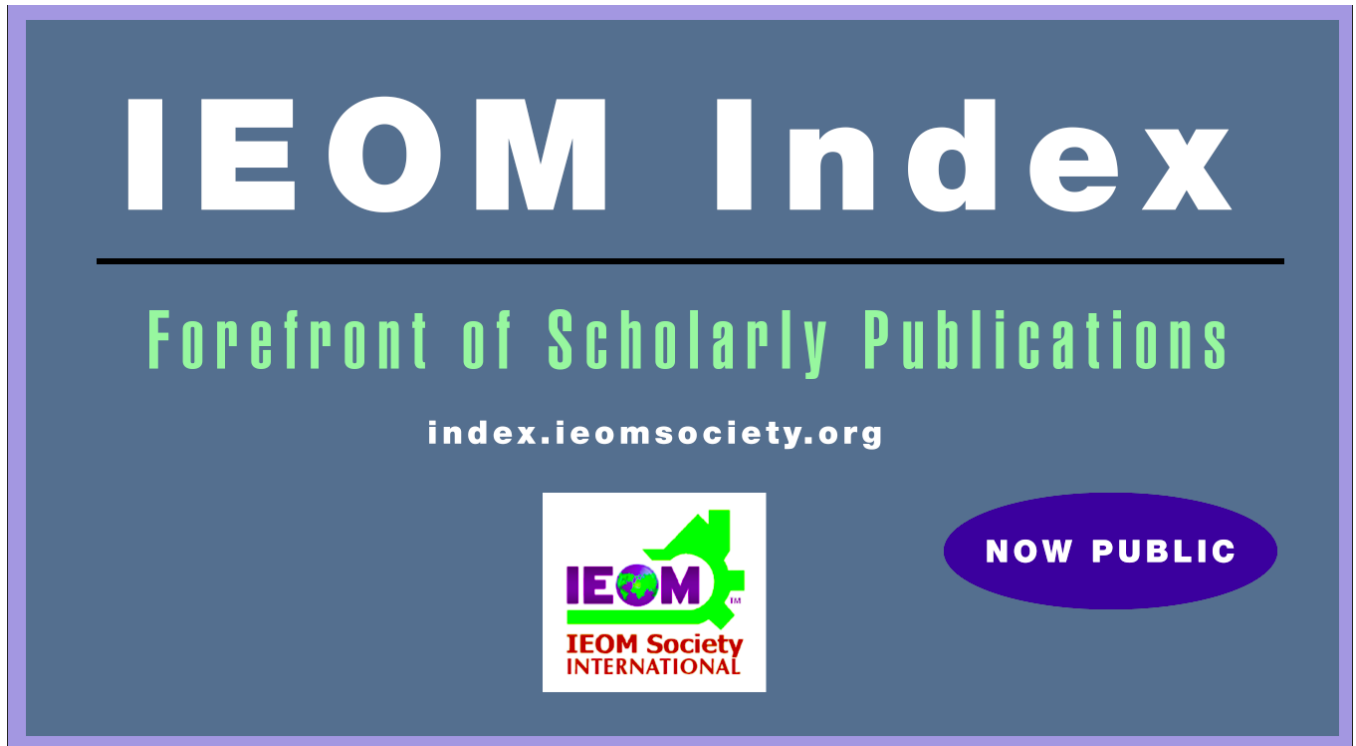


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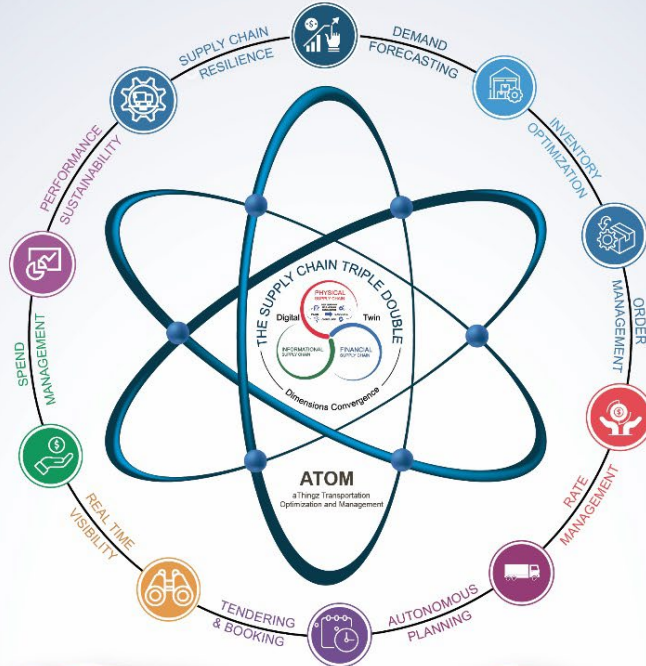
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Upcoming IEOM Conferences



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 Milwaukee, Wisconsin, USA, June 9-11, 2026
 Host: University of Wisconsin, Milwaukee



16th International Conference on Industrial Engineering and Operations Management
 June 23-26, 2026, Ankara, Turkey
 Host and Venue: Gazi University, Ankara



9th European Conference on Industrial Engineering & Operations Management
 Barcelona, Spain, July 20-22, 2026
 Host: EUSS School of Engineering



3rd World Congress on Industrial Engineering & Operations Management
 Irvine, California, USA, October 13-15, 2026
 Venue: Courtyard by Marriott Irvine Spectrum



Theme: Advanced Manufacturing and Industrial AI Innovation



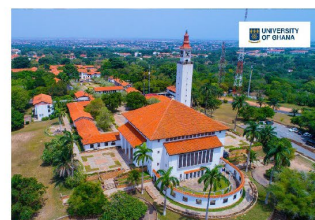
4rd GCC International Conference on Industrial Engineering & Operations Management
 Doha, Qatar, December 1-3, 2026
 Host & Venue: University of Qatar



6th IEOM India International Conference on Industrial Engineering and Operations Management
 Bangalore, India, November 5-7, 2026
 Host: Bharatiya Engineering, Science & Technology Innovation University (BESTIU)



8th African Conference on Industrial Engineering & Operations Management
 Accra, Ghana, May 11-13, 2027
 Host: University of Ghana



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