Tenth International Conference on Industrial Engineering and Operations Management

Hyatt Regency Hotel

Dubai, United Arab Emirates

March 10–12, 2020

Sponsor Universities

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- Zayed University
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Organizer

IEOM Society International

IEOM Society International, 21415 Civic Center Dr., Suite 217, Southfield, Michigan 48076, USA
Phone: 1-248-450-5660, Email: info@ieomsociety.org
Welcome to the 10th Annual IEOM Society International Conference
Dubai, United Arab Emirates

To All Conference Attendees:

On behalf of the IEOM Society International, we would like to welcome you to Dubai, United Arab Emirates and the 10th Annual International Conference on Industrial Engineering and Operations Management. This unique international conference provides a forum for academics, researchers and practitioners from many industries to exchange ideas and share recent developments in the fields of industrial engineering and operations management. This diverse international event provides an opportunity to collaborate and advance the theory and practice of major trends in industrial engineering and operations management.

There were more than 700 papers/abstracts submitted from 60 countries, and after a thorough peer review process, approximately 470 have been accepted. The program includes many cutting-edge topics of industrial engineering and operations management. The theme of the conference is "Operational Excellence in the era of Industry 4.0".

This conference will address many of the issues concerning continuous improvement for quality and service. Our keynote speakers will address some of these issues:

- Dr. Mr. Osman Sultan, CEO of Emirates Integrated Telecommunications Company (du), UAE
- Dr. Oliver Elbracht, Vice President Siemens / Managing Partner Siemens Consulting Middle East, Dubai, United Arab Emirates
- Dr. Rubén Elvira Herranz, Services Program Manager, Airbus Defence and Space, Military Aircraft, Madrid, Spain
- Professor Ammar Kaka, Provost, Heriot-Watt University Dubai and Vice-Principal (Dubai), Heriot-Watt University, Dubai, UAE
- Dr. Ibrahim Alharkan, General Director for King Salman Institute for Entrepreneurship (KSIE), King Saud University, Riyadh
- Dr. Ali Diabat, Global Network Professor of Civil and Urban Engineering, New York University Abu Dhabi, UAE
- Dr. Nicklas Dahlstrom, Human Factors Manager, Emirates Airlines, Dubai, UAE
- Dr. Mohammad T. Khasawneh, Professor & Chair, Systems Science and Industrial Engineering, State University of New York at Binghamton, USA
- Harry Kasuma (Kiwi) Aliwarga, CEO and Co-Owner, UMG Myanmar, Indonesia
- Dr. Yousef Al-Assaf, President, Rochester Institute of Technology (RIT) – Dubai, Dubai Silicon Oasis, Dubai, UAE
- Prof. Dr. Bhaskar Bhandarkar, Director General, Institution for Innovation, Industrial Engineering & Entrepreneurship, Principal Investigator IUSSTF India, Former Chairman of IIIE
- Dr. Sayyad Zahid Qamar, Associate Professor, Mechanical and Industrial Engineering Department, College of Engineering, Sultan Qaboos University, Al-Khoudh, Sultanate of Oman
- Professor Charles Mbohwa, Pro-Vice Chancellor Strategic Partnerships and Industrialization, University of Zimbabwe

The 17th IEOM Society Global Engineering Education session will feature distinguished speakers who will discuss the workforce readiness and engineering education challenges and opportunities. The Industry 4.0 will showcase major topics including IoT, AI, data analytics, iCloud, cybersecurity, automation, digital manufacturing and MSV. Industry Solutions will showcase best industry practices as well as shared experiences. Six panel sessions have been planned. They are: Industry 4.0, Global Engineering Education, Supply Chain and Logistics, Lean Six Sigma, Women in Industry and Academia and Healthcare Improvement.

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

University of Sharjah and Zayed University, conference hosts, welcome all participants to Dubai. The IEOM Society Conference Planning Committee hopes you will enjoy Dubai and all that it has to offer with its diverse culture, rich history and exceptional cuisine.

Lastly, our sincere best wishes to you all for a successful conference and an enjoyable stay in Dubai.

Enjoy the conference!
Conference Program

March 8-9, 2020 (Sunday & Monday), 8:00 am - 5:00 pm: Lean Six Sigma Green Belt Certification Workshop
- SPEAKER: Dr. Saso Krstovski, MBB, Lean Manufacturing Coach / Six Sigma Master Black Belt, Van Dyke Transmission Plant, Ford Motor Company, Michigan, USA

March 9, 2020 (Monday)
13:00 – 20:00 Conference Registration

March 10, 2020 (Tuesday)
07:00 – 17:00 Registration
08:00 – 09:30 Parallel Sessions – Rooms 1-8
09:40 – 10:20 Opening Keynote I: Mr. Osman Sultan, CEO of Emirates Integrated Telecommunications Company (du), UAE
10:20 – 11:00 Opening Keynote II: Dr. Oliver Elbracht, Vice President Siemens / Managing Partner Siemens Consulting Middle East, Dubai, United Arab Emirates – Ballroom
11:00 – 11:30 Networking Break at Exhibition Hall
11:30 – 12:10 Tuesday Keynote III: Dr. Rubén Elvira Herranz, Services Program Manager, Airbus Defence and Space, Military Aircraft, Madrid, Spain – Ballroom
12:10 – 12:50 Tuesday Keynote IV: Professor Ammar Kaka, Provost, Heriot-Watt University Dubai and Vice-Principal (Dubai), Heriot-Watt University, Dubai, UAE – Ballroom
13:00 – 14:30 Buffet Lunch and IEM Student Chapter Presentations - KFUPM, Zagazig University, University of Johannesburg and University of Science & Technology of Fujairah (USTF), UAE – Ballroom
14:30 – 16:00 Parallel Sessions – Rooms 1-8
16:00 – 16:30 Networking Break
16:30 – 18:00 Parallel Sessions – Rooms 1-8
18:00 – 22:00 IEOM Global Council Meeting

March 11, 2020 (Wednesday)
07:00 – 17:00 Registration
08:00 – 09:30 Parallel Sessions – Rooms 1-8
09:40 – 10:20 Wednesday Morning Keynote I: Dr. Ibrahim Alharkan, General Director for King Salman Institute for Entrepreneurship (KSIIE), King Saud University, Riyadh, Saudi Arabia – Ballroom
10:20 – 11:00 Wednesday Morning Keynote II: Dr. Ali Diabat, Global Network Professor of Civil and Urban Engineering, New York University Abu Dhabi, Abu Dhabi, UAE – Ballroom
11:00 – 11:30 Networking Break at Exhibition Hall
11:30 – 12:10 Wednesday Keynote III: Dr. Nicklas Dahlstrom, Human Factors Manager, Emirates Airlines, Dubai, UAE
12:10 – 12:50 Wednesday Keynote IV: Dr. Mohammad T. Khasawneh, Professor & Chair, Systems Science and Industrial Engineering, State University of New York at Binghamton, USA – Ballroom
13:00 – 14:30 Networking Lunch Buffet
14:30 – 16:00 Parallel Sessions – Rooms 1-8
16:00 – 16:30 Break
16:30 – 18:00 Parallel Sessions – Rooms 1-8
18:00 – 20:00 Poster Session, High School STEM Competition, Sr. Design Poster Competition

March 12, 2020 (Thursday)
07:00 – 17:00 Registration
08:00 – 09:30 Parallel Sessions – Rooms 1-8
09:40 – 10:20 Thursday Morning Keynote I: Dr. Yousef Al-Assaf, President, Rochester Institute of Technology (RIT) – Dubai, Dubai Silicon Oasis, Dubai, United Arab Emirates – Ballroom
10:20 – 11:00: Thursday Morning Keynote II: Prof. Dr. Bhaskar Bhandarkar, Director General, Institution for Innovation, Industrial Engineering & Entrepreneurship, Principal Investigator IUSSTF India, Former Chairman of IIIE – Ballroom
11:00 – 11:30 Networking Break at Exhibition Hall
11:30 – 12:00 Keynote: Dr. Sayyad Zahid Qamar, Associate Professor, Mechanical and Industrial Engineering Department, College of Engineering, Sultan Qaboos University, Al-Khoudh, Sultanate of Oman
11:30 – 13:10 Parallel Sessions – Rooms 1-8
13:00 – 14:30 Buffet Lunch and IEM Student Chapter Presentations - MAPUA University, University of West Bohemia, Pilsen, P.D.A. College of Engineering, India, UNS, Indonesia and Shipbuilding Institute of Polytechnic Surabaya – Ballroom
14:30 – 16:00 Parallel Sessions – Rooms 1-8
16:00 – 16:30 Networking Break
16:30 – 18:00 Parallel Sessions – Rooms 1-8
19:00 – 22:00 CONFERENCE AWARD DINNER and Fellows Recognition – Ballroom
Awards Keynote - Professor Charles Mbohwa, Pro-Vice Chancellor Strategic Partnerships and Industrialisation, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Keynote Speakers

Opening Keynote I - Tuesday, March 10 2020, 9:40 – 10:20 am

Mr. Osman Sultan
CEO
Emirates Integrated Telecommunications Company, (du)
UAE

Title of Keynote address: The Enablers of the Perfect Storm: The 4th Industrial Revolution

As the founding CEO of Emirates Integrated Telecommunications Company (du) since 2005 in the UAE, and the founding CEO of Egyptian Company for Mobile Services (Mobinil) in Egypt from 1998 to 2005, Osman Sultan set during the course of his career several strategies translating the profound transformations that the telecom and information sectors have been creating in our lives. As an influential figure and a mentor in the telecommunications sector, he is proud to have groomed close to 20 talented individuals who became CEOs of various operations across all continents. Osman Sultan is a visionary leader and a notable public speaker in the field. His distinguished achievements ranked him as one of the most powerful executives in the telecoms industry in the world twice on «GTBPower100 List» in both 2010 and 2011. Osman Sultan brings 35 years of leadership, rich with achievements in the telecom business. His vast knowledge and expertise in the field as early as the pre-internet period, placed him as one of the pioneers in France, Europe, the USA, Japan and the entire MENA region.

Opening Keynote II - Tuesday, March 10, 2020, 10:20 – 11:00 am

Dr. Oliver Elbracht
Vice President Siemens / Managing Partner Siemens Consulting Middle East
Dubai, United Arab Emirates

As the Managing Partner for Siemens Consulting Middle East, Dr. Oliver Elbracht has a strong background in management consulting, digital and business transformation. During the course of his career, he gained deep consulting experience in business strategy & development, AI, Predictive Analytics, BDAA, digital transformation (tech & business), innovation, IT system design, e-commerce, sales & distribution, cybersecurity, greenfield operations. Through his research in computational physics, he has mastered a broad set of computer science knowledge & techniques including machine learning & algorithms, statistical models, and coding languages. Further, he has developed broad experience along the value chain in Telecommunication & Technology, IT, Infrastructure & Transportation, Government/Public Services, Automotive and Financial Services. He has been working in 15+ countries through international engagements in Europe (e.g. Germany, Austria, Sweden, Turkey), Middle East (e.g. Bahrain, Saudi Arabia, UAE, Kuwait, Qatar) and Asia (e.g. Taiwan, Indonesia, Myanmar, Hongkong, Kazakhstan).

Keynote III - Tuesday, March 10, 2020, 11:30 – 12:10 am

Dr. Rubén Elvira Herranz
Services Program Manager
Airbus Defence and Space - Military Aircraft
Madrid, Spain

Dr. Rubén Elvira Herranz is teaching in various universities in Spain (Carlos III University in Madrid, Instituto de Estudios Bursátiles, Technical University of Madrid) and Business School (Institute for Advance Management – CEU) in the areas of Project Management, Operations Management, Finance and Geoconomy. As well he has published some of his works in top ranked journals.

In his professional life Dr. Elvira is Program Manager for Middle East in Airbus Defence & Space.

Dr. Elvira is holding a PhD in Business Administration, various MSc (Industrial Management, Business Administration, Machines and Transportation) and a Bachelor in Aerospace Engineering, all from various universities. Also is certified as PMP ®.

Keynote IV - Tuesday, March 10, 2020, 12:10 – 12:50 am

Professor Ammar Kaka
Provost, Heriot-Watt University Dubai and Vice-Principal (Dubai), Heriot-Watt University
Dubai, UAE

Transforming Construction through Smart Technologies

Professor Ammar Kaka is the Provost of Heriot Watt University Dubai Campus. Within Heriot Watt University, he holds the position of Vice Principal and the Professor of Construction Economics and Management. In 2008 he was also allocated the title the William Watson Chair of Building Engineering. Professor Kaka’s contribution to the transnational education in general and to the Dubai’s education hub in particular has been immense. With a student population of 4000 and a growing research culture, the Dubai campus is currently recognised as one of UK’s leading provider of transnational education. Professor Kaka has an international reputation for research on the assessment, planning and control of construction projects. Author of more than a hundred research papers, he has held numerous funded research grants with impact demonstrated by the extent of citation and direct
Ibrahim Al-Harkan, is an associate professor of industrial engineering at King Saud University, Saudi Arabia. He holds a B.S. in Industrial Engineering from King Saud University, M.S. and Ph.D. in Industrial Engineering from The University of Oklahoma, USA. His specialized areas are production planning and control, modeling and simulation of industrial and service systems, and applied operations research. Dr. Al-Harkan, is one of the founder of the Saudi Industrial Engineering Society (SIES), one of the founders of the Industrial Engineering Council at the Saudi Council of Engineers, One of the founders of the Saudi Chapter of Institute of Industrial engineers, and established the Department of Industrial Engineering at the college of Engineering in King Saud University. Dr. Al-Harkan was the Chairman for the Mechanical Engineering Department for three years and half, also the Chairman for Industrial Engineering Department for two years, in addition he was the dean for graduate studies for five years. Dr. Al-Harkan, was the Vice Rector Assistant for Graduate studies and Scientific Chairman for the Mechanical Engineering Department at the college of Engineering in King Saud University. Dr. Al-Harkan was the Vice Rector Assistant for Graduate studies and Scientific Research for Knowledge Exchange and Technology Transfer for one year. Dr. Al-Harkan, was the General Director of External Joint Supervision Program (EJSP) for ten years. Dr. Al-Harkan, is currently is the General Director for Entrepreneurship Institute (EI) which contains the Innovation Center (Khota), Small and Medium Enterprises Services Center (SMESC), and Funding Services Center (FSC).

Tuesday Lunch Buffet, March 10, 2020, 1:00 – 2:30 pm

IEOM Student Chapter Presentations – Ballroom
KFUPM, Zagazig University, University of Johannesburg and University of Science & Technology of Fujairah (USTF), UAE

Keynote I - Wednesday, March 11, 2020, 9:40 – 10:20 am

Dr. Ibrahim Alharkan
Associate Professor at Industrial Engineering Department, College of Engineering
General Director for King Salman Institute for Entrepreneurship (KSIE)
Director of Applied Engineering Management Program (AEMP)
King Saud University, Riyadh, Saudi Arabia

Ibrahim Al-Harkan, is an associate professor of industrial engineering at King Saud University, Saudi Arabia. He holds a B.S. in Industrial Engineering from King Saud University, M.S. and Ph.D. in Industrial Engineering from The University of Oklahoma, USA. His specialized areas are production planning and control, modeling and simulation of industrial and service systems, and applied operations research. Dr. Al-Harkan, is one of the founder of the Saudi Industrial Engineering Society (SIES), one of the founders of the Industrial Engineering Council at the Saudi Council of Engineers, One of the founders of the Saudi Chapter of Institute of Industrial engineers, and established the Department of Industrial Engineering at the college of Engineering in King Saud University. Dr. Al-Harkan was the Chairman for the Mechanical Engineering Department for three years and half, also the Chairman for Industrial Engineering Department for two years, in addition he was the dean for graduate studies for five years. Dr. Al-Harkan, was the Vice Rector Assistant for Graduate studies and Scientific Research for Knowledge Exchange and Technology Transfer for one year. Dr. Al-Harkan, was the General Director of External Joint Supervision Program (EJSP) for ten years. Dr. Al-Harkan, is currently is the General Director for Entrepreneurship Institute (EI) which contains the Innovation Center (IC), Technology Advancement and Prototyping Center (TAP), Intellectual Property and Licensing Program (IPTL), Incubator and Accelerator Center (Khota), Small and Medium Enterprises Services Center (SMESC), and Funding Services Center (FSC).

Morning Keynote II - Wednesday, March 11, 2020, 10:15 – 11:00 am

Dr. Ali Diabat
Global Network Professor of Civil and Urban Engineering
New York University Abu Dhabi
Abu Dhabi, UAE

Dr. Ali Diabat is a Global Network Professor of Engineering at New York University Abu Dhabi. His research focuses on different applications of optimization and operations research: in particular, logistics and supply chain management, healthcare management, and production planning. He has published over 100 research journal papers and over 30 conference papers in leading journals and international conference proceedings, and his research has received about 5 million dollars of grant funding from different industries and collaborative proposals with academic institutions. Dr. Diabat has received several Excellence in Teaching awards, including an Outstanding Graduate Instructor Award and an Excellence in Teaching Award from Purdue University, in 2004 and 2006, respectively. He was the recipient of the 2012 Excellence in Teaching Award from Masdar Institute, and in 2014, he also received the Best Faculty Research Award from the Department of Engineering Systems and Management at Masdar Institute. Dr. Diabat currently serves as an Associate Editor of the Journal of Manufacturing Systems, an Area Editor of the Journal of Computers and Industrial Engineering, and an Engineering Editor of the Arabian Journal for Science and Engineering.

11:00 – 11:30 Networking Break

Keynote III - Wednesday March 11, 2020, 11:30 am – 12:10 pm

Dr. Nicklas Dahlstrom
Human Factors Manager
Emirates Airlines, Dubai, UAE

Well Done is Better than Well Said – Improving Safety and Efficiency with Human Factors

Dr. Nicklas Dahlstrom is Human Factors Manager at Emirates Airlines and has been with the airline since 2007. In this position he has overseen CRM training in a rapidly expanding airline and also been part of efforts to integrate Human Factors in the organisation. He has also done work for other organisations, especially the UN World Food Program’s Aviation Safety unit and is currently a member of ICAO’s Human Performance Task Force. In 2018 he received Civil Aviation Training magazine’s Pioneer award for his work in the aviation industry. Nicklas also holds the position of Assistant Professor at Lund University School of Aviation in Sweden and was previously a researcher and instructor there, working mainly on projects related to safety and Human Factors in aviation as well as in other areas, such as maritime transportation and health care. Nicklas did his PhD with Professor Sidney Dekker as supervisor and worked with him on research projects until he joined Emirates. His research areas in aviation have been mental workload, training and simulation and he has written research
articles and book chapters on Human Factors and CRM as well as delivered invited presentations, lectures and training in more than twenty different
countries. Previous to his career in academia and civil aviation Nicklas was an officer and meteorologist in the Swedish Air Force, where he also
underwent flight training on the SAAB 105 twin engine trainer jet aircraft. He worked in the Swedish Air Force at the Air Base F10 in as well as at
the Swedish Fighter Pilot School F5, where he was also an instructor for both pilots and meteorologists.

Keynote IV - Wednesday, March 11, 2020, 12:10 – 12:50 pm

Dr. Mohammad T. Khasawneh, Ph.D.
Professor & Chair, Systems Science and Industrial Engineering
Associate Director, Watson Institute for Systems Excellence
Director, Healthcare Systems Engineering Center
Graduate Program Director, Executive Master of Science in Health Systems
Thomas J. Watson School of Engineering and Applied Science
State University of New York at Binghamton
Binghamton, New York 13902, U.S.A.

Dr. Mohammad Khasawneh is a Professor and Chair of Systems Science & Industrial Engineering at Binghamton University. He received his Ph.D. in Industrial Engineering from Clemson University, South Carolina, in August 2003, and his B.S. and M.S. in Mechanical Engineering from Jordan University of Science and Technology, Jordan, in 1998 and 2000, respectively. Dr. Khasawneh’s research is focused on healthcare systems engineering, operations management, and data science. Dr. Khasawneh currently serves as Associate Director for the Watson Institute for Systems Excellence (WISE), an institute for advanced studies that generates 2.5-3 million US$ in research funds annually. In addition, he currently serves as the founding director of the Healthcare Systems Engineering Center, an organized research center (ORC) at Binghamton University.

Since 2003, Dr. Khasawneh has been leading a wide spectrum of projects with U.S. hospital systems that focus on applied research in the areas of healthcare systems engineering, operational excellence, and data science. His health systems engineering center generates over one million US$ annually in sponsored research from various healthcare and hospital systems. Building on a successful research program and an academic concentration/minor, at the graduate/undergraduate levels. Dr. Khasawneh developed a 12-month Executive Master of Science with a Health Systems Concentration, which has been offered in Manhattan since 2013. He has also been instrumental in developing a new M.S. degree program in Healthcare Systems Engineering. Over the years, Dr. Khasawneh presented his research at various national and international conferences, including China, India, Mexico, Jordan, Korea, Thailand, Japan, Turkey, Indonesia, and Canada. Dr. Khasawneh’s research activities thus far have led to 50+ refereed journal articles, 100+ conference articles, one patent, and two new invention disclosures. In addition, his sponsored research efforts thus far have resulted in over ten (10) million US$ in external funding and over 39 million US$ in software/equipment grants.

In 2006, Dr. Khasawneh received a U.S. Air Force Summer Faculty Fellowship to evaluate the use of multi-sensory cues to improve the landing of unmanned aerial vehicles. In 2009, he received another fellowship from the U.S. Air Force Office of Scientific Research to design ergonomic computer workstations for very large displays. Dr. Khasawneh received the State University of New York (SUNY) Chancellor’s Award for Excellence in Teaching in 2011, the University Award for Outstanding Graduate Director in 2015, and the University Award for Excellence in International Education in 2016. He is a member of the Alpha Pi Mu and Alpha Epsilon Lambda honor societies. Dr. Khasawneh was also recently honored with the Diplomate status with the Society for Health Systems (SHS), a professional society within the Institute of Industrial and Systems Engineers (IISE) that supports the industrial engineering profession and individuals involved with improving quality and productivity within healthcare. Dr. Khasawneh also holds an honorary visiting professor position with the Industrial Engineering Department at Hebei University of Technology in Tianjin, China.

Lunch Keynote - Wednesday, March 11, 2020, 1:30 – 2:00 pm

Harry Kasuma (Kiwi) Aliwarga
Chief Executive Officer and Co-Owner
UMG Myanmar
Karet Kuningan Jakarta, Indonesia

Harry Kasuma (Kiwi) Aliwarga is chief executive officer and co-owner of UMG Myanmar, one of the country’s leading business conglomerates. Born in Jakarta, Indonesia, Mr. Aliwarga graduated from the Institute of Technology of Indonesia (ITI) in 1992 with a degree in industrial engineering and later received a master’s degree in civil engineering at the Asia Institute of Technology in Thailand. Kiwi Aliwarga began his professional career in the business development division at Astra International, one of Indonesia’s largest traded companies, where he worked from 1992 to 1995. He went on to become business development manager at United Tractors–Indonesia (UT) before founding UMG Myanmar in 1998 with his partner MarLar Win. Mr. Aliwarga has set the ambitious goal of making UMG a billion-dollar company by 2020, by relying on three essential pillars: people, leadership, and the relentless pursuit of excellence.
Keynote I - Thursday, March 12, 2020, 9:40 – 10:20 am

Yousef Al-Assaf  
President, Rochester Institute of Technology (RIT) – Dubai  
Dubai Silicon Oasis, Dubai, United Arab Emirates

How industry 4.0 is transforming Industrial Engineering?

Dr. Al-Assaf had his PhD from Oxford University and leadership training from Cornell University. He is a widely published and academic and senior education management professional with extensive international experience. He is currently President of Rochester Institute of Technology-Dubai, a leading not for profit international branch of RIT Rochester, New York. RIT Dubai University is established in conjunction with the Dubai Government in Dubai Silicon Oasis. Prior to this he was Dean of the College of Engineering at the American University of Sharjah where he was one of the founding members of the electrical engineering and computer engineering programs. During his tenure at RIT Dubai, he has ensured that the university plays a major role in the ecosystem of Dubai Silicon Oasis and supporting the strategic plans of UAE and Dubai. Introduced a number of new programs, certifications and initiatives to meet the needs of public and technology partners including: Smart City Sciences, Data Analytics, Emerging Technologies, Corporate and Customer Happiness, Future Foresight and Strategic Planning, Computing Security and Sustainability among others. Dr. Al-Assaf’s research focuses on using soft computing to model and control various industrial, business and medical systems. Applications include materials modeling and classification, prostheses control, industrial quality control and optimization. His industrial experience is in the areas of adaptive and predictive control, soft computing and industrial instrumentation and control.

Keynote II - Thursday, March 12, 2020, 10:20 – 11:00 am

Prof. Dr. Bhaskar Bhandarkar  
Director General, Institution for Innovation, Industrial Engineering & Entrepreneurship  
Principal Investigator IUSSTF India  
Former Chairman of IIIE - Indian Institute of Industrial Engineers  
Governing Council Member Engineering Council India

Dr. Bhaskar Bhandarkar is Director General of Institution for Innovation & Industrial Engineering and Entrepreneurship. He received his BS from Nagpur University, BTech from JNU New Delhi, MTech from Pune University, MBA (Operation & Marketing) and PhD: BIT, Mesra. Gold Medalist from NCDC, GOI, Ministry of Home affairs. Dr. Bhandarkar has 37 years’ experience in Operations/Reffits/Quality Assurance/Manufacturing and Training; Consultant to NITIE Govt. of India, Ministry of Human Resource Development; Chairman, Indian Institution of Industrial Engineering for record eight years; Director General Indian Institution of Industrial Engineering Mumbai, Managing Editor of Industrial Engineering Journal; Member of the Technical Committee of Elastomers and Plastics, the Journal of Engineering Research, etc.) He has received PhD from King Fahd University of Petroleum and Minerals (KFUPM), Dhaхран, Saudi Arabia, MS from Institute for Innovation and Design in Engineering, Texas A&M University, College Station, Texas; and Stanford University, Palo Alto, California, USA and BE from NED University of Engineering & Technology, Karachi, Pakistan.

11:00 – 11:30 Networking Break

Keynote III - Thursday, March 12, 2020, 11:30 am – 12:00 pm

Dr. Sayyad Zahid Qamar  
Associate Professor, Mechanical and Industrial Engineering Department  
College of Engineering  
Sultan Qaboos University, Al-Khoudh, Sultanate of OMAN

Dr. Sayyad Zahid Qamar is currently associated with the Mechanical and Industrial Engineering Department, Sultan Qaboos University (SQU), Muscat, Oman. He has over 25 years of academic and research experience in different international universities. He has also worked as a professional mechanical engineer in the field for over 6 years in the heavy engineering and fabrication industry (Manager Research and Development; Deputy Manager Design; Production Engineer; Quality Control Engineer). He has also been actively involved in research and accreditation work related to engineering education. His research areas are Applied materials and manufacturing; Applied mechanics and design; Reliability engineering; and Engineering education. As part of the Applied Mechanics and Advanced Materials Research group (AM2R) at SQU, he has been involved in different applied research funded projects in excess of 4 million dollars. He has over 200 research/technical publications to his credit (2 research monographs/books, 2 edited book volumes, 6 book chapters, 160 publications in refereed international journals and conferences, and 36 technical reports). He is currently editing one volume (Renewability of Synthetic Materials) for the Elsevier Encyclopedia of Renewable and Sustainable Materials. He has served as Associate editor, Guest editor, and Member editorial board for different research journals (including Materials and Manufacturing Processes, Journal of Elastomers and Plastics, the Journal of Engineering Research, etc.) He has received PhD from King Fahd University of Petroleum and Minerals (KFUedM), Dhaхран, Saudi Arabia, MS from Institute for Innovation and Design in Engineering, Texas A&M University, College Station, Texas; and Stanford University, Palo Alto, California, USA and BE from NED University of Engineering & Technology, Karachi, Pakistan.
Thursday Lunch Buffet and IEOM Student Chapter Presentations  
March 12, 2020, 1:00 – 2:30 pm – Ballroom  
MAPUA University, Philippines  
University of West Bohemia, Pilsen, Czech Republic  
P.D.A. College of Engineering, India  
Sebelas Maret University (UNS), Indonesia  
Shipbuilding Institute of Polytechnic Surabaya  

Thursday Awards Dinner – 7:00 pm to 10:00 pm  

Awards Keynote  

Professor Charles Mbohwa  
Pro-Vice Chancellor Strategic Partnerships and Industrialisation  
University of Zimbabwe  
Mt Pleasant, Harare, Zimbabwe  

Professor Charles Mbohwa is the University of Zimbabwe Pro-Vice Chancellor responsible for Strategic Partnerships and Industrialisation since 1st July 2019. Before that he was a Professor of sustainability engineering in the Faculty of Engineering and the Built Environment at the University of Johannesburg. Earlier on in his career, he was a mechanical engineer in the National Railways of Zimbabwe from 1986 to 1991; lecturer and senior lecturer at the University of Zimbabwe and joined the University of Johannesburg as a senior lecturer in 2007. He is an established researcher and is NRF-Rated in category C1. He was the Chairmain 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 July 2014 to June 2017. He was Acting Executive Dean in the Faculty of Engineering and the Built Environment from November 2017 to July 2018. He has published more than 700 papers in peer-reviewed journals and conferences, 20 book chapters and 7 books. He has a Scopus h-index of 13; a web of science h-index of 11 and Google Scholar h-index of 18. He holds a BSc Honours in Mechanical Engineering from the University of Zimbabwe in 1986; Masters of Science in Operations Management and Manufacturing Systems from University of Nottingham; and a Doctor of Engineering from the Tokyo Metropolitan Institute of Technology.  

He was a Fulbright Scholar for 6 months in 2006/2007 at the Supply Chain and Logistics Institute at the School of Industrial and Systems Engineering, Georgia Institute of Technology. He was also a Japan Foundation Fellow. He is a Fellow of the Zimbabwe Academy of Science and of the Zimbabwean Institution of Engineers. He 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 been involved in research exchange with collaborator in many countries including the United Kingdom, Japan, German, France, the USA, Brazil, Sweden, Ghana, Nigeria, Kenya, Tanzania, Malawi, Mauritius, Austria, the Netherlands, Uganda, Namibia and Australia. In 2016, he was a finalist of the TW Kambule-NSTF Award for research and its outputs by an individual over a period of up to 15 years after award of a PhD and a finalist in the category Research or Engineering Capacity Development NSTF Awards for achievements over the last five to 10 years. He is a Global Council Member and Fellow of the Industrial Engineering and Operations Management Society. He is a reviewer for more than 20 international journals and is a member of the editorial boards/ committees of 5 journals. He has collaborated with the United Nations organisations and has assisted to write the Global Guidance Principles for Life Cycle Assessment Databases and has reviewed Methodological Sheets for Subcategories in Social Life Cycle Assessment. He is a founding member of the Social Life Cycle Assessment Alliance coordinated by the World Resources Forum, which will focus, among many other things, on social impacts of sustainable recycling. He has also been a board member of the African Roundtable in Sustainable Consumption and Production. He was also a board member of Almin Industries and for Willowvale Motor Industries in Zimbabwe. He has successfully supervised more than 50 Master’s students, 12 doctoral students and 12 postdoctoral fellow.  

Submissions Received from Countries and Territories  

- Algeria  
- Australia  
- Bangladesh  
- Belgium  
- Brazil  
- Canada  
- Cape Verde  
- China  
- Colombia  
- Czech Republic  
- Ecuador  
- Egypt  
- Ethiopia  
- Finland  
- France  
- Germany  
- Greece  
- India  
- Indonesia  
- Iran  
- Ireland  
- Israel  
- Italy  
- Japan  
- Jordan  
- Kenya  
- Kuwait  
- Latvia  
- Libya  
- Macedonia  
- Malaysia  
- Mexico  
- Morocco  
- Nigeria  
- Oman  
- Pakistan  
- Palestine  
- Paraguay  
- Philippines  
- Portugal  
- Qatar  
- Russia  
- Saudi Arabia  
- Singapore  
- South Africa  
- South Korea  
- Spain  
- Sri Lanka  
- Sweden  
- Taiwan  
- Tajikistan  
- Thailand  
- Tunisia  
- Turkey  
- UAE  
- United Kingdom  
- United States  
- Vietnam  
- Zimbabwe
Session I: Global Engineering Education - 8:00 – 9:30 am (Tuesday) – Room 1
Session Chair: Dr. Imad Alsyouf, University of Sharjah, United Arab Emirates

8:00 – 8:30 (Tuesday)
Dr. Imad Alsyouf
Associate Professor of Industrial Engineering
Director of Sustainability Office
University of Sharjah
United Arab Emirates
Sustainability Circles the way to Sustainability Excellence in Institutes of Higher Education
Imad Alsyouf is an associate professor of Industrial Engineering, employed by University of Sharjah, UAE. He is the founder and coordinator of the Sustainable Engineering Asset Management (SEAM) Research Group. He has produced more than 67 conference and journal papers. He has about 30 years of industrial and academic experience in various positions in Jordan, Sweden and UAE. His research interests include reliability, quality, maintenance, and optimization. He has developed and taught more than 25 post and undergraduate courses. He delivered training courses in Kaizen, TQM, and organizational excellence.

8:30 – 9:00 (Tuesday)
Dr. César A. Collazos
Full Professor
Computer Science Department
Universidad del Cauca-Colombia
Popayán, Cauca, Colombia
Collaborative games as a mechanism to support collaborative learning processes
César A. Collazos, full professor computer science department at Universidad del Cauca-Colombia. Phd in computer science and head of IDIS research group at Universidad del Cauca. His main research areas include: Human Computer Interaction, Computer Supported Collaborative Learning, ICT in education.

9:00 – 9:30 (Tuesday)
Dr. Mohammad Mashud
Professor, Department of Mechanical Engineering
Khulna University of Engineering & Technology (KUET)
Khulna-9203, Bangladesh
Dr. Mohammad Mashud is a Professor in the Department of Mechanical Engineering, Khulna University of Engineering & Technology, Bangladesh. He was born in Dhaka, Bangladesh in 1975. He received his Ph.D. in Aerospace Engineering from Nagoya University, Japan in 2006. He also earned Master of Engineering from the same department and university from Japan in 2003. He completed his Bachelor of Science in Engineering (Mechanical) from Khulna University of Engineering & Technology (KUET), Bangladesh in 1999. He joined as a lecturer in the Department of Mechanical Engineering, KUET. He served as a Head of the Department of Mechanical Engineering, KUET for the duration of two years (2012-2013). He supervises research activities in the field of aerodynamics, UAV, fluid mechanics and energy sciences and teaches fluid mechanics and aerodynamics for bachelor students in engineering sciences as well as post-graduate students in mechanical & bio-medical engineering. He has successfully supervised 7 post-graduate and more than 100 bachelor students thesis. He has been involved many research projects funded by ministry of education, university grant commission and KUET. He received academic awards and scholarship from government and professional institutes. Dr. Mashud served as a technical Chair, Co-chair of many international conferences, he also organized an international conference as an organizing secretary.

Session II: Global Engineering Education - 2:30 – 4:00 pm (Tuesday) – Room 1
Session Chair: Dr. Heba Y. M. Soliman, Port Said University, Egypt

2:30 – 3:00 (Tuesday)
Professor Assem Tharwat
Professor at the College of Business Administration
American University in the Emirate
Dubai, UAE
Prof Assem Tharwat earned his master's degree in mathematical Statistics and his bachelor’s degree in mathematics from Cairo University, Egypt, and his Ph.D. in Operations Research from Charles University, Czech Republic. He accumulated more than 35 years of academic experience in different universities in both the public and private sectors in Egypt and in UAE. He taught both basic and advanced courses in many fields in Operations Research and Management Sciences. Prof Assem supervised about forty Ph.D. and M.Sc. thesis during the past 20 years and he published about 100 articles in International/National Journals and conferences during the past 30 years. In addition, he accumulated more than ten years' experience in the accreditation field in Egypt and UAE, moreover he is working as a member in the AACSB team for almost three years in AUE. Prof Assem has a very good experience in the academic positions for more than 15 years and he served as a dean between 2011 and 2013 in CIC, Egypt & between 2017 and 2019 in COBA, AUE, UAE.
3:30 – 4:00 (Tuesday)

Dr. Waleed K. Ahmed
Assistant Professor, Engineering Requirements Unit, College of Engineering
United Arab Emirates University, Al Ain, UAE

Merging 3D Printing Technology to Enhance Engineering Pedagogical Process: Applications and Challenges

Originally from Mesopotamia, Dr. Waleed K. Ahmed obtained B.Sc. in Mechanical Engineering from the University of Baghdad in 1992. Served over 16 years in the manufacturing and quality control industrial sector. In 2000, obtained M.Sc. in Applied Mechanics from the University of Technology, Baghdad. Appointed as a lecturer in 2001 at the Materials Engineering Department, Al-Mustansiriyah University, Baghdad. In 2006 completed Ph.D. from Al-Mustansiriyah University Joint venture with the University of Nottingham. Worked as a consultant for many industrial companies. Dr. Waleed moved to work at United Arab Emirates University in 2008. From 2009 to 2019, worked as an instructor in the Engineering Requirements Unit as well as serving the Mechanical Engineering Department. Published more than 50 journals and conference papers. The main interest in renewable energy, nanomaterials, failure analysis, FEA, fracture mechanics, forensic engineering, composite recycling, as well as e-Learning. Awarded UAEU Chancellor Innovation Award for 2017 and 2018. Has four granted patents and 3 under examination. Granted AUA (Asian Universities Alliance) Fellowship Award 2019 conducting research at Nanotechnology and Catalysis Research Centre in UM, Malaysia. Nowadays focusing on 3D printing technology in material, manufacturing, and education. Recently has been appointed as an Assistant Professor in the Engineering Requirements Unit.

Dr. Heba Y. M. Soliman
Associate Professor, Electrical Engineering Department
Port Said University, Egypt

Electrical Engineering Education in both Egyptian NARS and Pearson BTEC Higher Nationals Standards

Dr. Soliman is an Associate Professor in the area of wireless communications and signal processing at Electrical Engineering department, Port Said University. She is the Executive manager of the Entrepreneurship, Innovation and sustainable environment unit of Faculty of Engineering, Port Said University. She is the Vice Executive manager of Quality and Accreditation Unit of Faculty of Engineering, Port Said University. She is responsible for the Wireless Antennas Laboratory, Faculty of Engineering, Port Said University. She has also a special interest in the methodologies, quality and accreditation standards of the electrical engineering education. Her Continuous learning and training interests are in the filed of Smart cities technologies and Smart cities management. Dr. Soliman got her MSc (2004) and PhD (2010), Suez Canal University, Egypt. She got a training in Connected Vehicles Cloud Computing for Smart Cities, with Electrical and Computer Engineering department and a training about Smart Poles and Smart Cities, with Sustainable Smart Cities research center, UAB, Alabama, USA, 2018. Her contributions related to efficient use of power and frequency resources in wireless communication systems included 15 publications. Since 2010, she has participated in international conferences and workshops in Qatar, Poland, USA and Dubai. She has supervised 7 MSc and 3 PhD at Port Said and Suez Canal Universities. She is a referee in ELSEVIER, Computer Standards and Interfaces Journal. Dr. Soliman is a member in the research project “Geometric Algebra based Electromagnetic waves simulator”, funded by the ministry of communication (ITIDA-ITAC).

Dr. Lakhwinder Pal Singh
Associate Professor, Department of Industrial and Production Engineering
Dr. B.R. Ambedkar National Institute of Technology
Jalandhar, India

Dr. Lakhwinder Pal Singh is working as a faculty in the Department of Industrial and Production Engineering at Dr. B R Ambedkar National Institute of Technology, Jalandhar Since 2006, he. He has 20 years’ experience in teaching and research, and has published more than 45 papers in national and international journals and 50 papers in conferences and contributed a number of 8 book chapters and five books out of which Work study and Ergonomics (Cambridge University Press) is well accepted at Global level. His areas of research interest are Ergonomics and Human Factors Engineering, Occupational Health and Safety, Lean manufacturing, Operations and Supply Chain management. He is a life member of more than seven societies mainly including; IIE, IEI, ISTE, GIFT and ISE. He has organised seven International conferences and 12 short term courses in various capacities, he has also been Co-Chair and Organising Secretary of 14th International Conference (HWWE-2016) and 17th (HWWE-2019) of Indian Society of Ergonomics from 8th-10th November, 2019. He has guided 6 PhD and two are in process, 45 M Tech and 2 are in process. Filed one patent filed “Ergonomic Design of Transfer Assisting Device (portable stretcher) for Shifting of Patients’ after major Surgery (from operation table to stretcher, stretcher to bed and vice versa)” Patent Application File No. 2016110161124 by Dr Lakhwinder Pal Singh, Dr B R Ambedkar NIT Jalandhar. Beside he has delivered many expert talks at various institutions in India and Abroad. He has visited different countries including USA, UK, Australia, Dubai, Malesia, Mauritius, Italy, and Turkey.

Session III: Global Engineering Education – Panel Session - 4:30 – 6:00 pm (Tuesday) – Ballroom
Panel Chair: Dr. Abu Masud, Wichita State University, Kansas, USA

Dr. Abu Masud, P.E.
Emeritus Professor, Department of Industrial and Manufacturing Engineering
Wichita State University, Kansas, USA

Dr. Abu Masud is an emeritus professor of industrial and manufacturing engineering at Wichita State University. He was named the Boeing Global Engineering Professor at Wichita State University. Dr. Masud advanced the College of Engineering’s strategic alliances for global enrichment and experiential learning of students as well as international research collaborations and partnerships. He received Duane and Velma Wallace Outstanding Educator Award from WSU College of Engineering. Previously he was held various positions at Wichita State including dean and associate dean of graduate school (2008-2013), coordinator, college ABET affairs (2006-2008), associate dean, college of engineering (2004-2005), chair, industrial and manufacturing engineering department (1994-2004) and graduate coordinator of IME (1991-94, 1996-98, 2001-2004). Dr. Masud has engaged with various companies and governmental research centers including NASA Langley Research Center, VA, NASA/ASEE Summer Faculty Fellow (1991 and 1992), Boeing, Consulting Analyst, and Kuwait Institute for Scientific Research. He is member of Accreditation Review Council (2011-2014). Dr. Masud published book, book chapters, and numerous journal and conference papers. He is registered Professional Engineer at Kansas State. Dr. Masud is an IIE fellow. He received Ph.D. and M.S. in Industrial Engineering from Kansas State University, and B.S. in Mechanical Engineering from Bangladesh University of Engineering & Technology.
Dr. Alaa Ashmawy joined AUD in 2006 as Dean of Engineering. Prior to his appointment at AUD, he had been a tenured Associate Professor at the University of South Florida in Tampa. His expertise is in geotechnical engineering, with interests in numerical modeling of foundations and earth structures, environmental geotechnics, and soil dynamics & earthquake engineering. Dr. Ashmawy’s experience includes engineering consulting for a number of companies in the US, and a visiting professorship at the Universidad de las Americas in Puebla, Mexico. He is a licensed professional engineer in the State of Florida (USA) and an ABET Program Evaluator. He received Ph.D. in Civil Engineering from Purdue University, M.S. in Civil Engineering from Purdue University and B.S. in Civil Engineering from Alexandria University (Distinction with Honors).

Rosemary Seva is a Professor of Industrial Engineering and former Dean at the Gokongwei College of Engineering – De La Salle University, Manila, Philippines. Rosemary Seva is a Professor of Industrial Engineering and former Dean at the Gokongwei College of Engineering – De La Salle University, Philippines. She is the current President of three ergonomics organizations: Asian Council on Ergonomics and Design (ACED), the Southeast Asian Network of Ergonomics Societies (SEANES) and Human Factors and Ergonomics Society of the Philippines (HFESP). She also heads the Engineering Commission of the Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU). She obtained her doctorate degree at the Nanyang Technological University (Singapore). She has two master’s degrees: one in Ergonomics from the University of New South Wales (Australia) and in Industrial Engineering from De La Salle University. She is an ASEAN Engineer and a Professional Industrial Engineer.

Dr. Alaa Ashmawy
Professor and Dean
School of Engineering
American University in Dubai
United Arab Emirates

Dr. Alaa Ashmawy joined AUD in 2006 as Dean of Engineering. Prior to his appointment at AUD, he had been a tenured Associate Professor at the University of South Florida in Tampa. His expertise is in geotechnical engineering, with interests in numerical modeling of foundations and earth structures, environmental geotechnics, and soil dynamics & earthquake engineering. Dr. Ashmawy’s experience includes engineering consulting for a number of companies in the US, and a visiting professorship at the Universidad de las Americas in Puebla, Mexico. He is a licensed professional engineer in the State of Florida (USA) and an ABET Program Evaluator. He received Ph.D. in Civil Engineering from Purdue University, M.S. in Civil Engineering from Purdue University and B.S. in Civil Engineering from Alexandria University (Distinction with Honors).

Rosemary Seva, Ph.D.
Professor of Industrial Engineering
Former Dean at the Gokongwei College of Engineering
De La Salle University, Manila, Philippines

Rosemary Seva is a Professor of Industrial Engineering and former Dean at the Gokongwei College of Engineering – De La Salle University, Philippines. She is the current President of three ergonomics organizations: Asian Council on Ergonomics and Design (ACED), the Southeast Asian Network of Ergonomics Societies (SEANES) and Human Factors and Ergonomics Society of the Philippines (HFESP). She also heads the Engineering Commission of the Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU). She obtained her doctorate degree at the Nanyang Technological University (Singapore). She has two master’s degrees: one in Ergonomics from the University of New South Wales (Australia) and in Industrial Engineering from De La Salle University. She is an ASEAN Engineer and a Professional Industrial Engineer.

Khaled S. El-Kilany, Ph.D.
Professor and Head, Department of Industrial and Management Engineering
Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt

Khaled S. El-Kilany is a professor of industrial engineering at the department of Industrial and Management Engineering (IME) at the Arab Academy for Science, Technology, and Maritime Transport (AASTMT), which is accredited by the Engineering Accreditation Commission of ABET since 2010. The department offers both B.Sc. and M.Sc. degrees in Industrial and Management Engineering. Prof. El-Kilany has previously been appointed as acting head of department of Industrial and Management Engineering for two years (February 2005 – February 2007) and is currently the head of department since February 2009. Prof. El-Kilany is a senior member of the ISE and is a reviewer of several journal, conferences, and textbooks. Prof. El-Kilany has received his Ph.D. in Mechanical and Manufacturing Engineering from Dublin City University, Ireland. Having Intel Ireland as the industry research partner, his research work included modelling and simulation of automated material handling system of Intel’s wafer fabrication facility Fab24, which was the second wafer fabrication facility in the world that produces 300mm wafers. Since graduation in 1997, Prof. El-Kilany has developed extensive experiences in teaching and research within the academic and professional field of Industrial Engineering. Also, Prof. El-Kilany has almost ten years of experience in the design, development, and accreditation of undergraduate and postgraduate industrial engineering curricula. He has been directly involved in all processes required for accreditation by ISO, ABET, IMechE, IET, National Authority for Quality Assurance and Accreditation in Egypt, and the Supreme Council of Universities. He’s an editor and reviewer of several department and college self-study reports presented to different national and international accreditation bodies in the US, UK, and Egypt; has led teams across the department and college to coordinate all departments’ efforts to satisfy these bodies’ requirements; and hosted various visits by program evaluators and examiners to the department and college. His research interests lies in the analysis and improvement of manufacturing systems performance; specifically, material flow and WIP management using discrete-event systems simulation and optimization techniques. He has supervised over 15 Masters Research students to completion and is supervising a number of PhD Research students in Ireland and the U.K.

Dr. Sidi M Ahmed Ghaly
Assistant Professor, Electrical Engineering Department
College of Engineering
Al Imam Mohammad Ibn Saud Islamic University
Saudi Arabia

Dr. Sidi M Ahmed Ghaly is an Assistant Professor at the Electrical Engineering Department, College of Engineering, Al Imam Mohammad Ibn Saud Islamic University, holds a Ph.D. in Instrumentation & Micro-Electronics, Nancy University, France, a Master of Instrumentation & Micro-Electronics, Nancy University, France. He is the head of the quality committee in the EE department. He works on instrumentation, RF Coils, ECT Sensors, Fractional PID Controllers and Engineering Education. His focus is on ECT Sensors, RF coils, and Assessment.

Dr. Md. Mizanur Rahman, CEng, Chartered Energy Engineer
Senior Lecturer (Thermo Fluid), School of Mechanical Engineering
University Technology Malaysia (UTM), Skudai, Johor Bahru, Malaysia

Md. Mizanur Rahman is currently a Senior Lecturer at Thermo-Fluids Panel, School of Mechanical Engineering, Universiti Teknologi Malaysia UTM, Johor Bahru, Malaysia. Dr. Mizanur is a certified Chartered Energy Engineer by Energy Institute UK. Before joining at UTM, he has served as a Postdoctoral Researcher at Aalto University School of Engineering, Finland. Mizanur also has more than 12-year working experience in a government statutory body namely Bangladesh Rural Electrification Board (BREB), Bangladesh. During his tenure in BREB, Mizanur has gathered practical experiences in dealing with techno-economic and sociocultural challenges faced by rural electrification program. He has accumulated deep insights towards the solution pathways for energy technology education in engineering programs: paradigm shift from technology-centred to multidisciplinary focus.

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the Global Mega-challenge of having 1.2 billion people without access to electricity yet. Mizanur has sound understanding into the global energy sector challenges and its societal implications. He has received his Ph.D. in Energy Economics and Power plant Engineering from Aalto University, Finland, M.Sc. in Sustainable Energy Engineering from Royal Institute of Technology KTH, Sweden, and B.Sc. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh. His research interests include Thermodynamics, low temperature Kalian cycle, energy economics, energy management, energy efficiency and system, sustainable and renewable energy, energy system modelling, Life-Cycle analysis, distributed power generation, multicriteria evaluation etc. Mizanur has several publications in International refereed journals in energy engineering domain.

9:00 – 9:30 (Wednesday)

Dr. Jafri Mohd Rohani
Head of the Industrial Engineering Programme
Department of Materials, Industrial and Manufacturing Engineering
Faculty of Mechanical Engineering
Universiti Teknologi Malaysia,
Skudai, Johor, Malaysia

Enhancing Outcome Based - Education Industrial Engineering Curriculum at Universiti Teknologi Malaysia

Jafri Mohd Rohani is a Senior Quality and Statistical Engineering Lecturer. He is also Head of the Industrial Engineering Programme at the Department of Materials, Industrial and Manufacturing Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor. Currently, he is the President of JohorCost and Quality Engineers Society. He is a member of the American Society for Quality (ASQ) and Human Factor Society of Malaysia.

2:30 – 4:00 pm (Wednesday)

Session V: Business and Management Education – Teaching and Learning

Session Chair: Dr. Mohammad Iqbal, Shahjalal University of Science and Technology, Sylhet, Bangladesh

2:30 – 3:00 (Wednesday)

Dr. Ghada El Khayat
Professor and Head of Department
Department of Information Systems and Computers
Alexandria University
Alexandria, Egypt

Teaching Factory Based Learning IR 4.0: New Paradigm in Engineering Education

Dr. Abdul Talib Bon is Professor of Technology Management in Department of Production and Operations Management, Faculty of Technology Management and Business at the Universiti Tun Hussein Onn Malaysia. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France in the year 2008. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration major in Quality Management at the master’s level in the Universiti Kebangsaan Malaysia for which he was awarded the MBA in the year 1998. He’s bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom in 1997. He is Director of Teaching Factory and Manager of Centre for Technology (Furniture Innovation Technology) since 1 September 2016. Dr. Abdul Talib Bon has had over 30 year experience of teaching in higher learning education. Dr. Abdul Talib Bon has multidisciplinary research interests that encompass industrial engineering, quality management and production and operations management. His completed 17 research grant projects as project leader include applications of forecasting in industries. He has supervised more than 100 undergraduate and PhD research students. He has served as a reviewer for a number of engineering management conferences and journals as part of his expertise sharing initiatives. He had published more than 300 International Proceedings and International Journals and 8 books. He is also Fellow and President of Industrial Engineering and Operation Management Society (IEOMS, Malaysia), Professional Technologist of Malaysia Board of Technologists (MBOT), Council member of Management Science and Operation Research Society of Malaysia (MSORSM), member of International Association of Engineers (IAENG), member of Institute of Industrial Engineer (IIE), USA, member of International Institute of Forecasters (IIF), member of Technological Association of Malaysia (TAM) and associate member of Malaysian Institute of Management (AMIM).

Dr. Jafri Mohd Rohani
Head of the Industrial Engineering Programme
Department of Materials, Industrial and Manufacturing Engineering
Faculty of Mechanical Engineering
Universiti Teknologi Malaysia,
Skudai, Johor, Malaysia

Enhancing Outcome Based - Education Industrial Engineering Curriculum at Universiti Teknologi Malaysia

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Dr. G. Suseendran
Assistant Professor, School of Computing Sciences Department of Information Technology
Vels Institute of Science, Technology & Advanced Studies (VISTAS)
Pallavaram Chennai-6000117, India

Dr. G. Suseendran received his M.Sc., Information Technology and M.Phil., degree from Annamalai University, Tamil Nadu, India and Ph.D., degree in Information Technology-Mathematics from Presidency College, University of Madras, Tamil Nadu, India. In additional qualification, he has obtained DOEACC ‘O’ Level AICTE Ministry of Information Technology and Honor Diploma in Computer Programming. He is currently working as Assistant Professor, Department of Information Technology, School of Computing Sciences, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamil Nadu, India which is well known University. He has 10 years of teaching experience in both UG and PG Level. His research interests include Wireless Sensor Network, Ad-hoc networks, IOT, Data Mining, Cloud Computing, Image Processing, Knowledge-based systems and Web Information Exploration. He has produced 4 M.Phil., Scholars and 3 Ph.D., Research Scholars awarded under my Guidance and Supervision. He has published more than 72 research papers including 3 SCI publication in various International Journal such in Science Citation Index, IEEE Access, Springer Book Chapter, Scopus, and UGC referred journals. He has presented 20 papers in various international Conferences. He authored 11 Book and received 6 awards.

3:00 – 3:30 (Wednesday)

Dr. Ghada El Khayat
Professor and Head of Department
Department of Information Systems and Computers
Alexandria University
Alexandria, Egypt

Teaching Factory Based Learning IR 4.0: New Paradigm in Engineering Education

Dr. Abdul Talib Bon is Professor of Technology Management in Department of Production and Operations Management, Faculty of Technology Management and Business at the Universiti Tun Hussein Onn Malaysia. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France in the year 2008. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration major in Quality Management at the master’s level in the Universiti Kebangsaan Malaysia for which he was awarded the MBA in the year 1998. He’s bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom in 1997. He is Director of Teaching Factory and Manager of Centre for Technology (Furniture Innovation Technology) since 1 September 2016. Dr. Abdul Talib Bon has had over 30 year experience of teaching in higher learning education. Dr. Abdul Talib Bon has multidisciplinary research interests that encompass industrial engineering, quality management and production and operations management. His completed 17 research grant projects as project leader include applications of forecasting in industries. He has supervised more than 100 undergraduate and PhD research students. He has served as a reviewer for a number of engineering management conferences and journals as part of his expertise sharing initiatives. He had published more than 300 International Proceedings and International Journals and 8 books. He is also Fellow and President of Industrial Engineering and Operation Management Society (IEOMS, Malaysia), Professional Technologist of Malaysia Board of Technologists (MBOT), Council member of Management Science and Operation Research Society of Malaysia (MSORSM), member of International Association of Engineers (IAENG), member of Institute of Industrial Engineer (IIE), USA, member of International Institute of Forecasters (IIF), member of Technological Association of Malaysia (TAM) and associate member of Malaysian Institute of Management (AMIM).
Dr. Mohammad Iqbal
Professor, Dept. of Industrial and Production Engineering
Shahjalal University of Science and Technology, Sylhet-3114, Bangladesh

Dr. Mohammad Iqbal is currently serving as a Professor at Shahjalal University of Science and Technology (SUST) under the Department of Industrial and Production. Professor Iqbal obtained his Bachelor of Technology (Mechanical) from Sri Venkateshwara University, College of Engineering, Tirupati, Andre Pradesh, India and M.Sc. Engg. from Industrial and Production Engineering, BUET, Dhaka in 1989 and 1993 respectively. He received his Ph.D. from Dublin City University, Dublin, Republic of Ireland in 2000. Professor Iqbal served as a visiting research scholar at Mary O’Connor Process Safety Center, Texas A & M University, College Station, Texas, USA in the year 2018. He is the founder lecturer of the Department of Industrial and Production, SUST. He served as the Head of the dept. for 13 years and Dean of School of Applied Science and Technology for two years. He was the Head of Petroleum and Mineral Engineering Dept. Shahjalal University of Science and Technology (SUST), Sylhet, Bangladesh for one year. He has 28 years of industrial, research and teaching experiences. Professor Iqbal’s present research interest includes Virtual Reality, Ergonomics, Industrial safety and risk management, Supply chain management, Renewable energy and Production system analysis. He has more than 100 international publications in conference proceedings and peer review journals. He is a co-author of three engineering books namely Surveying, Engineering Materials and Industrial Health, Safety and Welfare. He is a life member of Institution of Engineers, Bangladesh. He was the honorary secretary of Institution of Engineers Bangladesh (IEB) Sylhet Centre, Sylhet, Bangladesh during 2018-2019. Dr. Iqbal was the Conference Chair of IEMO Society-Bangladesh Chapter held in December, 2019. He was the Chair of IEMO Society -Bangladesh Chapter in March, 2018 - February, 2020. Professor Iqbal conducted many training programs, seminars, workshops and symposiums at home and abroad. He has been involved in several research projects funded by the Ministry of Science and Technology, Bangladesh and SUST Research Center, Shahjalal University of Science and Technology, Sylhet, Bangladesh. Professor Iqbal received International and National Awards on research papers presented at different International Conferences home and abroad.

Ihfasuziella Ibrahim
Researcher
Construction Research Institute of Malaysia (CREAM)
Kuala Lumpur, Malaysia

Ihfasuziella Ibrahim is a researcher at Construction Research Institute of Malaysia (CREAM), a research institute established under the Construction Industry Development Board (CIDB), which she joined in February 2013 and as a part time PhD’s student in UiTM Shah Alam. Ihfasuziella start her career after completing a Bachelor Science in Real Estate Management with Honors from UTHM, Johor in 2009. Upon completing her studies, she has been a research assistant in University Tun Hussein Onn Malaysia (UTHM) in 2010 under the Technology Management & Business faculty. Due to high enthusiasm and encouragement for continuing studies, Ihfasuziella have been offered a place at University Tun Hussein Onn Malaysia entering Masters level on Science in Property and Facilities Management in 2010. The title of her thesis is “Development of Space Charging Model in Malaysian Higher Education Institutions. Currently, she pursued his PhD in Facilities Management at MARA University of Technology (UiTM). She is also member in Malaysian Association of Facilities Management (MAFM). Her research interests are currently in the areas of facilities management, real estate management, performance management and construction worker’s amenities. She was published papers in the local and international conference, seminars, journals, articles and chapter in books. She has published journal and conference papers.

ID 818 Analysing and Prioritizing the Antecedents of Shopping Centre Grading Using Analytical Hierarchy Process (AHP) Modelling
Ihfasuziella Ibrahim, Abdul Talib Bon, Abdul Hadi Nawawi and Edie Ezwan Mohd Safian, Faculty of Architecture, Planning and Surveying, UiTM, 40450 Shah Alam, Malaysia and Faculty of Technology Management & Business, UTM, 86400 Johor, Malaysia

Ihfasuziella Ibrahim
Researcher
Construction Research Institute of Malaysia (CREAM)
Kuala Lumpur, Malaysia

Ihfasuziella Ibrahim is a researcher at Construction Research Institute of Malaysia (CREAM), a research institute established under the Construction Industry Development Board (CIDB), which she joined in February 2013 and as a part time PhD’s student in UiTM Shah Alam. Ihfasuziella start her career after completing a Bachelor Science in Real Estate Management with Honors from UTHM, Johor in 2009. Upon completing her studies, she has been a research assistant in University Tun Hussein Onn Malaysia (UTHM) in 2010 under the Technology Management & Business faculty. Due to high enthusiasm and encouragement for continuing studies, Ihfasuziella have been offered a place at University Tun Hussein Onn Malaysia entering Masters level on Science in Property and Facilities Management in 2010. The title of her thesis is “Development of Space Charging Model in Malaysian Higher Education Institutions. Currently, she pursued his PhD in Facilities Management at MARA University of Technology (UiTM). She is also member in Malaysian Association of Facilities Management (MAFM). Her research interests are currently in the areas of facilities management, real estate management, performance management and construction worker’s amenities. She was published papers in the local and international conference, seminars, journals, articles and chapter in books. She has published journal and conference papers.

ID 023 Preparing International Engineering Programs for Accreditation
Albertus Retnanto, Texas A&M University at Qatar

Dr. Albertus Retnanto
Professor of the Practice, Petroleum Engineering
Texas A&M University at Qatar

Preparing International Engineering Programs for Accreditation
Dr. Albertus Retnanto is Professor of the Practice of Petroleum Engineering at Texas A&M University at Qatar and has been in the Petroleum Engineering program since 2009. He received his Ph.D. degree in Petroleum Engineering (1998) from Texas A&M University. He teaches undergraduate courses in numerical methods, well testing, petroleum production system, production engineering, petroleum technical presentation, natural gas engineering, and integrated asset development and makes significant curriculum enhancements to several courses. He held a Principal position with Schlumberger and has more than 18 years of experience working in both technical and management positions in the area of well testing, field development, and production enhancement. He has received the Performed by Schlumberger Bronze Award four times. He has served as the Review Chairman of SPE Drilling & Completion Journal and chair on several committees on SPE. He received the A Peer Apart SPE Award, which is dedicated to the technical excellence of authors to the industry. He received the AFS College-level Distinguished Achievement Award in Teaching in 2016, SGA Educator Award, SEC Best Faculty Award, and the Faculty of the Year Award in five times, and the Distinguished Teaching Award. He has authored and co-authored over 35 papers. He is a PETE undergraduate advisor, and ABET/SAC coordinator. He serves as an ABET Program Evaluator (PEV) for the Engineering Accreditation Commission representing the Petroleum Engineering.

ID 041 The Professional Profile of Aerospace Engineers for Industry 4.0
Alma Arcelia Gonzalez Lozano, Instituto Politécnico Nacional, Gustavo A. Madero, Ciudad de Mexico, Mexico

Alma Arcelia Gonzalez Lozano
Escuela Superior de Comercio y Administración Unidad Santo Tomás
Instituto Politécnico Nacional
Ciudad de México, Mexico

Alma Arcelia Gonzalez Lozano, Ph.D. is currently completing a master’s degree by research in Education Management and Development at Escuela Superior de Comercio y Administración, Instituto Politécnico Nacional (Mexico). She holds a BSc in International Political Economy and a MSc in Strategic Studies from the Nanyang Technological University (Singapore). As a Senior Consultant at STRATHA Learning Corporation, a global training company, Dr. Gonzalez Lozano works as an education and training consultant for multinational corporations in high-tech sectors. She is a member of the US-based Association for Talent Development.
ID 583 The use of computational simulation, finite element analysis and digital models to improve the practice and teaching of linear structural analysis

LUIZ DA GUIA, Centro Federal de Educação Tecnológica de Minas Gerais, VARGINHA, Minas Gerais, Brazil

Dr. Luiz Pinheiro da Guia
Professor, Departamento de Mecatrônica
Centro Federal de Educação Tecnológica de Minas Gerais
Avenida dos Imigrantes, 1000, Bairro Vargem, Varginha, MG, BRASIL

Luiz Pinheiro da Guia is a professor of civil engineering and teacher in the technical course of mechatronics and Doctor in civil engineering in the Department of Mechatronics of CEFET-MG, Varginha, Brazil. He earned a Bachelor's degree in Mechanical Engineering from Gama Filho University, Rio de Janeiro, and a Doctorate and master's degree in Civil Engineering from the Fluminense Federal University, Niteroi, Brazil. He published it in newspapers and conference papers. Worked of the Navy Arsenal of Rio de Janeiro and worked in several companies. Dr. Da Guia completed research projects with various Institutions in Brazil and published a book in 2015.

ID 379 Comparative Assessment of Ergonomic Education for Industrial Engineering in the Philippines

Yogi Tri Prasetyo, Mapua University, Manila, Philippines

Dr. Yogi Tri Prasetyo
Associate Professor
School of Industrial Engineering and Engineering Management
Mapúa University, Philippines

Yogi Tri Prasetyo is currently an associate professor in the School of Industrial Engineering and Engineering Management, Mapúa University, Philippines. He received a Bachelor of Engineering in Industrial Engineering from Universitas Indonesia (2013). He also studied for one year (2011-2012) at Waseda University, Japan, during his junior year as an undergraduate exchange student. He received an MBA (2015) and a Ph.D. (2019) from Department of Industrial Management National Taiwan University of Science and Technology (NTUST), with a concentration in human factors and ergonomics. He was awarded NTUST Outstanding Youth with a perfect GPA 4.00. He has a wide range of research interests including human-computer interaction particularly related to eye movement, color optimization of military camouflage, strategic product design, usability analysis, and now he is currently doing accident analysis and prevention. He published several SCI journals in Displays, Color Research and Application, Journal of Eye Movement Research, several non-SCI journals, and several conference proceedings. In addition, Dr. Yogi has contributed to several international conferences as co-chair, chair session, and even committee members. Apart from academics, Dr. Yogi likes playing flute, judo, swimming, and hiking. He has two black belts (1st dan black belt judo and 1st dan black belt taekwondo), an international certified lifeguard, and a certified advanced diver. He speaks Indonesian, English, Chinese, Japanese, and currently, he’s working hard for his Filipino.
Zanariah Ahmad
Universiti Tun Hussein Onn Malaysia
Batu Pahat, Johor, Malaysia

ID 87 Does Smartphone usage linked to Technical Students’ Anxiety and Declining Academic Performance?
Zanariah Ahmad, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

Nancy Lucero Tapia Ruíz
Division of Extension, Consulting and Research
Universidad de Monterrey, Mexico

Nancy Lucero Tapia Ruíz is currently studying a Master in Product Engineering in Universidad de Monterrey, Mexico. As a scholarship holder, she works part time as a research assistant with the Dean of the Division of Extension, Consulting and Research from Universidad de Monterrey. Lucero has worked in the manufacturing area with companies like LG Electronics and John Deere. She also used to work for Universidad Autónoma de Nuevo León in the division of manufacturing. Her research interests are lean manufacturing and operational excellence.

ID 255 Methodological development for the analysis of the viability of projects with organic waste
Nancy Tapia, Universidad de Monterrey, Nuevo León, Mexico

Session VII: Global Engineering Education (Room 1) - 2:30 – 4:00 pm (Thursday)
Session Chair: Dr. S. Balamurugan, Intelligent Research Consultancy Services (iRCS), Coimbatore, Tamilnadu, India

2:30 – 3:00 (Thursday)
Dr. Luiz Pinheiro da Guia
Professor of Civil Engineering, Department of Mechatronics
CEFET-MG, Varginha, Brazil

Luiz Pinheiro da Guia is a professor of civil engineering and Doctor in civil engineering in the Department of Mechatronics of CEFET-MG, Varginha, Brazil. He earned a Bachelor’s degree in Mechanical Engineering from Gama Filho University, Rio de Janeiro, and a Doctorate and master’s degree in Civil Engineering from the Fluminense Federal University, Niterói, Brazil. He published it in newspapers and conference papers. Worked of the Navy Arsenal of Rio de Janeiro and worked in several companies. Dr. Da Guia completed research projects with various Institutions in Brazil and published a book in 2015.

ID 582 The use of mobile robotics to pre-mapping areas for Orienteering Competition – “Projeto Azimute Norte Varginha” – Uso de drones
LUIZ DA GUIA, Centro Federal de Educação Tecnológica de Minas Gerais, VARGINHA, Minas Gerais, Brazil

3:00 – 3:30 (Thursday)
Dr. Shekar Babu PhD
Professor & Founding Head, Department of Management
Amrita Vishwa Vidyapeetham University, Bengaluru, India

Shekar Babu Ph.D. is the Professor and Director of “AMRITA Center for Responsible Innovations and Sustainable Enterprises”, “ARISE” Labs. He is also the Founding Head, Department of Management (DoM), Bangalore Campus, AMRITA Vishwa Vidyapeetham University, Bangalore, India. Dr. Shekar holds a Bachelor of Engineering (BE) degree in Electronics and Communications from Bangalore University and a Master of Science (MS) degree in Electrical and Computer Science from California State University, Los Angeles and a Doctoral degree in Strategic Management from Amrita University. He is a Management Consultant with over 25 years of experience in working at Price Waterhouse, Hewlett-Packard Co and AMRITA University. His research areas are Corporate Social Responsibility (CSR), Corporate Governance (CG), Strategy and Social Development and Sustainable Goals (SDG). He has taught courses in Marketing, Leadership, Management Consulting and Business Ethics and Values.

3:30 – 4:00 (Thursday)
Dr. S. Balamurugan
Director-Research and Development, Intelligent Research Consultancy Services (iRCS)
Coimbatore, Tamilnadu, India

Dr. S. Balamurugan is the Director-Research and Development, Intelligent Research Consultancy Services (iRCS), Coimbatore, Tamilnadu, India. He has published 45 books, 200+ international journals/conferences and 35 patents to his credit. He is the Editor-in-Chief of the Book Series "Artificial Intelligence and Soft Computing for Industrial Transformation", Scrivener, John Wiley. He is the Editor-in-Chief of Information Science Letters, Natural Sciences Publishing, NSF and International Journal of Robotics and Artificial Intelligence, PRIRS, USA. He is Associate Editor of IEICE Transactions on Information and Systems-Oxford University Press, Cluster Computing- Springer, Simulation- Sage Publishing, Technology and Healthcare- IOS Press, Intelligent IoT Computing, Inderscience, World Journal of Engineering, Emerald. He is also in editorial of International Journal of Intelligent Unmanned Systems, Emerald, International Journal of Automation and Control, Inderscience Publishers, International Journal of Society, Systems and Science, Inderscience Publishers, International Journal of System Dynamics Applications (USDA), IGI Global Publishers, International Journal of Service Science, Management, Engineering, and Technology, IGI Global Publishers, International Journal of Knowledge and System Sciences, IGI Global Publishers and several other journals of Taylor & Francis, Inderscience, Emerald, IET, MDPI and Lead Guest Editor of several special issues with Springer, Elsevier and IEEE. He is the recipient of RashtraTyathya Vidhyatma Gourav Gold Medal Award and The Best Educationalist Award Hon. Justice O.P Saxena, Supreme Court, New Delhi and the Former Chairman of Minority Council, New Delhi, India. He is the recipient of two Lifetime Achievement Awards. He is the recipient of Dr.A.P.J.Abdul Kalam Sardhhabhana Award form Hon.Balmiki Prasad Singh, Former Governor of Sikkim, Jewel of India Award from Mr Gurpreet Singh, General Secretary, India, Star of Asia Award Mr. Korn Debbaramsi, Former Dy. Prime Minister, Thailand, in an International Summit at (Bangkok) Thailand & Pride of Asia Research Excellence Award from Hon. Anant, V Sheth, Deputy Speaker- Goa Legislative Assembly, Best Director Award. He received the "Active Member CSI National Award". He was awarded the Prestigious Mahatma Gandhi Leadership Award by NRI WELFARE SOCIETY OF INDIA at House of Commons, British Parliament, London, UK. The book he authored on “Machine Learning and Deep Learning Algorithms using MATLAB and PYTHON” won “Best MATLAB Book for Beginners” Award by BookAuthority. Dr. Balamurugan won the CSI Young IT Professional Award. He is also the recipient of the Best Researcher Award, Certificate of Exceptionalism, Young Scientist Award, Best Young Researcher Award and Outstanding Scientist Award. His biography is listed in "Marquis WHO'S WHO", New Jersey, USA. His professional activities include roles as Editor-in-Chief/Associate Editor/ Editorial Board Member for more than 500+ International Journals/Conferences of high repute and impact. He has been invited as Chief Guest/Resource Person/Keynote Plenary Speaker in many reputed Universities and Colleges at National and International Levels. His research interests include Artificial Intelligence, Augmented Reality, Internet of Things, Big Data Analytics, Cloud Computing, and Wearable Computing. He is a life member of ACM, IEEE and CSI.

4:00 – 4:30: Networking Break
Dr. Banu Y. Ekren
Full Professor, Department of Industrial Engineering
Yasar University, Izmir, Turkey

Engineering Education Towards Industry 4.0
Banu Y. Ekren is a full professor in the department of Industrial Engineering, at Yasar University, in Izmir, Turkey. She got her Ph.D., from University of Louisville in the Dept. of Industrial Engineering, in Kentucky, USA. Her research focus is on future of education, warehousing, stochastic and simulation modelling, supply chains, simulation-based optimization, and design of automated warehousing. Banu Y. Ekren holds associate professor position at her university and teaches simulation, stochastic modelling and facility logistics courses at the undergraduate level. She has several journal and book chapter publications.

ID 024 Building Communication Strengths and Skills for Non-native English Speaking Engineering Students
Albertus Retnanto, Texas A&M University at Qatar, Doha, Qatar

Neetu Choudhary
Executive Committee Member- Continuous Improvement Subgroup, Dubai Quality Group
Team Leader - UAE Innovation Awards
Compliance Analyst, DP World
Dubai, United Arab Emirates

Lean approach for effective presentation
Neetu Choudhary is a Continuous Improvement Leader with over 18 years of experience in Business Excellence, Quality Improvements, Strategy, Risk Management, IT Service Management, Project Management. She holds a Master’s degree in Computer Application with honours. She is an ASQ Certified Six Sigma Black Belt practitioner, EFQM certified Assessor, CMMI Associate, ISACA Certified in the Governance of Enterprise IT (CGEIT), ISO 9001-2015 Certified Lead Auditor and Certified in ITIL 4 Foundation. Neetu is a passionate author and has published multiple articles on Quality, Six Sigma, Business Excellence, Presentation Skills, Risks Management in international journals along with blogging on “Peace through Parenting”, Compassion, World Peace, Human Awareness and Conscious Parenting for the benefit of wider society. Neetu has presented papers & has been speaker at international conferences like ASQ- American Society of Quality, CSQ- Canadian Society of Quality, ISACA Africa South, ISACA Euro Geneva. She has been recognized as Top Rated Speake.

She is the Deputy Team Leader for Dubai Quality Awards, Team Leader for UAE Innovation Awards, Senior Assessor for Dubai SMART Industry Awards by Dubai Government, TAGDEER Awards for labourers by Dubai Government and Sheikh Khalifa Excellence Award by Abu Dhabi Government. She has been Communication Chair for ASQ Local Member Community UAE Chapter, participated in the panel of judges for the International Business Excellence Awards, ASQ – ITEA International Team Excellence Awards and Stevie Awards for Sales and Customer Service. Neetu is Executive Committee Member of Dubai Quality Group CIS group and has been in Jury Panel at Continual Improvement Symposium for Kaizen, Six Sigma, Best Practices, Happiness, and Innovation. Neetu has successfully formed and lead teams of Quality professional to implement various quality initiatives including CMMI Maturity Level 3-4 framework, ITIL, Six Sigma, Lean, EFQM, Integrated Risk Framework. She has been Assessment Team Member (ATM) for SCAMPI- Class A Appraisal. Her hands on experience to various quality frameworks and models like EFQM, ITIL, ISO 20000-1, ISO 27000, Cobit, TMMi, Project Management Office, Six Sigma, Lean, Balanced Score Card, Strategy, KPIs and Emotional Intelligence etc. makes it obvious for her to see a bigger picture holistically along with the minute details to integrate different approaches for the excellence.
Panel on Industry 4.0 - 2:30 – 4:00, Tuesday (Ballroom)

Panel Chair: Ts. Dr. Mehran Doulat
Associate Professor of Engineering/Operations Management
MBA Program Committee/Coordinator Director of Spectral Centre for Operational Excellence
Research (COER)
Xiamen University
Sepang, Selangor, Malaysia
Director Academy of Research and Training (SART Sdn. Bhd.)

Mr. Sanjay Nadkarni
Director of Research & Innovation
Emirates Academy of Hospitality Management (Jumeirah Group)
United Arab Emirates

Satya Saurabh Khosla
Owner and Managing Director
Adimode Transnational Trading LLC, Dubai, UAE

Panel on Global Engineering Education - 4:30 – 6:00, Tuesday (Ballroom)

Panel Chair: Dr. Abu Masud, Wichita State University

Dr. Abu Masud, P.E.
Emeritus Professor, Department of Industrial and Manufacturing Engineering
Wichita State University, Kansas, USA

Dr. Abu Masud is an emeritus professor of industrial and manufacturing engineering at Wichita State University. He was named the Boeing Global Engineering Professor at Wichita State University. Dr. Masud advanced the College of Engineering's strategic alliances for global enrichment and experiential learning of students as well as international research collaborations and partnerships. He received Duane and Velma Wallace Outstanding Educator Award from WSU College of Engineering. Previously he was held various positions at Wichita State including dean and associate dean of graduate school (2008-2013), coordinator, college ABET affairs (2006-2008), associate dean, college of engineering (2004-2005), chair, industrial and manufacturing engineering department (1994-2004) and graduate coordinator of IME (1991-94, 1998-98, 2001-2004). Dr. Masud has engaged with various companies and governmental research centers including NASA Langley Research Center, VA, NASA/ASEE Summer Faculty Fellow (1991 and 1992), Boeing, Consulting Analyst, and Kuwait Institute for Scientific Research. He is member of Accreditation Review Council (2011-2014). Dr. Masud published book, book chapters, and numerous journal and conference papers. He is registered Professional Engineer at Kansas State. Dr. Masud is an IIE fellow. He received Ph.D. and M.S. in Industrial Engineering from Kansas State University, and B.S. in Mechanical Engineering from Bangladesh University of Engineering & Technology.
Dr. Alaa Ashmawy
Professor and Dean, School of Engineering
American University in Dubai, United Arab Emirates

Dr. Alaa Ashmawy joined AUD in 2006 as Dean of Engineering. Prior to his appointment at AUD, he had been a tenured Associate Professor at the University of South Florida in Tampa. His expertise is in geotechnical engineering, with interests in numerical modeling of foundations and earth structures, environmental geotechnics, and soil dynamics & earthquake engineering. Dr. Ashmawy’s experience includes engineering consulting for a number of companies in the US, and a visiting professorship at the Universidad de las Americas in Puebla, Mexico. He is a licensed professional engineer in the State of Florida (USA) and an ABET Program Evaluator. He received Ph.D. in Civil Engineering from Purdue University, M.S. in Civil Engineering from Purdue University and B.S. in Civil Engineering from Alexandria University (Distinction with Honors).

Rosemary R. Seva, Ph.D.
Professor of Industrial Engineering and Former Dean at the Gokongwei College of Engineering
De La Salle University, Manila, Philippines

Rosemary Seva is a Professor of Industrial Engineering and former Dean at the Gokongwei College of Engineering – De La Salle University, Philippines. She is the current President of three ergonomics organizations: Asian Council on Ergonomics and Design (ACED), the Southeast Asian Network of Ergonomics Societies (SEANES) and Human Factors and Ergonomics Society of the Philippines (HFESP). She also heads the Engineering Commission of the Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU). She obtained her doctorate degree at the Nanyang Technological University (Singapore). She has two master’s degrees: one in Ergonomics from the University of New South Wales (Australia) and in Industrial Engineering from De La Salle University. She is an ASEAN Engineer and a Professional Industrial Engineer.

Khaled S. El-Kilany, Ph.D.
Professor of Industrial Engineering and Head of Department
Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt

Khaled S. El-Kilany is a professor of industrial engineering at the department of Industrial and Management Engineering (IME) at the Arab Academy for Science, Technology, and Maritime Transport (AASTMT), which is accredited by the Engineering Accreditation Commission of ABET since 2010. The department offers both B.Sc. and M.Sc. degrees in Industrial and Management Engineering. Prof. El-Kilany has previously been appointed as acting head of department of Industrial and Management Engineering for two years (February 2005 – February 2007) and is currently the head of department since February 2009. Prof. El-Kilany is a senior member of the ISE and is a reviewer of several journal, conferences, and textbooks. Prof. El-Kilany has received his Ph.D. in Mechanical and Manufacturing Engineering from Dublin City University, Ireland. Having Intel Ireland as the industry research partner, his research work included modeling and simulation of automated material handling system of Intel’s wafer fabrication facility Fab24, which was the second wafer fabrication facility in the world that produces 300mm wafers. Since graduation in 1997, Prof. El-Kilany has developed extensive experiences in teaching and research within the academic and professional field of Industrial Engineering. Also, Prof. El-Kilany has almost ten years of experience in the design, development, and accreditation of undergraduate and postgraduate industrial engineering curricula. He has been directly involved in all processes required for accreditation by ISO, ABET, IMechE, IET, National Authority for Quality Assurance and Accreditation in Egypt, and the Supreme Council of Universities. He’s an editor and reviewer of several department and college self-study reports presented to different national and international accreditation bodies in the US, UK, and Egypt; has led teams across the department and college to coordinate all departmental efforts to satisfy these bodies’ requirements; and hosted various visits by program evaluators and examiners to the department and college. His research interests lies in the analysis and improvement of manufacturing systems performance; specifically, material flow and WIP management using discrete-event systems simulation and optimization techniques. He has supervised over 15 Masters Research students to completion and is supervising a number of PhD Research students in Ireland and the U.K.

Panel on Supply Chain Sustainability - 2:30 – 4:00, Wednesday, March 11, 2020 (Ballroom)
Panel Chair: Dr. Jose Arturo Garza-Reyes, University of Derby, UK

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

Professor Jose Arturo Garza-Reyes is a Professor of Operations Management and Head of the Centre for Supply Chain Improvement at the College of Business, Law and Social Sciences, University of Derby, UK. He is actively involved in industrial projects where he combines his knowledge, expertise and industrial experience in operations management to help organisations achieve excellence in their internal functions and supply chains. He has also led and managed international research projects funded by the British Academy, British Council and Mexico’s National Council of Science and Technology (CONACYT). As a leading academic, he has published over 100 articles in leading scientific journals, international conferences and four books in the areas of operations management and innovation, manufacturing performance measurement and quality management systems. Areas of expertise and interest for Professor Garza-Reyes include general aspects of operations and manufacturing management, business excellence, quality improvement, and performance measurement. He is a Chartered Engineer (CEng), a certified Six Sigma-Green Belt, and has over eight years of industrial experience working as Production Manager, Production Engineer and Operations Manager for several international and local companies in both the UK and Mexico. He is also a fellow member of the Higher Education Academy (FHEA) and a member of the Institution of Engineering Technology (MIET).

Panel Speakers

Dr. Sunil Luthra
Assistant Professor, Department of Mechanical Engineering
Government Polytechnic, Jhajjar, India

Sunil Luthra is working as an assistant professor, State Institute of Engineering and Technology (formerly known as Government Engineering College), Nilokheri, Haryana, India. He is also working as Honorary Research Fellow at Bradford School of Management, University of Bradford, Bradford, United Kingdom. He has been associated with teaching for the last seventeen years. He has contributed over 180 research papers in international refereed & national journals, and conferences at international and national level. He has an excellent research track record (over 290 cumulative impact factor points; received more than 3,400 citations and H-index – 30 on Google Scholar). He has received many Awards and Honours for the research and teaching. He is as Guest Editor of many reputed journals such Journal of Cleaner Production, Production Planning & Control, Resources Policy, Resources, Conservation and Recycling and Annals of Operations Research etc. He is reviewing papers for more 50 reputed
IEOM Panel Sessions  Dubai, UAE, March 10-12, 2020

Panel on Women in Industry and Academia (WIIA)
4:30 – 6:00 pm, Wednesday, March 11, 2020 (Ballroom)
Panel Chair: Ola AlZawati, Corporate Excellence Expert in Dubai Municipality, Dubai, UAE

Panel Chair

Ola AlZawati
Corporate Excellence Expert in Dubai Municipality
Dubai, UAE

Ms. AlZawati is a holder of the best leader Award from King Abdullah II Center for Excellence in Government Performance and Transparency and American Society for Quality Award ASQ– senior level award for the middle east and the region in 2017. She is currently a PhD. candidate in Engineering and Engineering Management at the University of Sharjah in business excellence and holds a MSc. in industrial engineering in performance management. Besides her academic knowledge, she has a 25 years of practical experience in public sector management reforms, including strategy development and execution, services and process improvements; performance management, audits and evaluations; governance, sustainability and accountability; public sector compliance including accreditation, certification and inspection; policies and procedures manuals, auditing and quality improvement; project management; innovation assessment and management. She has several internationally published papers in the field of innovation, quality and performance management. She also worked as consultant and assessor for different regional and international agencies such as UNDP, USAID, GIZ, UAE and Dubai PMOs, etc.

Panel Speakers

Dr. Anil Kumar
Lecturer in area of Operations, Supply Chain and Business Analytics
Centre for Supply Chain Improvement
The University of Derby
Derby, United Kingdom

Anil Kumar is a Lecturer in an area of Operations, Supply Chain and Business Analytics at Centre for Supply Chain Improvement, the University of Derby, U.K. For the last eight years, he has been associated with teaching and research. He earned his PhD in Management Science from Indian Institute of Information Technology and Management, Gwalior, India. He did graduation in Mathematics (Hons) and MSc in Mathematics from Kurukshetra University, India. He earned Master of Business Administration (MBA) and qualified National Eligibility Test (NET), June 2011. Anil has contributed over 40+ research papers in international refereed & national journals.

Dr. Jiri Tupa
Vice Dean for Faculty Development, Faculty of Electrical Engineering
University of West Bohemia, Pilsen, Czech Republic

J. Tupa received his MSc (2002) and PhD (2008) in Electrical Engineering from Faculty of Electrical Engineering, University of West Bohemia in Pilsen, Czech Republic. He is a Vice-dean of Faculty and Senior Lecturer at Department of Technologies and Measurement. Dr. Tupa is member of executive management at Regional Innovation Centre for Electrical Engineering of the Faculty of Electrical Engineering at the University of West Bohemia in Pilsen. He is also PhD supervisor, reviewer of journal and conference publications and co-organizer of conferences. His research interests include Business Process Management, Quality Management, Risk and Performance Management in Electrical Engineering Industry, Industrial Engineering, Electronics Manufacturing and Diagnostics, Financial and Project Management, Copyrights and patents law, information law and transfer of IPR. Jiri Tupa is responsible for several international research and development projects with industrial and university partners. The project RiMaCon – Risk Management Software System for SMEs in the Construction Industry is one of the important international projects. This project has received funding from the European Union’s Seventh Framework Program for research; technological development and demonstration (2013-2017). The RiMaCon project’s main goal is to implement a collaborative effort to promote the sharing of knowledge and competencies in a long-term strategic research partnership around the development, testing and validation of a cost effective and user-friendly risk management system for SMEs in the construction sector.

Dr. Rehab Faraj Al Ameri
Director of National Accreditation Department
Emirate Authority for Standardization and Metrology-ESMA and Secretary General of International Halal Accreditation Forum-IHAF

Before joining ESMA, Dr. Rehab was a Healthcare Quality Expert at Ministry of Presidential Affair, UAE, and her role was oversight healthcare improvement & setting healthcare improvement quality strategy for all hospitals under Ministry of Presidential Affair. From 2012 until October 2016 she was a senior specialist in Abu Dhabi Quality and Conformity Council, responsible for setting up technical requirements for related activities within Quality Infrastructure system in Abu Dhabi and ensure their competency in line with international requirements. Before that, Dr. Rehab spent her carrier life of over 11 years in military, worked as Gastroenterology Consultant at Zayed Military Hospital in Abu Dhabi until reached rank ‘Major’. During that time, she earned her MSc in science of clinical gastroenterology and rewored with higher distinction from Queen Mary University London-UK.

Also holding a Master degree in Quality Management (MQM) as well Higher Diploma on Healthcare Quality Management from Cambridge both degrees with distinction. Chairing Board of Directors of GCC Accreditation Center (GAC) and Board member in many organizations. Lead Emirate National Accreditation System to achieve its International recognition as the first national accreditation body in the region based on the new ISO/IEC 17011:2017 standard. Pioneer Subject Matter Expert assessor of the 4th Generation Model for Excellences Award Program – UAE, Innovation Award, Emiratization Award and many others. She won the honor ship Medal for the best serving officer by UAE GHQ and the ADGCC “Al Shara Excellence Award” for the distinguishing project team of 1st PT for Inspection Body in lifting equipment worldwide in corporation with LEEA 2015. Lead the project of Medical Laboratory Technical Requirements based on ISO15189 which approved to be the main technical requirements in UAE for accreditation of medical lab. An active member in many technical quality-working group within UAE like (National agenda of Healthcare, international Quality policy improvement by USAID) as well as regional and international speaker.
Panel Sessions
Dubai, UAE, March 10-12, 2020

Engineer Rab’ah Mufleh Al-Ajarmeh
Director General, Jordan Institute for Public Administration

Rab’ah enjoys 31 years of experience. She has a Bsc. In Chemical Engineering. She started her career in 1987 at the Ministry of Industry and Trade and continued at the Jordan Standards and Metrology Organization “JSMO” until 2008, after that she moved to work with the private sector as a consultant and expert on different projects funded by USAID focusing on enhancing business environment and strengthening of governmental organizations performance. Rab’ah worked in the fields of excellence, institutional enhancement and organizational transformation. She is a certified EFQM lead assessor, quality manager, and lead auditor; she worked as an assessor for different excellence award programs in Jordan and the UAE. She has expertise in different areas including policies & legislation development, project management, strategic planning, public sector governance, business process reengineering, innovation, sustainability & business continuity. She has extensive corporate building capacity experience including the development of training packages and learning initiatives with an understanding of global best practices in standardization, conformity assessment and excellence development. Rab’ah volunteer as a board member for the Jordan Society for Quality; a society focusing on promoting Quality and Excellence in Jordan. She is also a member of different societies working on social development.

Fatima Butti Al-Muhairi
Director of Investment and Social Responsibility Department
Community Development Authority
Dubai, UAE

Fatima Butti Al-Muhairi is a strategic expert in social responsibility and community development. A leader who has an innate intelligence and a challenging spirit, proven capabilities in transforming strategic plans into reality and played a distinctive role in strategic planning in all Federal and local government sectors and contribute to the application and development of standards that distinguish a number of sectors, including the development of the social sector in the Emirate of Dubai. She works in the Community Development Authority in the field of social welfare and community development for a period of seven years during which she held several leadership positions such as a director of Department of Financial Benefit Management and a director of the Department of Investment and Social Responsibility was keen to seek financial support and aid from various public and private entities. Aside from her work in the government sector, she volunteered to work for a non-profit organization that seeks to support excellence and achieve quality in the private sector, which is the Dubai Quality Group which was established in 1994. She studied Higher Diploma in Business Administration at the Higher Colleges of Technology for female students in Dubai and completed a bachelor’s degree in the college in the same specialization and after that she got a master’s degree in global business management from the University of Wollongong Australian and is about to complete a PhD in social innovation.

Dr. Nita Sukdeo
Full Time Senior Lecturer in Quality and Operations Management
BTech Quality Programme Manager
Department of Quality and Operations Management
University of Johannesburg
Gauteng, South Africa

Dr. Nita Sukdeo is currently a full time senior lecturer in the field of Quality and Operations Management, and the BTech Quality programme manager, in the Department of Quality and Operations Management, at the University of Johannesburg, Gauteng, 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 an emerging young researcher in the field of total quality management and operations management. Her field of expertise also include quantitative analysis, quality management systems, quality auditing and risk assessment. She is a qualified Lead Auditor, proficient in ISO standards and certification. She is one of the directors of the Society for Operations Management in Africa (SOMA), as well as a professional member of the South African Society for Quality (SASQ).

Panel Chair

Steven Sibrel
Senior Supplier Quality Manager, Harman / Becker, Novi, Michigan, USA
Professional Development Chair and Past Chair – ASQ Greater Detroit

Steve Sibrel is a business process improvement trainer, coach and auditor with over 35 years of experience in the business and manufacturing world. He is currently working as Senior Supplier Quality Manager at Harman International, a manufacturer of audio and infotainment systems for consumer, professional, and automotive industries, with well-known brands such as JBL, Lexicon, Crown, Infinity, Mark Levinson, Becker and Harman-Kardon. Previously he held a number of engineering and management positions in diverse industries at Applied Materials (Semiconductor), NEC (Telecommunications) and Texas Instruments (Military). He has conducted over 200 supplier audits in North America, Europe, and Asia and is a Lead Auditor for ISO/TS16949, ISO9001, ISO13485, ISO17025, and 21CFR820. He has been the Chair for Professional Development for the ASQ Detroit section since 2008. He received the Distinguished Service Award in 2008 and the Leadership Award in 2013 from ASQ. Current ASQ Certifications held are Six Sigma Black Belt, Quality Tools and Techniques, TQM Fundamentals, and Operations Management. He has over twenty years of industrial engineering experience in the logistics, contracting, services and manufacturing sectors. He earned his PhD from the University of New Brunswick in Canada. He published one book on integrated company-wide management system and more than twenty papers in various international journals and conference proceedings. He conducted benchmarking studies with General Electric and Boeing. He is also certified as a Black Belt by the Juran Institute and as a Lean Six Sigma Master Black Belt by Johnson Controls International in the USA and by Alignment Strategies in Canada. He is also certified as a Quality, Health, Safety, and Environment Management Systems (ISO 9001, ISO 14001, OHSAS 18001) Lead-Auditor by Beareau Veritas. Dr. Souraj won the United Arab Emirates Quality-professional-Award by the American Society for Quality (ASQ) in 2015.

Panel Speakers

Dr. Souraj Salah
Process Improvement Manager
Abu Dhabi Port, UAE

Dr. Souraj Salah is currently a full time Process Improvement Manager at Abu Dhabi Ports. He is an adjunct professor at Abu Dhabi School of Management and also at Hamdan Bin Muhammad Smart University (Teaching courses like: Japanese Quality, Quality Tools and Techniques, TQM Fundamentals, and Operations Management). He has over twenty years of industrial engineering experience in the logistics, contracting, services and manufacturing sectors. He earned his PhD from the University of New Brunswick in Canada. He published one book on integrated company-wide management system and more than twenty papers in various international journals and conference proceedings. He conducted benchmarking studies with General Electric and Boeing. He is also certified as a Black Belt by the Juran Institute and as a Lean Six Sigma Master Black Belt by Johnson Controls International in the USA and by Alignment Strategies in Canada. He is also certified as a Quality, Health, Safety, and Environment Management Systems (ISO 9001, ISO 14001, OHSAS 18001) Lead-Auditor by Beareau Veritas. Dr. Souraj won the United Arab Emirates Quality-professional-Award by the American Society for Quality (ASQ) in 2015.
Dr. Saso Krstovski, MBB
Lean Manufacturing Coach / Six Sigma Master Black Belt
Van Dyke Transmission Plant, Ford Motor Company, Michigan, USA

Dr. Saso Krstovski works for Ford Motor Company – Van Dyke Transmission Plant as a Lean Manufacturing Coach and Six-Sigma Master Black Belt. With over twenty years of service with Ford Motor Company, Dr. Krstovski has held a multitude of engineering assignments, which includes time working as a Test Engineer, Launch Test Engineer, and Electrical Control Engineer. During his time with Ford Motor Company, Dr. Krstovski has worked in several plant environments and skill teams such as Dearborn Tool & Die Plant, Information Technology, and has held front-line supervision roles managing hourly UAW-Ford production employees. This exposure to new work concepts within Ford has allowed Dr. Krstovski to amass a holistic approach to engineering. As such, Dr. Krstovski has gained an extensive understanding of the Six-Sigma methodologies. As a detail oriented and data-driven engineer, Dr. Krstovski is an invaluable contributor to Ford Motor Company. He is highly distinguished and skilled with problem identification and resolution to avoid time and cost expenditures. Dr. Krstovski recently joined Lawrence Technological University as an Adjunct Professor and is currently teaching in the Engineering Department. Dr. Krstovski’s research interests lie in the area of System Optimization. He continues to collaborate actively with researchers at several universities. Dr. Krstovski provides guidance globally to doctoral candidates on dissertation direction. He graduated from Lawrence Technological University with a Doctorate of Engineering in Manufacturing Systems (DEMS). In addition, to his doctorate degree, Dr. Krstovski has a Masters in Electrical Computer Controlled Systems and a Bachelor’s of Science in Electrical Engineering from Wayne State University. Dr. Krstovski has authored several publications and scientific articles on various engineering topics.

Sunil Thawani
Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates
Member, Board of Directors, Dubai Quality Group

Sunil is a leading management professional with over 35 years of experience in TQM, Business Excellence, Corporate Governance, Strategy deployment, Re-engineering, Service excellence in diverse industries such as e-Government, Social Housing, Manufacturing, Services, Healthcare, Oil & Gas, Banking, Education, etc. He has a successful track record of transforming/ building organizations which are highly customer focused, continually improving & differentiated in market place for excellence. Some of his leadership roles are:

- Addressed conferences locally, regionally & globally – UAE, Sweden, Mauritius, India, Indonesia, Azerbaijan, Bahrain, Nigeria, Slovenia, etc.
- International Consultant – Quality & Excellence, United Nations
- CEO of Quality Indeed Consulting, Member of the Board, Dubai Quality Group, 2019-2021.
- Member of the Board, American Society for Quality, 2016-2017. 1st from MENA.
- Recipient, ASQ Lancaster Medal, 2015, 1st in MENA in 30 years. Author, Business ExcellenceAwards – Strategies for Winning”
- Fellow, American Society for Quality (ASQ), 1st in GCC. (2009). Jury member, Dubai Quality Award, Sheikh Khalifa Excellence Award
- Invited by United Nations to participate in international conferences on public services, innovation, governance, UN SDGs 2030

Sunil has trained thousands of professionals in Excellence, Customer Experience, Management Systems, Service Excellence, Benchmarking, Business Process Management etc. He has helped many organization to implement Quality & Excellence frameworks such as EFQM/ UAE 4th Generation Excellence Model/ United Nations Public Service Award/ Lean to enhance performance and create a culture of excellence, continual improvement and customer service. Sunil has travelled all over the world on motorcycle. He lives in United Arab Emirates.

Fawzi A. Bawab, PhD
Partner and Senior Consultant, Meirc Training and Consulting, Dubai-UAE

Dr. Fawzi is a senior quality and strategy consultant with over 30 years’ experience in Canada and the Middle East in the fields of TQM, Excellence models and various ISO models (9001, 14001, 16949) and Lean Six Sigma. He holds a PhD in Lean Six Sigma from Edinburgh Business School at Heriot-Watt University in the UK. He has conducted over 400 external ISO audits for organizations in different sectors worldwide. Fawzi has also trained and coached thousands of participants in different quality and continual improvement fields. He is a frequent keynote speaker at universities, professional conferences and corporate meetings. Fawzi has been involved in the implementation of more than 300 projects in areas of quality, excellence, Lean and Six Sigma resulting in savings exceeding USD 30 million. Building on his former experience with KPMG, BSI and IBM, Fawzi continues to support and coach organizations in achieving their business objectives through various training, coaching and consulting assignments focusing on business process improvement. His areas of competence include corporate quality systems, Six Sigma (black belt, green belt, champion), Lean, ISO, strategic quality planning, TQM, process improvement, leadership, Statistical Process Control (SPC), performance management and strategic management. Fawzi is a Certified Six Sigma Master Black Belt (CSSMBB) and a Kaplan- Norton qualified strategy practitioner. He is also a senior member of the American Society for Quality (ASQ), the American Institute of Industrial Engineers (IIIE) and the American Society for Engineering Management (ASEM). He is also an ASQ Certified Manager of Quality/Organizational Excellence and a certified training Practitioner (CTP™) from the Institute of Performance and Learning, Canada.

Neetu Choudhary
Executive Committee Member- Continuous Improvement Subgroup, Dubai Quality Group
Team Leader – UAE Innovation Awards and Compliance Analyst, DP World
Dubai, United Arab Emirates

Panel on Healthcare Improvement - 4:30 – 6:00, Thursday

Dr. Mohammad T. Khasawneh, Ph.D.
Professor & Chair, Systems Science and Industrial Engineering
Associate Director, Watson Institute for Systems Excellence
Director, Healthcare Systems Engineering Center
Graduate Program Director, Executive Master of Science in Health Systems
Thomas J. Watson School of Engineering and Applied Science
State University of New York at Binghamton, Binghamton, New York 13902, U.S.A.
Dr. Abdelaziz Berrado
Professor and Chair, Industrial Engineering
EMI School of Engineering, Mohamed V University in Rabat, Morocco
Abdelaziz BERRADO is a Professor and Chair of Industrial Engineering in EMI School of Engineering at Mohamed V University in Rabat. He holds a Ph.D. in Decision Systems and Industrial Engineering from Arizona State University and an M.S. and a B.S./M.S. from San Jose State University and Ecole Mohammadia d’Ingénieurs school of engineering, respectively. His research and teaching interests are focused in the areas of Data Science, Industrial Statistics, Operations and Supply Chain Modelling, Planning and Control with applications in healthcare systems and other industries. He focuses on developing frameworks, methods and tools for systems’ diagnostics, optimization and control with the aim of operational excellence. Dr Berrado’s work has led to several research papers and conference articles with local and international funding. In addition to academic work, he interacts with different Industries in the areas of Performance Management, Operations and Supply Chain Management, Machine Learning and Quality Engineering. He reviews for many journals and is member of INFORMS, IEM and IEEE. Previously, he was also a senior engineer at Intel.

Dr. Mohamed Adel Serhani
Full Professor and the Assistant Dean for Research and Graduate Studies
College of Information Technology, United Arab Emirates University, Al Ain, UAE
Mohamed Adel Serhani is currently a Full Professor and the Assistant Dean for Research and Graduate Studies at the College of Information Technology, United Arab Emirates University, UAE. He received the Ph.D. degree in computer engineering from Concordia University, Canada, in 2006, and the M.Sc. degree in software engineering from the University of Montreal, Canada, in 2002. His research interests include smart connected health, non-invasive smart health monitoring, cloud for data intensive e-health applications, and services, SLA enforcement in cloud data centers, cloud federation and monitoring. Big Data quality assessment, and web services applications. Dr. Serhani has a large experience earned through his involvement and management of different R&D projects for the past 14 years. He served on several organizing and Technical Program Committees, including for instance the IEEE DESt, IEEE WiMob, IEEE IWCMC, WMNC, NDT and IIT. He delivered several keynotes and tutorials in respected international conferences and events. He is the program Co-chair of the upcoming International Conference on Web Services (ICWS’20) which will be held this June, 2020 in Honolulu, Hawaii, USA. He was the program Co-chair of the IEEE conference on Innovations in Information Technology (IIT’13), Chair of IEEE Workshop on Web service (IWCMC’13), Chair of IEEE workshop on Web, Mobile, and Cloud Services (ICWS’12), and Co-chair of International Workshop on Wireless Sensor Networks and their Applications (NDT’12). Dr. Serhani has published over 120 refereed publications including conferences, journals, a book, and book chapters.

Mohammad Mehedy Masud, Ph.D.
Associate Professor, College of IT
United Arab Emirates University, Al Ain, UAE
Dr. Mohammad Mehedy Masud is currently an Associate Professor at College of Information Technology (CIT) at United Arab Emirates University (UAEU). Prior to joining UAEU in January 2012, Dr. Masud worked at the University of Texas at Dallas as a Research Associate for 2 years. He received his Ph.D. degree in Computer Science from University of Texas at Dallas, USA, in December 2009. Dr. Masud’s research interests include Big Data mining, data stream mining, machine learning, healthcare data analytics and e-health. His research also contributes to cybersecurity (network security, intrusion detection, and malware detection) using machine learning and data mining. He has published more than 50 research articles in high quality journals such as Transactions on Knowledge and Data Engineering (TKDE), International Journal of Knowledge and Decision Making (IJKM), Journal of Knowledge and Information Systems (KAIS), and top tier conferences including IEEE International Conference on Big Data (BigData’16), IEEE International Conference on Data Mining (ICDM). His is the lead author of the book “Data mining tools for malware detection” and the principal inventor of a US Patent. He is the principal investigator of several prestigious research grants funded by government and private funding organizations.

Prof. Ma. Janice J. Gumasing, PIE
Professor, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines
Prof. Ma. Janice J. Gumasing, PIE is a Professor of School of Industrial Engineering and Engineering Management at Mapua University. She has earned her B.S. degree in Industrial Engineering and Masters of Engineering degree from Mapua University. She is a Professional Industrial Engineer (PIE) with over 15 years of experience. She is also a professional consultant of Kaizen Management Systems, Inc. She has taught courses in Ergonomics and Human Factors, Cognitive Engineering, Methods Engineering, Occupational Safety and Health and Lean Manufacturing. She has numerous international research publications in Human Factors and Ergonomics. Her research papers have been awarded as Best Track Paper in 2014 IEM European Conference in Bali, Indonesia; 2016 IEEE European Conference in Paris, France; 2019 International Conference on Industrial Engineering and Applications in Tokyo, Japan; and 2019 International Conference on Management Science and Industrial Engineering in Phuket, Thailand. She has also been awarded as Woman in the Industry and Academe during the 2019 International Conference of Industrial Engineering and Operations Management (IEOM) held in Bangkok, Thailand.

Dr. Md. Haider Ali Biswas
Professor, Mathematics Discipline, Science Engineering and Technology School
Khulna University, Khulna-9208, Bangladesh
Dr. Md. Haider Ali Biswas is currently affiliated with Khulna University, Bangladesh as a Professor of Mathematics under Science Engineering and Technology School and he served as the Head of Mathematics Discipline from 2015 to 2018. Prof. Biswas obtained his B Sc (Honors) in Mathematics in the year 1993 and 1994 respectively from the University of Chittagong, Bangladesh, M Phil in Mathematics in the year 2008 from the University of Rajshahi, Bangladesh and PhD in Electrical and Computer Engineering from the University of Porto, Portugal in 2013. He has more than 20 years teaching and research experience in the graduate and post-graduate levels at different public universities in Bangladesh. He published three books, three book chapters and more than 100 research papers in the peer reviewed journals and international conferences. Prof. Biswas has worked at several R & D projects in home and abroad as PI and/or Researcher, particularly he is conducting different research projects funded by the Ministry of Science and Technology, University Grants Commission of Bangladesh and The World Academy of Science (TWAS), Trieste, Italy. His present research interests include Optimal Control with Constraints, Nonsmooth Analysis, Mathematical Modeling, Mathematical Biology and Biomedical Engineering, Epidemiology of Infectious Diseases. He is the life/general members of several professional societies and/or research organizations like Bangladeshi Mathematical Society (BMS), Asiatic Society of Bangladesh (ASB), Institute of Mathematics and its Applications (IMA), UK, European Mathematical Society (EMS) and Society for Mathematical Biology (SMB). Dr. Biswas was the General Secretary of Mathematical Forum Khulna in 2013-2015. Dr. Biswas organized several national and international seminars/workshops/conferences in home and abroad and he has been working as editor/member of editorial boards of several international peer-reviewed journals. Professor Biswas contributed as Keynote/Invited/Plenary/Panel speaker at several international conferences/seminars/workshops in home and abroad. Professor Biswas has been nominated as the Member of the Council of Asian Science Editors (CASE) for 2017-2020 and the Associate Member of the Organization for Women in Science for the Developing World (OWSD) since 2017. Recently, Professor Biswas has been elected as a Member of Executive Committee of Bangladesh Mathematical Society (BMS) for the year 2020-2021, and also nominated as the Associate Editor of the international journal of the Asian Mathematical Society (JAMS) for the year 2020-2021. Dr. Biswas has been nominated as a Member of Executive Committee of the IOEM Society, Bangladesh Chapter and also serving as the Treasurer of the IEOM Society, Bangladesh Chapter. He is also serving as the Faculty Advisor of the IEOM Society Khulna University Chapter. Professor Biswas is presently serving as the President of Bangladesh Society for Mathematical Biology (BSMB) for the year 2020-2021.
Dr. Kenichi Funaki, Hitachi, Yokohama, Japan
Dr. Adel Hejazi, Engineering Services Management (ESM) Limited, Essex, UK
Dr. Anwar Hossain, Daikin Applied, Minneapolis, Minnesota, USA
Hafizuzzela Ibrahim, Construction Research Institute of Malaysia (CREAM)
Hew Koe Kock, Intel Malaysia
Ali Massaei, National Iranian Gas Company, Iran
Bob Mathur, Sr. Project Manager, Phillips 66 Refinery (Exxon), Linden, NJ, USA
German Moya, President at IEEE Costa Rica Section, Costa Rica
Paul Moore, International Mining, England, UK
Dr. Gerard O'Connor, Adelaide and Meath Hospital, Dublin, Ireland
Dr. Banu Ozkeser, Istanbul, Turkey
Dr. Sushil K. Shetty, Wilsonart LLC, Temple, Texas, USA
Masaru Tezuka, Hitachi Solutions East Japan, Ltd., Japan

**Women in Industry and Academia (WIA) Committee**
N Ashe Phaha, Crystal Quality, UK
Dr. Chai Chee Ming, Universiti Tun Hussein Onn Malaysia
Dr. Mey Goh, Assoc Professor in Product Design, Loughborough University, UK
Dr. Iram Kossavi, Al Akhawayn University, Ifrane, Morocco
Dr. Stefanie Pillai, University of Malaya, Kuala Lumpur, Malaysia
Dr. Firda Svinikaya Senfoglu, Bilgi University, Istanbul, Turkey
Dr. Adibah Shuib, Universiti Teknologi MARA, Malaysia
Dr. Vanajah Siva, Chalmers University, Sweden
Vanessa Victoire, University of Mauritius
Prof. Soumaya Yacout, École Polytechnique de Montréal, Canada
Dr. Doki Sarawati, Universitas Trisakti, Jakarta, Indonesia
Dr. Ho Hwi Chie, Bina Nusantara University (Binus), Indonesia

**Track Chairs**
Artificial Intelligence (AI)
Dr. Tagwe Ahmed Musa, Sudan University of Science and Technology, Khartoum, Sudan
Automation and Agility
Dr. Tawanda Mushiri, University of Zimbabwe, Harare, Zimbabwe
Business Management
Dr. Shekar Babu, AMRITA School of Business, Bangalore, India
Case Studies
Dr. Javad Feizabadi, MIT Global SCALE Network in Asia- Malaysia Institute for Supply Chain Innovation
Computers and Computing
Prof. Dr. Anand Kumar, M.S. Engineering College, Bangalore Karnataka, India
Construction Management
Hossam Hassoan, University of Alexandria, Alexandria, Egypt
Data Analytics and Big Data
Dr. Ammar Aamer, Sampoerna University, Jakarta, Selatan, Indonesia
Decision Sciences
Vassilis C Gogiamnis, University of Thessaly, Larissa, Greece
Dr. Azizur Rahman, Department of Industrial Engineering and Management, Khulna
University of Engineering & Technology (KUET), Khulna -9203, Bangladesh
Defense and Aviation
Mejar Wong Wa Loong, National Defence University of Malaysia
Dr. Al Mostafaeipour, Yaaz University, Yazd, Iran
Dr. Md. Mizanur Rahman, University Technology Malaysia (UTM), Johor Bahru, Malaysia
Design and Analysis
Dr. Ahsanul Karim, Ford Motor Company, USA
Prof. Ir. Dr. Mohd Khalir Anuar Mohd Affrin, University Putra Malaysia, Selangor, Malaysia
e-Business/e-Service/e-Commerce
Dr. Christoph Wunck, Jade University, Wilhemshaven, Germany
Energy
Dr. Al Mostafaeipour, Yaaz University, Yazd, Iran
Dr. Md. Mizanur Rahman, University Technology Malaysia (UTM), Johor Bahru, Malaysia
Engineering Economy
Dr. M. Affan Badar, Indiana State University, Terre Haute, IN, USA
Prof. Jerekas Gandure, University of Botswana, Gaborene, Botswana
Engineering Education
Dr. Chee-Ming Chan, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia
Dr. Peter Toth, Trefort Agoston Centre for Engineering Education, Obuda University, Hungary
Engineering Management
Dr. Mehran Doulat, University of Wollongong, Wollongong, NSW, Australia
Entrepreneurship and Innovation
Dr. Indra Gunawan, The University of Adelaide, Australia
Facilities Planning and Layout
Dr. Zeki Ayagi, Kadir Has University, Turkey
Financial Engineering
Abbas Ahmad, Payam-e-Noor University of Bushehr, Iran
Healthcare Systems
Dr. Farzad Firouzi, Department of Industrial Engineering University of Sistan and Baluchestan, Zahedan, Iran
Dr. Vahab VahdatZad, Northwestern University, USA
Human Factors and Ergonomics
Yoshiki B. Kurata, Industrial Engineering Department, Technological Institute of the Philippines Quezon City, Philippines

IE / OM in Asia
Dr. Ho Hwi Chie, Bina Nusantara University

Industrial Management
Dr. Pravin Tambe, Associate Professor, Department of Industrial Engineering, Shri Ramdeobaba College of Engineering and Management, Nagpur, India

Industry Best Practices
Edly Ramly, Lean Six Sigma Master Black Belt, EFR Certification, Malaysia
Masaru Tezuka, Hitachi Solutions East Japan, Ltd., Japan

Information Technology and Information Systems
Prof. Sukhjeet Singh, Guru Nanak Dev Engineering College, Ludhiana, Punjab, India

Inventory Control and Management
Dr. Salvatore Miranda, University of Salerno, Italy

Lean and Six Sigma
Dr. Bernardo Villareal, Universidad de Monterrey, Mexico
Erly Ramly, Lean Six Sigma Master Black Belt, EFR Certification, Malaysia
Abdulah Y. Dhfer, Amroc, Saudi Arabia

Logistics Management
Dr. Wahyudi Sutopo, Universitas Sebelas Maret, Surakarta, Indonesia

Manufacturing and Production
Dr. Noha Mostafa, Industrial Engineering Department, Zagazig University, Egypt
Dr. Wissu AitBou, ITB, Indonesia

Material Flow Cost Accounting (MFWCA)
Dr. Wichai Chatthinawat, Chiang Mai University, Thailand

Modeling and Simulation
Prof. Rene Estember, Mapua University, Philippines

Optimization and Mathematical Sciences
Dr. Md. Haider Ali Binawas, Khulna University, Bangladesh
Dr. Bhavin J. Shah, Indian Institute of Management Indore, Madhya Pradesh, India
Dr. Kuldeep Chaudhary, Amity Institute of Applied Sciences, Amity University, Noida, India

Product Design and Development
Dr. Abdalla Atrashan, Alfasal University, Riyad, Saudi Arabia

Product Lifecycle Management (PLM)
Dr. Ali Alaliherdi, Kuwait University, Kuwait

Project Management
Dr. Gede Agus Wiradypana, Petra Christian University, Indonesia

Quality Control and Quality Management
Mohamed Alboobishi, University of Sharjah, UAE
Dr. Ferdous Sarwar, IPE, BUET, Dhaka, Bangladesh

Reliability and Maintenance
Dr. Ing. Zied Hajj, Universite de Lorraine, France

Software Testing and Quality Assurance
Professor Mohammed Mannan, SSA and Adjunct Professor of UDC

Statistical Process Control
Engr. Maricar M. Navarro, Technological Institute of the Philippines Quezon City, Philippines

Supply Chain Management
Dr. Shao Hung Goh, Singapore Institute of Management (SIM) University, Singapore
Dr. Jumah E. Al-Awani, Yambio-Asinannayah, Saudi Arabia

Sustainability in Supply Chain, Enterprise Operations and Strategies
Prof. Jose Arturo Garza-Reyes, Derby Business School, University of Derby, UK
Dr. Vikas Kumar, Bristol Business School, University of the West of England, UK

Sustainability and Green Systems
Dr. Aseila K. Kulatunga, University of Peradeniya, Sri Lanka

Sustainable Manufacturing
Dr. Sambh Charles Mwakulungu, University of Johannesburg, South Africa
Dr. Bikram K Bahinipati, Professor – Operations Management Area, Xavier Institute of Management Bhubaneswar (XIMB), Bhubaneswar, India

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10th Annual International Conference

IEOM Dubai Conference

March 10-12, 2020

COMMITTEE
### Parallel Sessions

**March 8-9 (Sunday and Monday) - Lean Six Sigma Green Belt (LSSGB) Certification Workshop**  
(Certification Exam – 5:00 – 7:00 pm, Monday)

#### Tuesday, March 10, 2020

<table>
<thead>
<tr>
<th>Time</th>
<th>Room 1</th>
<th>Room 2</th>
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<th>Room 7</th>
<th>Room 8</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Global Engineering Education I</td>
<td>Industry 4.0 / Solutions I</td>
<td>Undergraduate Paper Competition</td>
<td>Graduate Student Paper Competition</td>
<td>Operations Research</td>
<td>Engineering Management</td>
<td>Project Management</td>
<td>Transportatio and Traffic</td>
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<tr>
<td>9:30</td>
<td>Welcome Address: Ballroom</td>
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<tr>
<td>9:40</td>
<td><strong>Opening Keynote I:</strong> Mr. Osman Sultan, CEO, Emirates Integrated Telecommunications Company, (du), UAE – Ballroom</td>
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<td>10:20</td>
<td><strong>Opening Keynote II:</strong> Dr. Oliver Elbracht, Vice President Siemens / Managing Partner Siemens Consulting Middle East, Dubai, UAE</td>
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<td>11:00</td>
<td>Networking Break – Foyer Area</td>
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<td>11:30</td>
<td><strong>Keynote III:</strong> Dr. Rubén Elvis Herranz, Services Program Manager, Airbus Defence and Space, Military Aircraft, Madrid, Spain</td>
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<td>12:10</td>
<td><strong>Keynote IV:</strong> Professor Ammar Kaka, Provost and Vice-Principal, Heriot-Watt University, Dubai, UAE – Ballroom</td>
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<td>1:00</td>
<td>Networking Lunch Buffet - Ballroom</td>
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<td>1:30</td>
<td><strong>IEOM Student Chapter Presentations</strong> - KFUPM, Zagazig University, University of Johannesburg and University of Science &amp; Technology of Fujairah (USTF), UAE</td>
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<tr>
<td>2:30</td>
<td>Panel I Industry 4.0</td>
<td>Global Engineering Education II</td>
<td>Industry 4.0 / Solutions II</td>
<td>Undergraduate Student Paper Competition</td>
<td>Automotive Manufacturing and Automation</td>
<td>Lean Six Sigma</td>
<td>Operations Management</td>
<td>Case Studies</td>
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<tr>
<td>4:00</td>
<td>Networking Break at Exhibition Hall</td>
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<tr>
<td>4:30</td>
<td>Panel II GEE</td>
<td>Competition s</td>
<td>Industry 4.0 / Solutions III</td>
<td>Competitions</td>
<td>Optimization</td>
<td>Quality Control</td>
<td>Supply Chain Management</td>
<td>Construction Management</td>
</tr>
</tbody>
</table>

#### Wednesday, March 11, 2020

<table>
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<tr>
<th>Time</th>
<th>Room 1</th>
<th>Room 2</th>
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</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Global Engineering Education IV</td>
<td>Industry 4.0 / Solutions IV</td>
<td>Systems Dynamics</td>
<td>Modeling and Simulation</td>
<td>Cybersecurity and AI</td>
<td>Occupational Safety &amp; Health</td>
<td>Waste Management</td>
<td>Facilities and Plant Layout</td>
</tr>
<tr>
<td>9:40</td>
<td><strong>Keynote I:</strong> Dr. Ibrahim Alharkan, General Director for King Salman Institute for Entrepreneurship (KSIE), King Saud University, Riyadh, KSA</td>
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<td>10:20</td>
<td><strong>Keynote II:</strong> Dr. Ali Diabat, Global Network Professor of Civil and Urban Engineering, New York University Abu Dhabi, UAE – Ballroom</td>
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<td>11:30</td>
<td><strong>Keynote III:</strong> Dr. Nicklas Dahlstrom, Human Factors Manager, Emirates Airlines, Dubai, UAE – Ballroom</td>
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<td>12:10</td>
<td><strong>Keynote IV:</strong> Dr. Mohammad T. Khasawneh, Professor &amp; Chair, Systems Science and Industrial Engineering, State University of New York at Binghamton, USA – Ballroom</td>
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<td>1:00</td>
<td>Networking Lunch Buffet - Ballroom</td>
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<td>1:30</td>
<td>Lunch Keynote: Harry Kasuma (Kiwi) Aliwarga, CEO and Co-Owner, UMG Myanmar, Karet Kuningan Jakarta, Indonesia - Ballroom</td>
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<td>2:30</td>
<td>Panel III SCM &amp; Logistics</td>
<td>Global Engineering Education V</td>
<td>Industry 4.0 / Solutions V</td>
<td>Sustainability in Supply Chain</td>
<td>Construction Management</td>
<td>Energy</td>
<td>Human Factors</td>
<td>Healthcare Operations and Services</td>
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<tr>
<td>4:00</td>
<td>Networking Break at Exhibition Hall</td>
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<tr>
<td>4:30</td>
<td>Panel IV WIIA</td>
<td>Global Engineering Education VI</td>
<td>Industry 4.0 / Solutions VI</td>
<td>Supply Chain Management</td>
<td>Data Analytics</td>
<td>Product Design and Development</td>
<td>Operations Management</td>
<td>Production Planning</td>
</tr>
</tbody>
</table>

6:00 – 8:00 pm: Poster Session, Senior Design Poster Competition, Student Chapter Activity Poster Presentations and Faculty Position Networking

#### Thursday, March 12, 2020

<table>
<thead>
<tr>
<th>Time</th>
<th>Room 1</th>
<th>Room 2</th>
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<tr>
<td>8:00</td>
<td>Global Engineering Education VII</td>
<td>Industry 4.0 / Solutions VII</td>
<td>Supply Chain Management</td>
<td>Innovation</td>
<td>Sustainable Manufacturing</td>
<td>Business Management</td>
<td>Artificial Intelligence</td>
<td>TQM and Technology Management</td>
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<tr>
<td>9:40</td>
<td><strong>Keynote I:</strong> Dr. Yousef Al-Assaf, President, Rochester Institute of Technology (RIT) – Dubai, Dubai Silicon Oasis, Dubai, UAE</td>
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<td>10:20</td>
<td><strong>Keynote II:</strong> Prof. Dr. Bhaskar Bhandarkar, Director General, Institution for Innovation, Industrial Engineering &amp; Entrepreneurship Principal Investigator IUSSTF India and Former Chairman of IIIE - Indian Institute of Industrial Engineers</td>
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<td>11:00</td>
<td>Networking Break at Exhibition Hall</td>
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<td>11:30</td>
<td><strong>Plenary Dr. Sayyad Zahid Qamar, SQU</strong></td>
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<td>1:00</td>
<td>Networking Lunch Buffet - Ballroom</td>
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<td>1:30</td>
<td><strong>IEOM Student Chapter Presentations</strong> - MAPUA University, University of West Bohemia, Pilsen, P.D.A. College of Engineering, India, UNS, Indonesia and Shipbuilding Institute of Polytechnic Surabaya</td>
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<td>4:30</td>
<td>Panel VI Health Care</td>
<td>Global Engineering Education X</td>
<td>Industry 4.0 / Solutions X</td>
<td>Inventory Control</td>
<td>Decision Sciences</td>
<td>Information Systems and IT</td>
<td>Quality Control and Quality Management</td>
<td>Manufacturing and Maintenance</td>
</tr>
</tbody>
</table>

7:00 – 10:00 pm, Thursday: Conference Awards Dinner

**Awards Keynote:** Professor Charles Mbohwa, Pro-Vice Chancellor Strategic Partnerships and Industrialization, University of Zimbabwe

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10th Annual International Conference
## March 10, 2020 (Tuesday) - Session: 8:00 – 9:30 am

### Global Engineering Education I (Room 1)

**Session Chair:** Dr. Imad Alsyouf, University of Sharjah, United Arab Emirates

*8:00 – 8:30 (Tuesday)*

**Dr. Imad Alsyouf**  
Director of Sustainability Office  
University of Sharjah, United Arab Emirates

**Sustainability Circles the way to Sustainability Excellence in Institutes of Higher Education**  
8:30 – 9:00 (Tuesday)

**Dr. César A. Collazos**  
Full Professor, Computer Science Department  
Universidad del Cauca-Columbia, Popayán, Cauca, Colombia

**Collaborative games as a mechanism to support collaborative learning processes**  
9:00 – 9:30 (Tuesday)

**Dr. Mohammad Mashud**  
Professor, Department of Mechanical Engineering  
Khulna University of Engineering & Technology (KUET), Khulna-9203, Bangladesh

### Industry Solutions I - Industry 4.0 (Room 2)

**Session Chair:** Heveine Baban, Heriot Watt University, Dubai, UAE

*8:00 – 8:30 (Tuesday)*

**Hashim Nomani**  
Lead Engineer - Special Airport Systems at Dubai Aviation Engineering Projects  
Manager Projects - Special Airport Systems  
IO Systems Ltd, Dubai, United Arab Emirates

**Evaluating the 3D Printing Capabilities**  
8:30 – 9:00 (Tuesday)

**Aya Mansour**  
Mechanical Engineering Department  
College of Engineering, United Arab Emirates University

**ID 692 Exploring the Potentials of Project Controls within the Construction Industry: Drivers and Challenges**  
9:00 – 9:30 (Tuesday)

**Heveine Baban**  
School of Energy, Geoscience, Infrastructure and Society  
Heriot Watt University, Dubai, UAE

### Undergraduate Student Paper Competition (Room 3)

**Session Chair:** Judging Committee Chair

**ID 195 Analysis of "Mathematics Proficiency" Online Course Data through Process Mining**  
Sagit Kedem-Yemini, Sapir Academic College Sderot, Sha'ar Ha-Negev, Israel

**ID 361 Correlating Brain Dominance and Hand Preference to Academic Tracks: A Case for Senior High School Students (SHS) in the Philippines**  
Ma. Monica L. Joven, Josephine D. German, Ma. Lourdes O. Buan, Alyana Bianca G. Carreon, and Marjorie Joyce D. Ochoa, Mapua University, Manila, Philippines

**ID 362 eReserba Cardinal: An Integrated Room Reservation System for Higher Education Institutions**  
Paz Clariz A. Barzagay, Josephine D. German, Guillier O. Binoya, Samantha Dominique C. Bucao, Samantha Cyrine R. Ibe, and Dave Cullen G. Yap, Mapua University, Manila, Philippines

**ID 375 Improving Fast-food Restaurant’s Method of Operation: Automated Drive through Ordering System**  
Allysa Mae M. Castillo, Louie John L. Salonga, John Allen L. Sia, and Michael N. Young, Mapua University, Manila, Metro Manila, Philippines

**ID 718 Reduction of Undelivered Items in the Service of Centron Energy Savings Technology Corporation**  
Ellaine C. Villegas, Kyra Patricia V. Tadina, Jenalyn Shigella Yandug, Nelrose D. Vidamo and Joanna Lou C. Mata, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines
## 8:00 – 9:30, TUESDAY

### Graduate Student Paper Competition

**Room 4**

**Session Chair:** Judging Committee Chair

**ID 615**  
**Effective Implementation of Lean Techniques in a Textile Composite Mill**  
Karthick D, and Syath Abuthakeer S, PSG College of Technology, Tamil Nadu, India

**ID 525**  
**Integrated Sequential Contractor & PMC Selection Model**  
Khalid Al Khodhairi, and Hesham K. Alfares, Saudi Aramco, Riyadh, Central, Saudi Arabia

**ID 224**  
**Quality Improvement Projects in Catheterization Laboratories: A Systematic Literature Review**  
Fernando Gonzalez Aleu, Cecilia Rodriguez Martinez, and Edgar Granda, Universidad De Monterrey, San Pedro Garza Garcia, Mexico

**ID 280**  
**Analyzing the Efficiency of the Top Non-Life Insurance Companies in the Philippines: Derivation of Common Weights in Data Envelopment Analysis (DEA) using Goal Programming Approach**  
Rex Aurelius C. Robielos, and Joshua James A. Bravante, Mapua University, Manila, Philippines

**ID 853**  
**Feasibility Study for Start-up a New Business of Plastic Recycling**  
Ahmed Almaamari, Talal Al-Hinai, Omar Al-Hashmi, and Khalid Alzebdeh, Sultan Qaboos University

### Operations Research

**Room 5**

**Session Chair:** Taoufiq EL HARROUTI, National School of Applied Sciences, Ibn Tofail University, Kenitra, Morocco

**ID 038**  
**Analysis of Schedule Rates for Bridge and Road Works in India using Solid Transportation Problem**  
Meghana Hooda, SRM University, Delhi NCR, Harayana, India

**ID 387**  
**Application of A One Stage Multimodal Fixed-Charge Transportation Problem**  
Sourav Kumar Ghosh, Md. Mamunur Rashid, and Naurin Zoha, Bangladesh University of Textiles, Dhaka, Bangladesh

**ID 242**  
**Assuring quality, accuracy and validity of test results in the laboratory for Sedibeng Water**  
Xhanti Dyonase, and Nomalungelo Magwaza, University of Johannesburg, Gauteng, South Africa

**ID 392**  
**Benchmarking the Performance of Southeast Asian Football Teams using the CCR Data Envelopment Analysis (CCR-DEA) Model**  
Rene D. Estember, Shean Michael L. Reyes, and Omar A. Solaiman, Mapua University, Manila, Metro, Philippines

**ID 177**  
**Comparative Study of Queuing Systems of Medical OPDs of Two Public Hospitals**  

**ID 538**  
**Crop Planning Problem using Rectangular Management Zones and Different Irrigation Systems**  
Omar Salama, Hala A. Farouk, and Noha M. Galal, Arab Academy for Science and Technology and Maritime Transport, Alexandria, Egypt

**ID 807**  
**Impact of Electric Mobility on the Country's Sustainable Development - The Case of Morocco**  
Taoufiq EL HARROUTI and Abdellah ABOUABDELLAH, Systems Engineering Laboratory, National School of Applied Sciences, Ibn Tofail University, Kenitra, Morocco

### Engineering Management

**Room 6**

**Session Chair:** Alya Abuseem, University of Sharjah, Sharjah, United Arab Emirates

**ID 223**  
**Assessing Systematic Literature Review Bias: Kaizen Events in Hospitals Case Study**  
Fernando Gonzalez Aleu, Francisco Flores, Jimena Perez, and Roy Gonzalez, Universidad De Monterrey, San Pedro Garza Garcia, Nuevo Leon, Mexico

**ID 577**  
**Automotive Industry under the Impact of 'Circular Economy' and 'Digital Technology': The Emerging Research Trends**  
Syed Wasiul Hasan Rizvi, Saurabh Bhati, Mahendra Agrawal, and Qasim Murtaza, Delhi Technological University, Delhi, India

**ID 095**  
**Identification of the Automotive Manufacturing Change Point Approaching Panel Data**  
Naser Rafiee, Armin Atashgar, and Malek Ashfar, University of Technology, Tehran, Iran

**ID 656**  
**Multi-Criteria Decision Making Methods and their Applications-- a Literature Review**  
Fatma Eltarabishi, Omar Hassan Omar, Maamar Bettayeb, University of Technology, Baghdad, Bagdad, Iraq

**ID 230**  
**Production Planning For Optimization of Coal Mining Operation by Value Stream Mapping**  
Kanwal Zehra, MUET, Karachi, Sindh, Pakistan

**ID 147**  
**Study on Analysis Model of Motivation for ICT Education in Companies**  
Shoichin Kaneko, Yamashita Gakusui University, Kofu city, Yamanashi, Japan

**ID 456**  
**Analyzing the Stakeholders and Their Influence in the Project Life Cycle of a Capital Project for a State-Owned Enterprise in South Africa**  
Hanelle Nel, and Penny Maphanga, University of Johannesburg, Johannesburg, Gauteng, South Africa

**ID 383**  
**Improving Project Management processes for EPC contractors: A case study**  
Muhammad Tariq Shafiq, and Mohammed Alabbad, UAE University, Al Ain, Abu Dhabi, United Arab Emirates

**ID 237**  
**Organisational Behaviour and Success of Construction Projects**  
Olufilola Akinshake, Clinton Algbavboa, and Madiimo Mutshena, University of Johannesburg, Gauteng, South Africa

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ID 305  Public policy and projects: making connections and continuing the conversation
Udechukwu Ojiako, and Eman Jasim Hussain AlRaeesi, University of Sharjah, Sharjah, United Arab Emirates

Hassan Elfly, Aly Owida, and Noha M. Galal, Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt

ID 083  An Innovative Framework To Measure The Maturity Level of Core Soft Skills and Competencies (SSCM) Needed by Project Managers in Oil and Gas Industry
Nasr Al Hinai, Esra Abusharkh, Asila Al-Shamli, and Emad Summad, Sultan Qaboos University, Alkhoud, Muscat, Oman

8:00 – 9:30, TUESDAY  Transportation and Design  Room 8
Session Chair: Yogi Tri Prasetyo, Mapua University, Manila, Metro Manila, Philippines

ID 078  A Review on City Logistcs and Two Echelon Freight Modelling

ID 090  Private Sector Role in Operating Kuwait Public Bus System: Overview
Sharaf AlKheder1, Mehmet Savsar2, Fahad AliKababi3, and Arejz Zaqzouq1
1Civil Engineering Department, Kuwait University, Safat, Kuwait
2Industrial & Management Systems Engineering Department, Kuwait University, Kuwait

ID 396  Vehicles’ Emissions Consideration in Transportation Network Design Using Markov Chain Traffic Assignment
Sinan Salman, and Suzan Alaswad, Zayed University, Abu Dhabi, UAE

ID 390  Development of Portable Electromagnetic Radiation Protective E-Textile
Md Mamunur Rashid, Sadman Sakib Tushan, and Sourav Kumar Ghosh, Bangladesh University of Textiles, Tejgaon, Dhaka, Bangladesh

ID 643  Evaluation for Tools and Techniques for Text-Extraction
Naveen Kumar N S, Poorvajaa M. S., and Madhulika Varanasi, Amrita Vishwa Vidyapeetham, Bangalore, Karnataka, India
Prof. Shekar Babu PhD, Founding Head, AMRITA Vishwa Vidyapeetham, Bengaluru, India
M. Mahathi Bhargavi, M.L.R. Institute of Technology, Telangana, India
Rohan Boorugu, Lovely Professional University, Punjab, India

ID 681  Do the Written Examination based Training Courses Affect on Freight Drivers’ Skills? An Empirical Study in Iran based on the Kirk-Patrick Model
Abbas Mahmoudabadi, MehrAstan University, Iran
Peyman Moghadam, Senior Expert in Freight Transportation, Road Maintenance and Transport Organization (RMTO), Tehran, Iran

ID 374  An Application of Color Similarity Index for Evaluating Exiting Military Camouflage Designs
Yogi Tri Prasetyo, Mapua University, Manila, Metro Manila, Philippines

9:30 am – 9:40 am, Tuesday: WELCOME ADDRESS

9:40 – 10:20 Opening Keynote I – Ballroom

Mr. Osman Sultan
CEO of Emirates Integrated Telecommunications Company (du), UAE

10:20 – 11:00 Opening Keynote II – Ballroom

Dr. Oliver Elbracht
Vice President Siemens / Managing Partner Siemens Consulting Middle East
Dubai, United Arab Emirates

11:00 am - 11:30 am: Networking Break

11:30 – 12:10 Tuesday Keynote III – Ballroom

Dr. Rubén Elvira Herranz
Services Program Manager, Airbus Defence and Space, Military Aircraft, Madrid, Spain

12:10 – 12:50 Tuesday Keynote IV – Ballroom

Professor Ammar Kaka
Provost and Vice-Principal (Dubai), Heriot-Watt University, Dubai, UAE

1:00 – 2:30 pm: Tuesday Buffet Lunch and IEOM Student Chapter Presentations

IEOM KFUPM Student Chapter, King Fahd University of Petroleum and Minerals, Saudi Arabia
IEOM ZAG Student Chapter, Zagazig University, Egypt
IEOM UJ Student Chapter, University of Johannesburg, South Africa
IEOM USTF Student Chapter, University of Science & Technology of Fujairah, UAE

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Session – Tuesday (March 10): 2:30 – 4:00 pm

2:30 – 4:00, TUESDAY  Panel I – Industry 4.0  Ballroom

Panel Chair: Ts. Dr. Mehran Doulat
Associate Professor of Engineering/Operations Management and MBA Program Committee/Coordinator
Director of Spectral Centre for Operational Excellence Research (COER), Xi’an University, Sepang, Selangor, Malaysia
Director Academy of Research and Training (SART Sdn. Bhd.)

Panel Speakers:

Mr. Sanjay Nadkarni
Director of Research & Innovation
Emirates Academy of Hospitality Management (Jumeirah Group)
United Arab Emirates

Satya Saurabh Khosla
Owner and Managing Director
Adimode Transnational Trading LLC
Dubai, UAE

Global Engineering Education II  Room 1

Session Chair: Dr. Lakhwinder Pal Singh, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, India

2:30 – 3:00 (Tuesday)

Professor Assem Tharwat
Professor at the College of Business Administration
American University in the Emirate, Dubai, UAE

3:00 – 3:30 (Tuesday)

Dr. Waleed K. Ahmed
Assistant Professor, Engineering Requirements Unit, College of Engineering
United Arab Emirates University, Al Ain, UAE

Merging 3D Printing Technology to Enhance Engineering Pedagogical Process: Applications and Challenges

3:30 – 4:00 (Tuesday)

Dr. Heba Y. M. Soliman
Associate Professor, Electrical Engineering Department
Port Said University, Egypt

Electrical Engineering Education in both Egyptian NARS and Pearson BTEC Higher Nationals Standards

4:00 – 4:30 (Tuesday)

Dr. Lakhwinder Pal Singh
Associate Professor, Department of Industrial and Production Engineering
Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, India

Industry 4.0 II  Room 2

Session Chair: Dr. Naill Momani, Dubai Police Academy, United Arab Emirates

2:30 – 3:00 (Tuesday)

Dr. Souraj Salah
Process Improvement Manager, Abu Dhabi Ports
Adjunct Professor at the Hamdan Bin Muhammad Smart University

3:00 – 3:30 (Tuesday)

Dr. Nadir Ali Kolachi
University Professor (Mgt/HRD), College of Business Administration
University of Fujairah, United Arab Emirates

Speech Title: LEAN MANAGEMENT: Tactics to save time & energy (Mini cases on Corporate & Academic world)

3:30 – 4:00 (Tuesday)

Naill Momani Ph.D., P.E., CBCI
Chair of Crises Management Department
Dubai Police Academy, United Arab Emirates

Title of the Talk: Disaster Risk Management

Undergraduate Student Paper Competition  Room 3

Session Chair: Judging Committee

ID 440 Renewable Waste Water and Filtration System with Phytoremediation Used in Aquaculture of Freshwater Ornamental Fish
Glyda Aricon Marquez, Charlotte Palao, Kenneth Ibasco, Lady Claudette Ferrer, Patricia Sagge, and Maria Teresa B. Mendoza, Technological Institute of the Philippines Manila, Philippines

ID 534 Study of Text Neck Syndrome Among Smartphone Users Via JACK Software
Khadeja Abdalaziz, Amira Khalaf, Bahie Elsamad, Dania Mohammad, Fajer Al-sana, and Lawrence Al-fandi, American University of the Middle East, Kuwait

ID 371 Water Resources Dynamics: Chabahar Free-zone Case Study
Abolfazl Taghavi, Amir Hossein Sadeghi, Hossein Zare and Sharif Khaleghparast, Sharif University of Technology, Tehran, Iran

ID 684 A Review on Food Delivery Solutions for Small Medium Restaurants in Jaffna Region
Hinshogan Karuneswaran, and Gayashini Ratnayake, Informatics Institute of Technology, Sri Lanka

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ID 678 Service Model Augmentations for Improving Company Management Systems of Corregidor Inn™
Maria Rebeca Isabel M. Carcellar, Jenalyn Shigella Yandug, John Bridier J. Aliado, Marjorie Joyce D. Ochoa, and Marquin Jose R. Pacian, Mapua University, Philippines

ID 702 Improving Auditing System in Pre-Primary and Primary Education: An Information System Integration Approach
Seonjae Lim, Jenalyn Shigella Yandug, Niño Chino B. Ledres, Valerie D. Cruz and Dave Cullen G. Yap, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 357 Quality Assurance in Education Based On Six Sigma Tool
Ameen Abdulla M.S, Kavilal E.G, Mohammed Navas O P, Amal M S and Bismil Nizam, SCTCE, Thiruvananthapuram, Kerala, India

2:30 – 4:00, TUESDAY  Automotive Manufacturing Systems and Automation  Room 4

2:30 – 4:00, TUESDAY  Lean Six Sigma  Room 5

ID 192 A Case Study for Performance Evaluation of Motorcycle Assembly Line through the Lean Manufacturing Practice of Overall Equipment Effectiveness (OEE)
Suresh Kumar, Muhammad Ali Khan, Sohail Ahmed, Aness-ur-Rehman and Emraan Luhar, Industrial Engineering & Management, Mehran UET, Jamshoro, Pakistan

ID 164 A Knowledge Transfer Model to Implement Lean Practices for Apparel Industry based Multi-stakeholder 3PLs
Lakshika Gamini, Kasuni Vidanagamachchi and Ruan Wickramarachchi, University of Kelaniya, Ambalangoda, Sri Lanka

ID 600 Lean approach in a High Mix, Low Volume Manufacturing Environment – Case study
Anees Hussain, Jose Eduardo Munive-Hernandez, and Felician Carpeanu, University of Bradford Bradford, West Yorkshire, United Kingdom

ID 606 Lean Readiness Level of the Azerbaijan Construction Industry
Simon Peter Nadeem, Jose Arturo Garza-Reyes, and Anil Kumar, University of Derby, Derby, Derbyshire, United Kingdom

ID 189 Preliminary Study on the Identification, Analysis and Elimination of Lean Manufacturing Wastes through Lean Manufacturing Practices at Yarn Manufacturing Industry
Muhammad Ali Khan and Hussain Bux Marri, Industrial Engineering & Management, Mehran UET, Jamshoro, Sindh, Pakistan

2:30 – 4:00, TUESDAY  Operations Management  Room 6

ID 302 An In-Depth Study on Challenges Faced By Junior Coal Mining Companies in South Africa
Henry Ncube, University of Johannesburg, Johannesburg, Gauteng, South Africa

ID 178 Impact of Workplace Conditions on Level of Employee Satisfaction
Judith Mhlanga, and Anup Pradhan, University of Johannesburg, Johannesburg, South Africa

ID 193 Dynamic Goal programming for Dietary Menu Planning problem incorporating the decision maker’s preferences
Ahmed Bensenouci, Amna NasrEldin, and Lama Almaghrabi, Effat University, Jeddah, Makkah, Saudi Arabia

ID 694 Demand Driven Approach to Combat Nervousness of Auto Supply Chain in India
Aman Sinha, Research Scholar, Department of Commerce and Management, Savitribai Phule Pune University, Pune, India

Anees Hussain, Jose Eduardo Munive-Hernandez, and Felician Carpeanu, University of Bradford Bradford, West Yorkshire, United Kingdom
### PARALLEL SESSIONS

**Session – Tuesday (March 10): 4:30 – 6:00 pm**

**2:30 – 4:00, TUESDAY**  
**Case Studies**  
Room 7

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<th>ID</th>
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<tr>
<td>036</td>
<td>To study the Impact of Success Factors of TQM implementation in an Indian Manufacturing Industry</td>
<td>Ankesh Mittal, SLIET, Sunam, Punjab, India</td>
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<tr>
<td>040</td>
<td>Cross Docking Network with Multiple Types of Trucks</td>
<td>Takashi Ihora, Sophia University, Chiyoda-ku, Tokyo, Japan</td>
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<td>081</td>
<td>Implementing a Cross-Docking System in Warehouse - A Systematic Review of Literature</td>
<td>Neerajye Mendoza, D. H. H. Niwunhella, Kasuni Vidanagamachchi, and Ruwan Wickramarachchi</td>
</tr>
<tr>
<td>328</td>
<td>Measuring the relative efficiency and Benchmarking the performance of Indian sea ports using Data Envelopment Analysis</td>
<td>Pravin Kumar, Delhi Technological University, Delhi, India</td>
</tr>
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<td>457</td>
<td>Proposal of a Preliminary Audit Approach for the Modeling and Digitization of a Green Supply Distribution Chain</td>
<td>Cheimaa ABOUESSOUROUR, and Khalid BENHIDA, University Cadi Ayyad, SAIF, Marakech, Morocco</td>
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**2:30 – 4:00, TUESDAY**  
**Logistics**  
Room 8

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<tr>
<td>047</td>
<td>A Simple Multivariate Bubble Point Correlation for Deep Offshore Niger Delta Crude</td>
<td>Jonathan Francis, and Joseph Ajienka, World Bank African Center of Excellence, Center for Oilfield Chemicals Research (ACE-CEFOR), University of Port Harcourt, Port Harcourt, Nigeria</td>
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<td>058</td>
<td>Logistics model for collection and distribution of critical foods, Valle del Cauca extended case</td>
<td>Nelson Ricardo Becerra Escobar, Valentina Restrepo Pelaez, and Gloria Mercedes Lopez Orozco, Universidad Autónoma de Occidente, Valle del Cauca, Colombia</td>
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<td>072</td>
<td>Experimental Test of Compression Strength for “C” Profile Cold Form Steel from Production of Factory X and Y</td>
<td>Sri Wiwoho Mudjanarko, Universitas Narotama, East Java, Indonesia</td>
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**4:00 – 4:30: Networking Break**

**4:30 – 6:00, TUESDAY**  
**Panel II – Global Engineering Educaiton**  
**Ballroom**

**PANEL CHAIR**  
Dr. Abu Masud, P.E.  
Emeritus Professor, Department of Industrial and Manufacturing Engineering  
Wichita State University, Kansas, USA

**PANEL SPEAKERS**

<table>
<thead>
<tr>
<th>Name</th>
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| Dr. Alaa Ashmawy | Professor and Dean  
American University in Dubai, United Arab Emirates |
| Rosemary R. Seva, Ph.D. | Professor of Industrial Engineering and Former Dean at the Gokongwei College of Engineering  
De La Salle University, Manila, Philippines |
| Khaled S. El-Kilany, Ph.D. | Professor of Industrial Engineering and Head of Department  
Department of Industrial and Management Engineering  
Arab Academy for Science, Technology and Maritime Transport  
Alexandria, Egypt |
DOCTORAL DISSERTATION COMPETITION

ID 013 Leadership for Lean Six Sigma
Alessandro Laureani, University of Strathclyde Leopardstown, Dublin, Ireland

MASTERS THESIS COMPETITION

ID 720 Optimization Design and Comparative Study of np and EWMA Charts for Monitoring Fraction Nonconforming
Mezoon AlRemeithi, University of Sharjah, United Arab Emirates

SUPPLY CHAIN AND LOGISTICS Technical Paper COMPETITION

ID 576 Good Practices for the Green Supply Chain Modeling
Sana Elhidaoui, and K. Benhida, LAPSSII, Est of Safi, UCA, Morocco

ID 355 Supply Contract Analysis for an Eco-friendly Textile Supply Chain
Arnab Adhikari, IIM Ranchi, Ranchi, Jharkhand, India

ID 689 Utilization of Bagasse Charcoal in Adsorption of Car Wash Wastewater Contaminants
Undergraduate STEM Research Competition
Louise Elaine Caranto, United International Private School, United Arab Emirates

Industry Solutions III  Room 2

4:30 – 6:00, TUESDAY

Session Chair: Dr Sarbjit Singh, National Institute of Technology, Jalandhar, India

4:30 – 5:00 (Tuesday)
Mr. Sanjay Nadkarni
Director of Research & Innovation
Emirates Academy of Hospitality Management (Jumeirah Group), United Arab Emirates

IoT as an Enabler for Enhancing Guest Experience in Hospitality

5:00 – 5:30 (Tuesday)
Satya Saurabh Khosla
Owner and Managing Director
Adimode Transnational Trading LLC, Dubai, UAE

5:30 – 6:00 (Tuesday)
Dr Sarbjit Singh
Associate Professor
National Institute of Technology, Jalandhar, India

Green Supply Chain Management

SIMULATION AND PLM COMPETITION

ID 540 Simulation-Based Cycle Time Optimization in Make-to-Order Environment with Job Shop Production Type
Zakka Ugih Rizqi, Adinda Khairunisa, Universitas Islam Indonesia, Yogyakarta, Indonesia

ID 798 A Simulation Study on Bed Capacity Management in a Public Hospital
Doha Makarem, Farah Sarraj, Fatemah AlKandarie, Shouq Thuwaini, Yara Tafesh, and Ufuk Kula, Industrial Engineering Department, American University of the Middle East, 250 St, Eqaila, Kuwait

ID 806 Increasing Oil/Petroleum Supply Chain Distribution Efficiency through using Autonomous Vehicle
Rizky Yonathan, Sabrina Putri Kinanti and Zahra, University of Indonesia

UNDERGRADUATE STEM RESEARCH COMPETITION

ID 693 Managing Project Delays: Simulation-Based Methodology for Project Scheduling
Reem Shams AlDeen, Ruqayah AlSaad, Maha Alrasheedi, Omniah Ahmad, Anfal Malak, and Hadi Jaber, American University of the Middle East, Kuwait

LEAN SIX SIGMA COMPETITION

ID 210 Lean in a High Mix, Low Volume Manufacturing Environment – Case study
Anees Hussain, Jose Eduardo Munive-Hernandez, Felician Campean, University of Bradford, West Yorkshire, United Kingdom

ID 799 Six Sigma Project to Improve a PVC Pipe Production
Anwar Al Merri, Dalal Al Attar, Kowthar Al Saegh, Louwah Al Doukhri, Muneera Al Sabah, and Ufuk Kula, Industrial Engineering Department, American University of the Middle East, 250 St, Eqaila, Kuwait

ID 832 Using DMAIC methodology for the Conversion of Ready-Mix Concrete Plant Energy to Solar PV
Slim Saidi, Associate Professor of Industrial Engineering, Industrial Engineering Department, Rochester Institute of Technology, Dubai, United Arab Emirates
Zulfa A. Rasheed, Master of Engineering Management Student, Industrial Engineering Department, Rochester Institute of Technology, Dubai, United Arab Emirates
### Session Chair: Ali Ahmid, École de Technologie Supérieure, Montreal, Canada

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<td>Reinforcement Learning Based Novel Approach to Job-Shop Scheduling having Random Processing Time</td>
<td>Manish Agrawal, IIT Kharagpur, Kharagpur, West Bengal, India</td>
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<td>Short survey of optimization methods in petroleum reservoir management</td>
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<td>Luis Miguel Escobar, Universidad Libre Seccional Pereira, Pereira, Risaralda, Colombia</td>
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### Session Chair: Edly Ramly, EFR Certification, Kulai, Johor, Malaysia

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<td>Abdussalam Shibli, Khaled Abu Awwad, Michel Ghostin, and Omar Farji Coventry University, Coventry, United Kingdom</td>
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### Phase I Winners

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<td>Andriant W. Supriyanto, Anggina R. Ibrahim, Zaffa Putra, Deft University of Technology, Netherlands</td>
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Phase II will take place in Dubai. Case study will be given at the event with limited time to solve.

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### IEOM Dubai Conference

#### PARALLEL SESSIONS

**March 10-12, 2020**

**ID 089**  **BREXIT: Assessing the Impact on the UK Construction Industry & Mitigating Identified Risks**
Danielle Smith, Vian Ahmed and Sara Saboor, American University of Sharjah, Sharjah, United Arab Emirates

**ID 161**  **A Practical Tool for Scheduling Interrelated Activities**
Hamdi Basheer, Salah Hardiyb, Mohammad Shamsuzzaman, and Imad Alysof, University of Sharjah, Sharjah, United Arab Emirates

**ID 233**  **A Systematic Review of Performance Measurement Models for Smart Cities**
Aravind Samarakkody, H. M. N. Dilum Bandara, and Udayangani Kulatunga, Department of Building Economics, University of Moratuwa, Homagama, Sri Lanka

**ID 313**  **Construction Material Ordering Policy Framework: Mamdani Approach**
Rajesh Kumar Singh, Management Development Institute Gurgaon, GURGAON, India

**ID 381**  **Defects Management practice during DLP in the UAE Construction Industry**
Muhammad Tariq Shafl, Ghaleb Al Sena, Mohammed Al Saqqa, and Sultan Al Mansouri, UAE University Al Ain, Abu Dhabi, United Arab Emirates

#### Business Management Room 8

**Session Chair:** Takahiro Nishi, Meiji University, Tokyo, Japan

**ID 644**  **Need Identification for CSR Activities through Gramasabhas – A Kerala Model**
Arun K, Atma Rishama Vidyapeetham, Amritapuri, Kollam, Kerala, India

**ID 128**  **Performance Evaluation of Selected Public and Private Mutual Fund Schemes in India**
Sushendra Kumar Misra, Dr. B R Ambedkar National Institute of Technology, Jalandhar, Punjab, India

**ID 086**  **Proposal of optimal discount price of ready meal considering the expiration date**
Yu Wakabayashi, Logistics Development Center, Kao Corporation, Tokyo, Japan

**ID 307**  **Retaining customers through contemporary digital communication mix**
Marina Kalinina, Financial University under the Government of Russian Federation, Moscow, Russian Federation

**ID 385**  **The Effect of Family Ownership on Risk-taking: Socioemotional Wealth Perspective**
Takahiro Nishi, Meiji University, Tokyo, Japan

**ID 640**  **The Importance of the Mine Manager and the Appraisal System in the Mining Sector**
Mercy Manyuchi, C. Mbohwa, and E. Muzenda, University of Johannesburg, Johannesburg, South Africa

**ID 025**  **The Aspects of Culture, Technology, Organization and Environment on the Adoption of Computer Assisted Audit Techniques**
Rindang Widuri, Bina Nusantara University, West Jakarta, DKI Jakarta, Indonesia

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**IEOM Supply Chain and Logistics Case Study Competition**

**Phase I Winners**

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**IEOM Supply Chain and Logistics Competition is Coordinated by**

The Centre for Supply Chain Improvement, University of Derby, UK

**Competition Chairs/Coordinators:**

Prof. Jose Arturo Garza-Reyes, Professor of Operations Management and Head of the Centre for Supply Chain Improvement

Dr. Simon Peter Nadeem, Lecturer in Operations and Supply Chain Management

Dr. Anil Kumar, Lecturer in Operations, Supply Chain and Business Analytics

Dr. Tony Anosike, Lecturer in Supply Chain Management

**Simulation Phase I Case Competition Winners**

- Newspaper Industry SCOR Performance Simulation, Iqbal Wahyu Saputra – Universitas Sebelas Maret, Indonesia

**Lean Six Sigma Phase I Case Competition Winners**

- Mamun Rashid, Department of Industrial and Production Engineering, Bangladesh University of Textiles, Dhaka, Bangladesh
- Ricardo Rabang, Racquel Tadina, and Maria Teresa Mendoza, Technological Institute of the Philippines
March 11, 2020 (Wednesday) - Session: 8:00 – 9:30 am

**8:00 – 9:30, WEDNESDAY**  
**Global Engineering Education IV**  
Room 1

**Session Chair:** Dr. Jafri Mohd Rohani, Universiti Teknologi Malaysia

8:00 – 8:30 (Wednesday)

**Dr. Sidi M Ahmed Ghaly**  
Assistant Professor, Electrical Engineering Department, College of Engineering  
Al Imam Mohammad Ibn Saud Islamic University, Saudi Arabia

**Assessment and Evaluation of Engineering Student Outcomes**

8:30 – 9:00 (Wednesday)

**Dr. Md. Mizanur Rahman,**  
CEng, Chartered Energy Engineer  
Senior Lecturer (Thermo Fluid), School of Mechanical Engineering  
University Technology Malaysia (UTM), Skudai, Johor Bahru, Malaysia

**Title:** Energy technology education in engineering programs: paradigm shift from technology-centred to multidisciplinary focus

9:00 – 9:30 (Wednesday)

**Dr. Jafri Mohd Rohani**  
Head of the Industrial Engineering Programme  
Department of Materials, Industrial and Manufacturing Engineering  
Faculty of Mechanical Engineering  
Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

**Enhancing Outcome Based Education Industrial Engineering Curriculum at Universiti Teknologi Malaysia**

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**8:00 – 9:30, WEDNESDAY**  
**Industry Solutions IV: Industry 4.0**  
Room 2

**Session Chair:** Qipeng Phil Zheng, University of Central Florida, Orlando, Florida, USA

8:00 – 8:30 (Wednesday)

**Qipeng Phil Zheng, Ph.D.**  
Associate Professor and Director of Applied Operations Research Lab  
Graduate Coordinator, Industrial Engineering & Management Systems  
University of Central Florida, Orlando, Florida, USA

8:30 – 9:00 (Wednesday)

**Waleed Emam, MIBA**  
VSAT Expert  
United Arab Emirates

9:00 – 9:30 (Wednesday)

**Akash Mavle**  
Senior Data Science Professional, AI and ML professional  
Senior Consultant, Las Vegas, Nevada Area

---

**8:00 – 9:30, WEDNESDAY**  
**Systems Dynamics**  
Room 3

**Session Chair:** Zakka Ugih Rizqi, Universitas Islam Indonesia, Yogyakarta, Indonesia

**ID 517**  
Need Analysis of Energy Efficient Cold Storage Solutions in Indian Market Scenario: A System Thinking Perspective  
Priyankshu Mukhopadhya, and Pravin P. Tambe, Shri Ramdevbaba College of Engineering and Management, Nagpur, Maharashtra, India

**ID 111**  
System Dynamics Applications in Healthcare: A Literature Review  
Rodrigo E. Peimbert-García, and Jesús Isaac Vázquez-Serrano, Tecnologico de Monterrey / Macquarie University, Monterrey / Sydney, Nuevo León / New South Wales, Mexico

**ID 393**  
Systematic approximation of Industry 4.0 as a digitization indicator  
Johana Patricia Cómita Niño, and Nataly del Rosario Puello Pereira, MSc., Universidad de la Costa CUC, Barranquilla, Atlantic, Colombia  
Sindy Johana Martínez Marín, Computer Science and Decision Department., Faculty of Mines, Universidad Nacional de Colombia

**ID 209**  
Barriers in Indian Agro Warehouse System  
Akilesh Barve, MANIT Bhopal, Bhopal, MP, India  
Sumanta Das, Research Scholar Indian Institute of Technology Bhubaneswar, Odisha, India.

**ID 159**  
Readiness Assessment for Industry 4.0 in Sri Lankan Apparel Industry  
Erandika Lakmali, K. Vidanagamachchi, L.D.J.F. Nanayakkara, Department of Industrial Management, Faculty of Science, University of Kelaniya, Kelaniya, Western Province, Sri Lanka

**ID 543**  
Feasibility Study on Designing Innovative Raincoat Production Company – Management and Operation Aspect (3)  
Zakka Ugih Rizqi and Adinda Khairunisa, Department of Industrial Engineering, Universitas Islam Indonesia, Yogyakarta, Indonesia

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**8:00 – 9:30, WEDNESDAY**  
**Modeling and Simulation**  
Room 4

**Session Chair:** Lina Gozali, Tarumanagara University, Indonesia

**ID 172**  
A Numerical Study of Flow Energy Harvesting of an Oscillating Airfoil  
Aanjad Ali, and Hamayun Farooq, Bahauddin Zakariya University, Multan, Punjab, Pakistan  
Imran Akhtar, Department of Mechanical Engineering, College of Electrical and Mechanical Engineering, National University of Sciences and Technology (NUST), Peshawar Road, Rawalpindi, Pakistan
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<td>Jenalyn Shigella G. Yandug, and Christine Anne S. Santos, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines</td>
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<td>Exploring the applications of lean manufacturing practices in textile industry</td>
<td>Muhammad Ali Khan and Hussain Bux Marri, Industrial Engineering &amp; Management, Mehran UET, Jamshoro, Sindh, Pakistan</td>
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<td>Md. Shanta Khatun, and Md. Haider Ali Biswas, Khulna University, Bangladesh</td>
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<td>Industrial Ecosystem Modeling of Wooden Fishing Boat Building in East Java, Indonesia</td>
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<td>Development of Artificial Intelligent (AI) for Agriculture, Business, E-commerce, Robotics and Education in Indonesia by UMG IdeaLab</td>
<td>Lina Gozali, Tarumanagara University, Indonesia, Harry Kasuma (Kiwi) Aliwarga, UMG IdeaLab, Jakarta, Indonesia</td>
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<td>065</td>
<td>The Interactional Effects of Page Layout, User Workload, and Lists in Improving the Single Usability Metric</td>
<td>Gabriel John L. de Leon, Joana Patrice M. Gratuito, and Ronald V. Polancos, Industrial Engineering Department, De La Salle University, Manila, Philippines</td>
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<td>064</td>
<td>The Impact of Command Buttons, Entry Fields, and Graphics on Single Usability Metric (SUM)</td>
<td>Ahmed Hafdi, Kenitra, Morocco</td>
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<td>631</td>
<td>Critical analysis of software vulnerabilities through data analytics</td>
<td>Mastan Rao Parimi, Amrta Vishva Vidyapeetham, Bengaluru, Karnataka, India</td>
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<td>632</td>
<td>Detecting Anomalies in Users - An UEBA Approach</td>
<td>Raguvir S, Amrta Vishva Vidyapeetham, Bangalore, Karnataka, India</td>
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<td>634</td>
<td>The discovery of the sequence of pseudo-randoms to generate prime numbers facilitates the cracking of RSA-encryption</td>
<td>Gabriel John L. de Leon, Joana Patrice M. Gratuito, and Ronald V. Polancos, Industrial Engineering Department, De La Salle University, Manila, Philippines</td>
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<td>20 years of scientific evolution of cyber security: a science mapping</td>
<td>Leonardo Bertolin Furstena, Liane Kipper, Michele Kremer Sott, and Andrio Jonas Ouirques Hornrich, Universidade de Santa Cruz do Sul – UNISC, Santa Cruz do Sul, Rio Grande do Sul, Brazil</td>
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<td>Simulation Analysis of Patients Flow in Oncology Clinics</td>
<td>Sara Hamad, and Khaled S. El-Kilany, Arab Academy for Science, Technology and Maritime Transport, Cairo, Egypt</td>
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<td>Study on health, safety &amp; accident in pharmaceuticals company in Bangladesh</td>
<td>Murtoza Arefin, Bangladesh Institute of Management, Dhaka, Noorjan Road, Bangladesh</td>
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<td>Determining the Impact of Construction and Demolition Waste Reduction practices on Green Building Projects in Gauteng Province, South Africa</td>
<td>Ademilade Aboginije, Clinton Aigbavboa, Wellington Thwala, and Segun Samuel, University of Johannesburg, Johannesburg, South Africa</td>
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### Session Chair:
- **Room 5**
  - Ronald V. Polancos, De La Salle University, Manila, Philippines
  - 8:00 – 9:30, WEDNESDAY

### Room 6
- **Occupational Safety and Health (OSH)**
- 8:00 – 9:30, WEDNESDAY
- Session Chair: Md. Haider Ali Biswas, Khulna University, Bangladesh
- **ID 140** Assessment of Safety Culture in Three Selected Thermal Power Plants Situated in Sylhet, Bangladesh
- Md. Abdul Aziz, Mohammad Iqbal, A. T. M. Sayeed Istaqaque, and Salma Akhter, Shahjalal University of Science and Technology, Sylhet, Bangladesh
- **ID 244** Risk and Safety Assessment on the Production of Firecrackers in Bulacan, Philippines
- Marvin I. Noroña, and Cherry Jean D. Bondal, Mapua University, Manila, Philippines
- **ID 581** Study on health, safety & accident in pharmaceuticals company in Bangladesh
- Murtoza Arefin, Bangladesh Institute of Management, Dhaka, Noorjan Road, Bangladesh
- **ID 526** Simulation Analysis of Patients Flow in Oncology Clinics
- Sara Hamad, and Khaled S. El-Kilany, Arab Academy for Science, Technology and Maritime Transport, Cairo, Egypt
- **ID 141** Survey Design to Evaluate Healthcare System Resilience at Barangay Level in the Philippines
- Giselle Joy Esmeria, Mary Jean Azaela, Dennis Paul Orge, and Mary Grace Valdez, De La Salle University - Laguna Campus (Philippines), Sta. Rosa, Philippines
- **ID 685** Modeling the Effects of Transmission Dynamics of Malaria: A Mathematical Approach on Healthcare
- Anaru Islam, Md. Borhan Uddin Imran, and Md. Haider Ali Biswas, Khulna University, Bangladesh
- **ID 849** An Assessment of Hazards and Risks in the Sewing Section of the Readymade Garment Industry in Bangladesh
- Subrata Talapatra and Nourin Mohsin, Department of Industrial Engineering and Management, Khulna University, Bangladesh
- **ID 140** Survey Design to Evaluate Healthcare System Resilience at Barangay Level in the Philippines
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### Session Chair:
- **Room 7**
  - Ignatio Madanhire, University of Johannesburg, Johannesburg, Gauteng, South Africa
  - 8:00 – 9:30, WEDNESDAY

### Room 7
- **Waste Management**
- 8:00 – 9:30, WEDNESDAY
- Session Chair: Ignatio Madanhire, University of Johannesburg, Johannesburg, Gauteng, South Africa
- **ID 329** A State Of Art In Managing Municipal Solid Waste Through A Cultural Perspective
- Binashi Kumarasiri, Nayanathara De Silva, and D.M.P.P. Dissanayake, University of Moratuwa, Kurunegala, North western, Sri Lanka
- **ID 174** A Study on Present E-Waste Scenario in Chattogram City, Bangladesh
- Hasan Ahmed, Mohammad Iqbal, Abdullah-Al-Nadim, and Shahrin Iqbal, Shahjalal University of Science and Technology, Sylhet, Bangladesh
- **ID 599** Bio char Production from Sugar Cane Bagasse and its Application Sugarcane Processing Wastewater Treatment
- Mercy Manyuchi, C. Mbohwa, and E. Muzenda, University of Johannesburg, Johannesburg, South Africa
- **ID 669** Determining the Impact of Construction and Demolition Waste Reduction practices on Green Building Projects in Gauteng Province, South Africa
- Ademilade Aboginije, Clinton Aigbavboa, Wellington Thwala, and Segun Samuel, University of Johannesburg, Johannesburg, South Africa
ID 612 Environmental Remediation through the Application of the Vermicomposting Technology for Bio waste Management
Mercy Manyuchi, C. Mbohwa, and E. Muzenda, University of Johannesburg, Johannesburg, South Africa

ID 281 Important Factors Evaluation for End-of-Life Vehicle Directive Implementation in Malaysia
Shamsuddin Ahmed, and Shameem Ahmed, Islamic University of Technology (IUT), Dhaka, Bangladesh

ID 278 Evaluating the feasibility of effective E Waste management: Case Study
Ignatio Madanhire, University of Johannesburg, Johannesburg, Gauteng, South Africa
Kumbi Mugwindiri, and Charles Mbohwa, Department of Mechanical Engineering, University of Zimbabwe, Harare, Zimbabwe

8:00 – 9:30, WEDNESDAY Facilities Planning and Plant Layout Room 8
Session Chair: Mehmet Savsar, Kuwait University, Kuwait

ID 273 A Facilities Planning Approach on Tenant Mix and Positioning of a Community Shopping Mall
Madonna F. Andrada, and Johanz Matthew M. Rivera, Mapua University, Manila, Philippines

ID 236 A Theoretical Review of the State of Infrastructure in Africa
Oluahola Akinshipe, and Clinton Aigbavboa, University of Johannesburg, Johannesburg, Gauteng, South Africa

ID 271 Facility Management System Improvement of the Philippine National Railways
Madonna F. Andrada, Aivan Kurt Russel B. Alfaro, and Jerren A. Cruz, Mapua University, Manila, Philippines

ID 272 Layout Design Model for Independent Grocery Stores in the Philippines
Madonna F. Andrada, Habakuk L. Prudenciano, and Justin B. Reyes, Mapua University, Manila, Philippines

9:40 – 10:20 am: Wednesday Morning Keynote I

Dr. Ibrahim Alharkan
Associate Professor at Industrial Engineering Department, College of Engineering
General Director for King Salman Institute for Entrepreneurship (KSIE)
King Saud University, Riyadh, Saudi Arabia

10:20 – 11:00 Wednesday Morning Keynote II:

Dr. Ali Diabat
Global Network Professor of Civil and Urban Engineering
New York University Abu Dhabi, Abu Dhabi, UAE

11:00 – 11:30 – Networking Break - Exhibition Hall

11:30 – 13:00 Wednesday Keynote III:

Dr. Nicklas Dahlstrom
Human Factors Manager
Emirates Airlines, Dubai, UAE

12:10 – 12:50 Wednesday Keynote IV:

Dr. Mohammad T. Khasawneh
Professor & Chair, Systems Science and Industrial Engineering
State University of New York at Binghamton, USA

1:00 – 2:30 – Networking Lunch Buffet

1:30 – 2:00 pm: Wednesday Lunch Keynote

Harry Kasuma (Kiwi) Aliwarga
Chief Executive Officer and Co-Owner
UMG Myanmar, Karet Kuningan Jakarta, Indonesia

Session – Wednesday (March 11): 2:30 – 4:00 pm
Panel Chair: Professor Jose Arturo Garza-Reyes, Ph.D.
Professor of Operations Management and Head of the Centre for Supply Chain Improvement
College of Business, Law and Social Sciences, University of Derby, UK
Editor-in-Chief, International Journal of Industrial Engineering and Operations Management (IJIEOM)

Panel Speakers

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<th>Name</th>
<th>Title</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Dr. Sunil Luthra</td>
<td>Assistant Professor</td>
<td>Department of Mechanical Engineering</td>
<td>Jhajjar, India</td>
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<tr>
<td>Dr. Anil Kumar</td>
<td>Lecturer in area of Operations, Supply Chain and Business Analytics</td>
<td>Centre for Supply Chain Improvement</td>
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<td>Dr. Jiří Tupa</td>
<td>Vice Dean for Faculty Development</td>
<td>Faculty of Electrical Engineering</td>
<td>Pilsen, Czech Republic</td>
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2:30 – 4:00, WEDNESDAY  
Panel III – Supply Chain and Logistics  
Ballroom

2:30 – 4:00, WEDNESDAY  
Global Engineering Education V  
Room 1

Session Chair: Dr. Mohammad Iqbal, Shahjalal University of Science and Technology, Sylhet, Bangladesh

2:30 – 3:00 (Wednesday)

Dr. Ghada El Khayat  
Professor and Head of Department, Department of Information Systems and Computers  
Alexandria University, Alexandria, Egypt

3:00 – 3:30 (Wednesday)

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

Teaching Factory Based Learning IR 4.0: New Paradigm in Engineering Education

3:30 – 4:00 (Wednesday)

Dr. Mohammad Iqbal  
Professor, Dept. of Industrial and Production Engineering  
Shahjalal University of Science and Technology, Sylhet-3114, Bangladesh

Industrial and Production Engineering Curriculum

4:00 – 4:30 (Wednesday)

Infasuziella Ibrahim  
Researcher, Construction Research Institute of Malaysia (CREAM)  
Kuala Lumpur, Malaysia

ID 818  
Analysing and Prioritizing the Antecedents of Shopping Centre Grading Using Analytical Hierarchy Process (AHP) Modelling

Infasuziella Ibrahim, Abdul Talib Bon, Abdul Hadi Nawawi and Edie Ezwan Mohd Safian, Faculty of Architecture, Planning and Surveying, UiTM, 40450 Shah Alam, Malaysia and Faculty of Technology Management & Business, UTHM, 86400 Johor, Malaysia

2:30 – 4:00, WEDNESDAY  
Industry 4.0 V  
Room 2

Session Chair: Dr. Wazir Khan, Jazan University, Saudi Arabia

2:30 – 4:00 (Wednesday)

Adil Matin  
President & Chief Editor WeTel-TV  
Director- Centre for Design & Technology, UAE

Communication Design Technology in Design Thinking for Industry 4.0

3:00 – 3:30 (Wednesday)

Manish Kotwala  
Business Partner, Exponential Digital Solution, United Arab Emirates

Intelligent Automation: Convergence of RPA with AI to drive excellence

3:30 – 4:00 (Wednesday)

Dr. Wazir Khan  
Jazan University, Saudi Arabia

ID 696  
Combating the Impact of Advanced Persistent Threats in Industrial Internet of Things (IIoT)

Wazir Khan, Jazan University, Saudi Arabia

2:30 – 4:00, WEDNESDAY  
Sustainability and Green Systems  
Room 3

Session Chair: Souraj Salah, Abu Dhabi Ports, Abu Dhabi, United Arab Emirates

ID 137  
Construction Industries’ LCA Adaptability: A Desk Study based SWOT Analysis

Isuri Amarasinghe, and H. Chandanie, University of Moratuwa, Moratuwa, Western Province, Sri Lanka

ID 668  

Ahmed Zaid, Palestine Technical University (PTUK), Tulkarm, Palestine
Abdul Talib Bon, Production and Operations Management Department, Universiti Tun Hussein Onn, Parit Raja, Johor, Malaysia
Ayham Jaaron, Leicester Castle Business School, De Montfort University, Leicester, United Kingdom

ID 412  
Heterogeneous Green Vehicle Routing Problem with Hierarchical Objectives: Case Study

Hagar Amer, Hala A. Farouk, Khaleel S. El-Kilany, Arab Academy for Science and Technology and Maritime Transport, Alexandria, Egypt
Session Chair: Abdussalam Shibani, Coventry University, Coventry, United Kingdom

ID 148 | Liveability Concept for Development of Urban Built Environment: Case of Sri Lanka
Maheshi Tennakoon, and Udayangani Kulatunga, Department of Building Economics, University of Moratuwa, Sri Lanka

ID 564 | Modular construction innovation in the UK: the case of residential building
Rafiu Dimeji Seidu and Bert Ediale Young, London South Bank University, UK
Menahia Thayaparan, University of Moratuwa, Kadubedda, Moratuwa, Sri Lanka
Joseph Appiah-Kubi, DMC Contracts Ltd, UK

ID 596 | Road Projects Estimation: A Review
Opeoluwa Akinradewo, Department of Construction Management & Quantity Surveying, University of Johannesburg, Johannesburg, Gauteng, South Africa

2:30 – 4:00, WEDNESDAY | Construction Management | Room 4

Session Chair: Mercy Manyuchi, University of Johannesburg, Johannesburg, South Africa

ID 459 | Design of a solar-powered food-truck system
Ahmed Bensenouci, Ghfuran Mohammed Ghbrawl, Alhanouf Faisal Alsayed, and Rowan khalid Algamdi, Effat University, Jeddah, Makkah, Saudi Arabia

ID 340 | Long Term Energy Development Pathways for Nigeria: A Scenario Based Analysis
Najib Aminu Ismail, Md. Mizanur Rahman, Muhammad Ali Abuelnour, Ihab Jabbar, and Aminuddin Saat, UTM, Johor Bahru, Malaysia

ID 389 | Overview of Grid-Tied PV Technology: A Review
Lakna Ganegodage, and Waidyasekara K.G.A.S., University of Moratuwa, Moratuwa, Western Province, Sri Lanka

ID 347 | Statistical Analysis of Wind Speed Distribution for Energy Application in Saudi Arabia
Ahmed Bensenouci, Ghufran Mohammed Ghrbawi, Alhanouf Faisal Alsayed, and Rowan khalid Algamdi, Effat University, Jeddah, Makkah, Saudi Arabia

2:30 – 4:00, WEDNESDAY | Energy | Room 5

Session Chair: Mercy Manyuchi, University of Johannesburg, Johannesburg, South Africa

ID 609 | Valorisation of Coffee Waste to Biogas
Mercy Manyuchi, C. Mbohwa, and E. Muzenda, University of Johannesburg, Johannesburg, South Africa

ID 606 | Value Addition of Woody Biomass (Saw Dust) to Bio Ethanol
Mercy Manyuchi, C. Mbohwa, and E. Muzenda, University of Johannesburg, Johannesburg, South Africa

2:30 – 4:00, WEDNESDAY | Human Factors and Ergonomics | Room 6

Session Chair: Lakhwinder Pal Singh, Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab, India

ID 179 | Factors Affecting Purchasing Behaviour of Generation Z
Nadeesha Kahawandala and Suren Peter, University of Kelaniya, Kelaniya, Western Province, Sri Lanka

ID 516 | Harmonizing Design for Ergonomics and Portability using TRIZ Methodology in Developing Student Workplace
Jeremy Laurence Bañez, Hazel A. Caparas, and Reynaldo G. Salamat, Bulacan State University, Guiquinto, Bulacan, Philippines

ID 389 | Model to Assess Risk Perception and Behaviour of Individuals
Menaha Thayaparan, University of Moratuwa, Kadubedda, Moratuwa, Sri Lanka

ID 380 | Occupational Fatality, Injury, Illness, and Work-related Abuses of Indonesian Immigrant Workers in Taiwan 2013-2014
Yogi Tri Prasetyo, Mapua University, Manila, Metro Manila, Philippines

ID 240 | The Effects of Energy Expenditure on the Mental Fatigue of Construction Workers
Janice Gumasing, Claire Marie A. Llamas, and Czarina Anne A. Martin, Mapua University, Manila, Philippines

ID 304 | Webpage Development of Group Buying Websites Focusing on Web Usability and Interface Design
Rene D. Estember, and Katrina Mae B. Procopio, Mapua University, Manila, Metro Manila, Philippines
The document contains a list of session titles, IDs, and speakers for the 10th Annual International Conference of IEOM Society International. The sessions are organized into categories such as Healthcare Operations and Services, Reliability and Six Sigma, Women in Industry and Academia, and Women in Industry and Academia. Each session includes topics like Lean Thinking, Workplace Safety, and Integrated Optimization.

The sessions are scheduled for specific times and rooms, with topics ranging from lean thinking and workplace safety to the use of reliability indicators. The conference also includes a networking break and panel discussions on various topics relevant to the field of operations and management.

The document is structured to provide a clear overview of the conference agenda, including session times, locations, and the names of the speakers and their affiliations.
4:30 – 6:00, WEDNESDAY     Global Engineering Education VI     Room 1

Session Chair: Glyda Aricon B. Marquez, Technological Institute of the Philippines Manila, Philippines

ID 023 Preparing International Engineering Programs for Accreditation
Albertus Retnanto, Texas A&M University at Qatar Doha Qatar
Hamid R. Parsaei, Department of Industrial and Systems Engineering Texas A&M University, USA
Boback Parsaei, Integrated Technology Systems, Inc. Houston, Texas, USA

ID 041 The Professional Profile of Aerospace Engineers for Industry 4.0
Alma Arcelia, Gonzalez Lozano, Rosa Amalia Gómez Ortiz, and Luis Rocha Lona, Instituto Politécnico Nacional, Gustavo A. Madero, Ciudad de Mexico

ID 583 The use of computational simulation, finite element analysis and digital models to improve the practice and teaching of linear structural analysis
Luiz Da Guaia, and Israel Mateus Melo Oliveira, Graduando em Engenharia Civil, Centro Federal de Educação Tecnológica de Minas Gerais VARGINHA Minas Gerais Brazil

ID 582 The use of mobile robotics to pre-mapping areas for Orienteering Competition – “Projeto Azimute Norte Varginha” – Use of drones
Luiz Da Guaia, Professor, Departamento de Mecatrónica, Israel Mateus Melo Oliveira, Graduando em Engenharia Civil Centro Federal de Educação Tecnológica de Minas Gerais VARGINHA Minas Gerais Brazil

ID 035 To Investigate the Relationship between TQM Enablers Applicable In Indian Engineering Education Institutes
Ankesh Mittal, Pardeep Gupta, and Manjot Singh, Department of Mechanical Engineering, SLIET sunam Punjab India

ID 439 Unravelling the Stereotypes of Women in Industrial Engineering
Glyda Aricon B. Marquez, Sheila May P. Gappi and Elaiza E. Bautista, Industrial Engineering Department, Technological Institute of the Philippines Manila, Philippines

4:30 – 6:00, WEDNESDAY     Industry 4.0 VI     Room 2

Session Chair: Sunil Thawani, Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates

4:30 pm – 5:00 pm

Ts. Dr. Mehran Doulat
Associate Professor of Engineering/Operations Management
MBA Program Committee/Coordinator and Director of Spectral Centre for Operational Excellence Research (COER)
Xiamen University, Sepang, Selangor, Malaysia
Director Academy of Research and Training (SART Sdn. Bhd.)

“Dubai We Learn”: Benchmarking for the Dubai Government Sectors

5:00 pm – 5:30 pm

Sunil Thawani
Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates
Member, Board of Directors, Dubai Quality Group

ID 276 Gift of Quality to United Nations Sustainable Development Goals
Sunil Thawani, Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates

5:30 pm – 6:00 pm

Sunil Luthra
Assistant Professor, Department of Mechanical Engineering
Government Polytechnic, Jhajjar, India

ID 336 Study of Key Enablers of Industry 4.0 Practices Implementation Using ISM-Fuzzy MICMAC Approach
Sunil Luthra Government Polytechnic Jhajjar, Jhajjar, India, Gunjan Yadav, Production Engineering Department, Veermata Jijabai Technological Institute, Mumbai, India, Anil Kumar, Anthony Anosike, Centre for Supply Chain Improvement, The University of Derby, Derby, United Kingdom, Sachin Kumar Mangla, Knowledge Management and Decision, Plymouth Business School, University of Plymouth, United Kingdom, Dixit Garg, Department of Mechanical Engineering, National Institute of Technology, Kurukshetra, India

4:30 – 6:00, WEDNESDAY     Supply Chain Management (SCM)     Room 3

Session Chair: Bibhas Giri, Jadavpur University Kolkata West Bengal India

ID 660 Improving end customers’ satisfaction through postponement in the South Africa automobile supply network
E. Innocents Edoun, Polycarpe Feussi, and Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, GAUTENG, South Africa

ID 022 Investigating the Applicability of Dynamic Bayesian Networks to Manage Spare Parts Inventory Risk: A Pipelines Coating Industry Example
Mouhammad Shaker Ali Agha, Robert Van Der Meer, and Lesley Walls, Department of Management Science, Strathclyde Business School, University of Strathclyde, Scotland United Kingdom

ID 641 Measuring Supply Chain Complexity based on Multi-criteria Decision Approach
Sujan Piya, Mohammad Khadem, and Mahmoud Al Kindi, Department of Mechanical and Industrial Engineering, Sultan Qaboos University Muscat Seeb Oman, Ahm Shamsuzzoha, School of Technology and Innovations, University of Vaasa, Vaasa, Finland

ID 171 Moving from Lean to Leagile: A Framework to Improve Supply Chain Performance of Fashion Garment Manufacturing in Sri Lanka
Dulanji Perera, Ruwan Wickramarachchi, Nadeesha Abyasekara, and Kasuni Vidanagamachchi, Department of Industrial Management, University of Kelaniya Kelaniya Western Province Sri Lanka

ID 579 Optimization of Supply Chain System in Multi-Product, Multi-Supplier Scenario Using Teaching-Learning-Based Optimization Algorithm
Padminak Pawar, K. N. Nandurkar, and P. K. Shahabadkar, K.K.W.I.E.E.R Nashik Select Region India

ID 168 Optimizing Inventory Management in Blood Supply Chains: A Literature Review
Radika Gunawardana, K. Vidanagamachchi, and L.D.J.F. Nanayakkara, Department of Industrial Management University of Kelaniya Kelaniya Gampaha Sri Lanka

ID 099 Measure of Bullwhip Effect in a Closed-loop Supply Chain with Two Retailers under Price-sensitive non-ARMA Demand Process
Bibhas Giri, Jadavpur University, Kolkata, West Bengal, India
**4:30 – 6:00, WEDNESDAY**  
**Product Design and Development**  
Room 5

**Session Chair:** Myzan Noor, University Kuala Lumpur Kuala Lumpur wilayah persekutuan Malaysia

**ID 327** A Decision-based Design Framework for a Commercial Product  
Tanvir Ibna Kasar, and AKM Kais Bin Zaman, Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

**ID 438** An Experimental Study on the Performance of a Newly Developed Pico Hydroelectric Device  
Loreen Alyana S. Macasu, Marco E. Malalbrigo, Esmond Adriel M. Ramos, and Ranihita D. Borres, School of Industrial and Engineering Management, Mapua University, Manila, Philippines

**ID 437** Design and Implementation of a Nurse Robot  
Ahmed Bensenouci, Arnal Abutaleb, Jory Alsabthani, Sadeem Alkini, Sara Alghamdi, and Shahad Alkaydi, Electrical and Computer Engineering Department, Effat University, Jedda, Makkah, Saudi Arabia

**ID 386** Development of a Low-Cost Solar Water Purifier Using Metaheuristic Process  
Sourav Kumar Ghosh, and Md. Mamunur Rashid, Department of Industrial and Production Engineering, Bangladesh University of Textiles, Dhaka, Bangladesh

**ID 270** Mobile Application: The Study of Diverseness of Renewable Energy for Primary School Students  
Myzan Noor, and Siti Najiah Osmanuddin, University Kuala Lumpur Kuala Lumpur wilayah persekutuan Malaysia

**ID 469** Plants Extract Based Antibacterial Nanofibrous Mats for Biomedical Applications  
Md Abdu Shahid, and Ayub Ali, Dhaka University of Engineering & Technology (DUET) Gazipur 1707 Bangladesh

**ID 243** A Life Cycle Assessment (LCA) – Based Approach in the Development of a Re-Circulation System for Secondhand Textbooks in the Philippines  
Marvin I. Norofia, and Mark Andrew D. Acot, School of Industrial Engineering and Engineering Management, Mapua University Manila, Manila, Philippines

**4:30 – 6:00, WEDNESDAY**  
**Operations Management**  
Room 6

**Session Chair:** Priya Sachin Deole, Department of Physics, G.S.Tompe Art’s, Comm. & Science College, Chandur Bazar, Dist. Amravati (M.S) India

**ID 138** Factors contributing to Building Fire Incidents: A review  
R.M.D.M. Rathnayake, P. Sridarran, and M.D.T.E. Abeynayake, University of Moratuwa, Moratuwa, Western Province, Sri Lanka

**ID 332** From Literature Review to Conceptual Framework for Evaluation of Performance of Sustainable Service Supply Chain  
Ramji Nagariya, and Divesh Kumar, Department of Management Studies, Malaviya National Institute of Technology Jaipur, Jaipur (INDIA) Jaipur Rajasthan, India

**ID 334** Modeling of External and Internal Enablers of Food Chain Logistics  
Akhayat Patidar, Malaviya National Institute of Technology, Jaipur Rajasthan, India

**ID 129** Optimal Operation Policies for Vendor Machines with Product Dedicated Variant Towers  
Md Abdus Shahid, and Ayub Ali, Dhaka University of Engineering & Technology (DUET) Gazipur 1707 Bangladesh

**ID 499** Simulation of Service Provision Process in Qazvin Gas Company with the Aim of Decreasing Waiting Time for Customers  
Sima Rafiei, Qazvin University of Medical Sciences, Qazvin, Iran

**ID 157** The Relationship Between Occupational Stress and Job Performance: An Empirical Study in a South African Contact Centre  
Nokuhanya Ndlovu, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, Gauteng, South Africa

**ID 144** The Relationship of TQM and Lean Production Towards Integrated Application  
Romulo Ulibas, Tarlac State University, Calamba, Laguna, Philippines

**ID 618** Design of Job Scheduling Using BAT Algorithm to Minimize Makespan in Hybrid Flowshop  
Sumiharni Batubara, Debbie Kemala Sari, and Dhimas Arroyo Wicaksono, Industrial Engineering Department, Faculty of Industrial Technology, Trisakti University, Kampus A USAKTI, Jl. Kyai Tapa No.1, Grogol, Jakarta Barat 11440, INDONESIA

**4:30 – 6:00, WEDNESDAY**  
**Production Planning**  
Room 7

**Session Chair:** Rene D. Estember, Mapua University, Manila, Philippines

**ID 452** Material Requirement Planning and Inventory Control Application Program of Crispy Retail at PT. Diva Mitra Bogatama with Application Program Based on c# Programming Language  
Lina Gozali, Florencia Irena, and Liliana Jap, Industrial Engineering Department Faculty, Tarumanagara University Jakarta Dki Jakarta Indonesia

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10th Annual International Conference
**Entrepreneurship Mediation (Case Study: Iranian Banking Industry)**

Jeanette del Pilar Ureña Aguirre, Javier Chiza López, Oviedo-Pantoja Winston, Maya-Nicolalde Mayra, and Marcelo Cevallos Vallejos, Universidad Técnica del Norte, Kampus A USAKTI, Jl. Kyai Tapa No.1, Grogol, Jakarta Barat 11440, INDONESIA

Judith Mhlanga, and Anup Pradhan, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa

Rahul Singh Rathore, Indian Institute of Technology, Roorkee, Uttarakhand, India

Fariba Hashemi, School of Paramedicine, Qazvin University of Medical Sciences, Qazvin, Iran

Nadia Neysari, Student Research Center, Qazvin University of Medical Sciences, Qazvin, Iran

Rim Larbi, Institut d'Innovation en Logistique du Québec, Canada & University of Carthage, National Engineering School of Carthage, UR-OASIS-ENIT, Tunis, Tunisia

Bhairab Chandra Patra and Usha Lenka, Department of Management Studies, IIT Roorkee, Roorkee, Uttarakhand, India

Zumrat Gaibullaeva, Tajik Technical University, Tajikistan

Vimala Rani M, Indian Institute of Technology Kharagpur West Bengal, India

Ali Reza Jalali Farahani, Assistant Professor at Tarbiat Modares University (T.M.U.) -Tehran-Iran

M. Mathirajan, Department of Management Studies, Indian Institute of Science (IISc)-Bangalore, India

Yash Daultani, Department of Operations Management, Indian Institute of Management, Lucknow, India

Dhirendra Prajapati, Arjun R Harish, and Saurabh Pratap, PDPM IIITDM Jabalpur, Jabalpur, M.P, India

Mengdi Zhang, School of Internet of Things, Nanjing University of Posts and Telecommunications, Nanjing 210003, People’s Republic of China

Yash Daultani, Department of Operations Management, Indian Institute of Management, Lucknow, India

**6:00 – 8:00 pm (Wednesday) - Poster Session**

**POSTERS**

**Senior Design / FYP Poster Competition**

Gasification Coal of the Fon-Yagnob Deposit for Combined Production of Heat and Chemicals
Zumrat Gaibullaeva, Tajik Technical University, Tajikistan

**Undergraduate Poster Competition**

IoT Technology for Wildlife Conservation Based on Energy Harvesting
Emad Abd-Elrady, Sara Anees, Sara Ali, Shaima Hassan, Abu Dhabi Women's College - Higher Colleges of Technology, Abu Dhabi, United Arab Emirates

**Graduate Poster Competition**

A Lean 7S methodology framework to improve efficiency and organizational performance: A review study in an SME organization
K. Mahlaia, N. Sukdeo and V. Mofokeng, Department of Quality and Operations Management, University of Johannesburg, Gauteng, South Africa

Evaluation of Variability in Clinical Assessments
Aliya Alyaari, Saleh Atatreh, Afraa Alseriedi, Noora Aliblooshi, Sumaya Almaazmi, Raja Jayaraman, and Mecit Can Emre Simsekler, Khalifa University, Abu Dhabi, United Arab Emirates

Impact of Job Burnout on the Performance of the Construction Professionals in South Africa
Motheo, M. Tjebane, Clinton O. Aigbavboa, Wellington D. Thwala, and Ifije D. Ohionah, University of Johannesburg, South Africa

The Job Characteristics Associated with Burnout in The South African Construction Industry
Motheo, M. Tjebane, Clinton O. Aigbavboa, Wellington D. Thwala, and Ifije D. Ohionah, University of Johannesburg, South Africa

Industry 4.0: An Insight into Indian FMCG Sector
Vilas Kharat, NITIE, Mumbai, Maharashtra, India
ID 076  Humanitarian Engineering Initiative of Texas A&M University at Qatar: A Case Study of a Series of Successful Workshops to Enhance the Sense of Social Responsibility of Engineering Students
Sara Amani, Zohreh Eslami, Hassan Bashir, and Mahmood Amani, Texas A&M University, Doha, Qatar

ID 079  Optimization Models in Aircraft Assignment and Airline Disruption Management – A Systematic Review of Literature
P.A. Fernando, D.H.H. Niwunhella, L.D.J.F. Nanayakkara, and R. Wickramaratne, University of Kelaniya, Kelaniya, Western Province, Sri Lanka

ID 162  Optimizing the Maintenance Policy of Offshore Wind Power Systems: A Two-step Approach
Vincent Yu, and Hsu-i Ting, National Taiwan University of Science and Technology, Taipei, Taiwan
Le Thi Huynh Anh, Faculty of Project Management, The University of Danang, University of Science and Technology, Danang City, Vietnam

ID 170  Corporate Value Prediction Model and Sensitivity Analysis of Taiwan Traditional Industry Based on Machine Learning Algorithm
Hsiang-Tien Pao and Hsin-Chia Fu, National Chiao Tung University, Hsinchu, Taiwan

ID 208  Sustainable Supply Chain Concerns in Diamond Industries
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 235  Routing of Unmanned Aerial Vehicles: State of Art
Anwar Hamdan, Sadeque Hamdan, Ali Cheaitou, and Imad Alsyouf, University of Sharjah, Sharjah, United Arab Emirates

ID 266  Role of Industry 4.0 in Processes Development
Rajat Agrawal, Associate Professor, Indian Institute of Technology Roorkee, India

ID 299  Low Cost Sorbents for Environmental Pollutants
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 306  The Influence of Descriptive Statistics on Woven carpet using T-Test to Compare Colored Yarns
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 310  Interview Questions for Lean Manufacturing: Case Study
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 311  An Application of six sigma In the roasted and grounded coffee production process in Colombia
Juan Camilo Garcia, Sara Nataly Gallego Urrea, Universidad Santiago de Cali, Valle del cauca, Colombia

ID 319  Tufted Woven Carpet with Enhanced Machine Mechanisms Using Response Surface Design Analysis
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 320  Synthesis and Interaction with Waste in Trico Factory Layout and Cycle time analysis
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 321  Method for Producing advanced Carpeting Using a HTC factor
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 322  Modeling the Starting Values for the Textile Industry: The Application of Nonlinear Regression Analysis
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 323  An implementation of the variance analysis (ANOVA) for Matters factory at Fisher Pairwise Comparisons Level
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 338  A Simulation-based Optimization Approach to Facility-Allocation under Demand Uncertainty and Enforced Level of Service
Joyjit Bhownick, Trade Services (Pvt.) Ltd., Dhaka, Bangladesh

ID 342  Production Stages and Data of Study are Analyzed as System Throughput Optimization
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 343  Applications and Theoretical Research for Fabric Manufacturing and Influence of Descriptive Statistics
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 354  The Contribution of Vocational Skills Development to Inclusive Industrial Growth and Transformation: An Analysis of the Survey Results from Manufacturing Industries in Ethiopia
Hadjus Berhe, Mezgebe Atsebha, and Alula Gebreselassie, School Mechanical and Industrial Engineering, Ethiopian Institute of Technology-Mekelle, Mekelle University

ID 365  Effects of Types of Clothing on Thermal Sensation and Hand Dexterity in Cold Exposure
Kyeong-Hee Choi, Yong-Ku Kong, Hyun-Ho Shim, Jae-Kyewong Kim and Chae-Won Park, and Min-uk Cho, Department of Industrial Engineering, Sungkyunkwan University, 2066, Seobu-ro, Jangan-gu, Suwon-si, Gyeonggi-do 16419, Korea

ID 368  Inception of Industry 4.0 in Indian manufacturing and Make in India
Dinesh Chandra Vaish, Research Scholar, Indian Institute of Technology Roorkee, India
Rajat Agrawal, Associate Professor, Indian Institute of Technology Roorkee, India
Ankur Goel, Research Scholar, Indian Institute of Technology Roorkee, India

ID 382  Pricing Strategy in Remanufacturing Using a Spatial Model Approach
Jen-Ming Chen, National Central University, Jhongli, Taiwan

ID 384  Wave Energy Converters: Barriers and Drivers
Misaa Alkhayyat, and Tayeb Brahimi, Effat University, Jeddah, Saudi Arabia

ID 423  Determining Factors of Auditor Switches among Manufacturing Companies Listed on the Indonesia Stock Exchange
Miftahul Rohmah, Rony Wardhana, Rudi Harianto, Ibu Fajarudin, Frenky Yusu, Nurul Aini, and Joko Suyono, Narotama University, Surabaya, East Java, Indonesia

ID 430  Experimental study on a composite PMMA/glass fiber used in the manufacture of orthopedic prostheses.
Alihi Latifi, Boukezzer Skander, Sassine Nacira, Hassani Mohamed, and Guefta Temam Taher, Research Center in Industrial Technologies (CRTI), Cheraga, Algeria

ID 454  Prevalence of Dementia and Depressive in Brain Tumor Patients
Miftahul Rohmah, Rony Wardhana, Rudi Harianto, Ibu Fajarudin, Frenky Yusu, Nurul Aini, and Joko Suyono, Narotama University, Surabaya, East Java, Indonesia

ID 454  Prevalence of Dementia and Depressive in Brain Tumor Patients
Saman Shahid, National University of Computer and Emerging Sciences (NUCES), FAST Lahore Pakistan
Sana Khalid, and Sajid Rasheed, College of Earth & Environmental Sciences (CEES), University of the Punjab, Lahore Pakistan
ID 573  Portable Air Inflated Freezer Solarcell, Technology For Fisheries SME Sidoarjo Indonesia
Ronny Durrotun Nasihien and Muhammad Ikhsan Setiawan, Agus Sukoco, Department of Management, Nataroma University, Indonesia
Abdul Talib Bin Bon, UTM Parit Raja Johor, Malaysia

ID 601  Intelligent Glove
Amal Barsheed, King Abdulaziz University, Jeddah, Makkan, Saudi Arabia

ID 603  Artificial Neural Networks for Fault Diagnosis of Milk Pasteurization Process - A Comparative Study
Chebira Samia, Bourmada Noureddine, and Boughaba Abdelali, Industrial Safety Department, Hygiene and Industrial Safety Institute, Mustafa Ben Boulaid BATNA 2 University, Batna, Algeria

ID 619  Heating and Cooling Loading Processes and Optimizes Material Properties for the Best Thermal Performances using CES
Ahmad Yame, Lawrence Technological University, Dearborn, MI, United States

ID 626  “Asmeany”: An Andriod Application for Deaf and Hearing-Impaired People
Reem Aisulami, Samar zaid alahmadi, King Abdulaziz University, Jeddah, Makkan, Saudi Arabia

ID 635  Data Mining for Mobile Internet Traffic Flow Forecasting
Saber Elalmabrouk, Libyan Academy, Janzou, Libya

ID 671  The Use of Word Card Media to Improve Early Reading Skill at Preschool
Farida Samad and Vrienda Makingking, University Kampus I Akehuda, Jl. Bandara Babullah Akehuda, Ternate, Maluku Utara, Indonesia

ID 673  Improving Parcel Sorting System by Utilizing OCR, ASR, and Robot Arm
Abdulrahman Ayash Alharbi, Hassan Ahmad Hassan, Mohammed Majed Alnazawi, Othman Sameer Sonbol, Taibah University Al-Madinah Al-Monawrah, Saudi Arabia

ID 674  Are Indonesian Muslim Students More Engaged to Religious Organization than Public Organization?
Hafid Algristian, Andini D. Arumarsi, Faculty of Education Sciences, Universitas Narotama, Surabaya, Indonesia
Azimul Karimah, Consultation-Liaison Psychiatrist, Faculty of Medicine, Universitas Airlangga Surabaya, Indonesia
Zulidyana Dwi Rusnalasari, Postgraduate Program, Universitas Negeri Surabaya, Indonesia

ID 721  Optimization Design and Comparative Study of np and EWMA Charts for Monitoring Fraction Nonconforming - Graduate Poster Competition
Mezoon AlRemeithi, Student at Department of Industrial Engineering and Engineering Management, College of Engineering, University of Sharjah, UAE
Salih Haridy, Program: Master of Science in Engineering Management, College of Engineering, University of Sharjah, UAE

ID 724  Remaining Useful Lithium-Ion Battery Life Prediction Based on Initial Stage-Cycles Using Machine Learning
Aditya Saxena, Birla Institute of Technology Pilani, Dubai Campus, Dubai International Academic City, Dubai - United Arab Emirates

ID 801  Effective ESP Course Design for Japanese Engineering Students
Rumi Tobita, Center for Liberal Arts and Sciences of Engineering Department, Ashikaga University, Tochigi, Japan

ID 804  Role of Design Thinking and Rapid Prototyping Methods in Service and Product Design
HamidrezaBahrami and Negin Firooz, Department of Industrial Engineering, Azad University of Tehran, Tehran, Iran

ID 811  University Exam Timetabling
Aseeal Alzadjali, Razan Hamed Al-Fazari and Zahra Hamed Al-Ishaqi, Mechanical and Industrial Engineering Department, Sultan Qaboos University, Muscat, Oman

ID 838  Modelling and optimizing hospital emergency department workflow
Ghaida Qadim Arfah Bait Kulaib and Ichraq Mohammed Hassan Ouhmidou, Industrial engineering students at Sultan Qaboos University, Oman

Senior Design / Final Year Project Competition (March 12, 6:00 pm – 8:00 pm)

ID 546  Construction Site Layout Planning Kuwait International Airport Expansion- Terminal 2
Dr. Rifat Ozdemir, Marah AlRahhal, Jumannah AlQallaf, Rawan AlAbdullah, Haya AlAradah, Sarah AlMatar, Industrial Engineering Department, American University of the Middle East, Eqaila, Kuwait

ID 723  Improving Patient Discharge Process
Maha Al Dhaheri, Mariam Ramadan, Afra Almheiri, Khalifa University, Maryam Alshehhi, Mecit Can Emre Simsekler, and Saed Amer, Khalifa University, UAE

March 12, 2020 (Thursday) - Session: 8:00 am – 9:30 am

8:00 – 9:30, THURSDAY  Global Engineering Education VII  Room 1
Session Chair: Nancy Tapia, Universidad de Monterrey, Nuevo Leon, Mexico

ID 528  A MIP Approach for Capacity Planning in Higher Education: Case of Study of Timetabling Problems at the Industrial Engineering Departments in Bogotá, Colombia
Julio-Mario Daza-Escorcia, Industrial Engineering Department, America University Foundation, Bogotá, Colombia
Paula Gómez, Carlos Mora and Carlos Arango-Londoño, Industrial Engineering Department, La Salle University, Bogotá, Colombia

ID 379  Comparative Assessment of Ergonomic Education for Industrial Engineering in the Philippines
Yogi Tri Prasetyo, Mapua University, Manila, Metro Manila, Philippines

ID 525  Methodological development for the analysis of the viability of projects with organic waste
Nancy Tapia, and Maria Guadalupe Moreno Treviño, Universidad de Monterrey, Nuevo Leon, Mexico

8:00 – 9:30, THURSDAY  Industry Solutions VII  Room 2
Session Chair: Akhilesh Kumar, IIT Kharagpur, Kharagpur, West Bengal, India

ID 165  A Literature-Based Survey on Industry 4.0 Technologies for Procurement Optimization
Sachini Chandrasekara, Kasuni Vidanagamachchim, Ruwan Wickramarachchi, University of Kelaniya, Ratnapura, Sri Lanka

ID 628  Harnessing Fourth Industrial Revolution (4IR) for Improving Poor Universities Infrastructure in Developing Countries-A Review
Thalente Nkosi, Ademilade Aboginije, Nokulunga Mashwama and Wellington Thwala, University of Johannesburg, Johannesburg, South Africa

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ID 652  The Fourth Industrial Revolution 4.0 and Knowledge Management Capabilities
Faridah Mustaffa, Universiti Kuala Lumpur, Cheras, Kuala Lumpur, Malaysia

ID 373  Combing Text Mining and Survival Analysis for Asset Health Management Using Maintenance Log
Akilesh Kumar, and Yarra Sai Deepak, IIT Kharagpur, Kharagpur, West Bengal, India
Bharat Bhushan, and Mohit Kale, Tata Metals Limited, Kharagpur, India

ID 465  The practice of Kaizen philosophy and its effect on Ethiopian manufacturing industries: case of chemical industries
Hafu Berhe, Ph.D. Candidate, Ethiopia Kaizen Institute, Addis Ababa, Ethiopia
Tewodros Halli, Lecturer, Axsum University, Mechanical Engineering Department, Axum, Tigray, Ethiopia

ID 758  Delegation versus Control under Competition and Bargaining Power Distribution in Supply Chain Procurement
Parisa Rahimi, and Rassoul Nocorossana, Iran University of Science and Technology, Tehran, Iran

ID 169  Exploratory Evaluation of Dry Ports in Northeast of Brazil
Thiago De Almeida Rodrigues, and Caroline Maria de Miranda Mota, Federal University of Pernambuco, Recife, Brazil
Gordian Udchukwuj Josuia, Industrial Engineering & Engineering Management Department, University of Sharjah, Sharjah, UAE

ID 491  Tropically Adapted Passive Building: The Impact of Building Design and Double Glazing on Ambient Temperature and Windows’ Inner Surface Temperature
Ashutosh Samadhiya, and Rajat Agrawal, Indian Institute of Technology Roorkee, Ghatampur, Uttar Pradesh, India

ID 498  The Narrative of Kuwait’s National Innovation System using Triple Helix Model
Siti Fatihah Salleh, and Ayodele Bamidele Victor, Institute of Energy Policy and Research (IEPRe), Universiti Tenaga Nasional, Jln Ikram-UNITEN, 43000 Kajang, Selangor, Malaysia

ID 397  Internal brand building through practicing Green Human Resource Management initiatives
Rajat Kapoor, Roorkee University, Uttar Pradesh, India

ID 108  Cyber-Physical Systems: Matching Up Its Application in the Construction industry and other Selected Industries
Matthew Ikuabe, Clinton Aigbavbo, Ayodeji Oke, University of Johannesburg, Johannesburg, Gauteng, South Africa

ID 085  Inertia motorized wheel balancing robotic motorcycle
Faridah Mustaffa, Universiti Kuala Lumpur, Cheras, Kuala Lumpur, Malaysia

ID 219  Productive Social Innovation in the Provinces of Imbabura and Carchi
Mayra Maya, Winston Osvedo, Jeannette Urea and Javier Chiza, Facultad de Ingenieria en Ciencias Aplicadas, Universidad Tecnica del Norte, Ibarra, Ecuador

ID 003  Real-time embedded IoT based industrial and indoor gas detection and monitoring system
Said Kafumbe, HCT, Abu Dhabi, United Arab Emirates

ID 498  The Narrative of Kuwait’s National Innovation System using Triple Helix Model
Husam Arman, Bashayer Dashti, Nora Abdulmalik, Kuwait Institute for Scientific Research, Kuwait

ID 491  Tropically Adapted Passive Building: The Impact of Building Design and Double Glazing on Ambient Temperature and Windows’ Inner Surface Temperature
Karl Wagner, Universiti Kuala Lumpur, Jln Sultan Ismail 1016, 50250 Kuala Lumpur, Malaysia

ID 568  Achieving Sustainability through Holistic Maintenance- Key for Competitiveness
Ashutosh Samadhiya, and Rajat Agrawal, Indian Institute of Technology Roorkee, Ghatampur, Uttarakhand, India

ID 569  Exploring Linkages between Sustainable Manufacturing Strategy and Total Productive Maintenance Pillars: A Systematic Literature review
Tushar Khatri, Thapar Institute of Engineering and Technology, Patiala City, Punjab State, India
Jitendar K. Bittoo, CEO, Metallin (Asia) Recyclers, LLP, Gurgaon, Haryana state, India

ID 346  Responsible Manufacturing Practice be the Right Paradigm-Perspective Bangladesh
Md Ziaur Rahman, Metropolitan University, Sylhet Metro, Sylhet, Bangladesh
Mohammad Iqbal, Professor, Industrial & Production Engineering Department, Shahjalal University of Science & Technology, Sylhet, Bangladesh

ID 152  Multi-objective Green Vehicle Routing Optimization
Enangi Waidyathilaka, V.K. Tharaka, and R. Wickramarachchi, University of Kelaniya, Kegalle, Sabaragamuwa, Sri Lanka

ID 687  Identification of SDGs through CSR of Indian Companies
Kiranavananth P, Amrita School of Business, Bengaluru, India
Prof. Shekar Babu PhD, Founding Head, AMRITA Vishwa Vidypeetham, Bengaluru, India

ID 057  Screening Variables using Computer Experiments: An application using a simulated furnace
Nuno Costa, and Paulo Fontes, IPS-EST, Setubal, Portugal
### Session Chair: Inese Ratanova, University of Latvia, Riga, Latvia

**8:00 – 9:30, THURSDAY**

#### Business Management

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<td>Nicolas Maranzana, Ameziane Aoussat, Arts et Métiers – LCPI, Paris, France</td>
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<td>Inese Ratanova, University of Latvia, Riga, Latvia</td>
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**8:00 – 9:30, THURSDAY**

#### Artificial Intelligence

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<td>Khalid EL ASNAOUI, Complex Systems Engineering and Human Systems, Mohammed VI Polytechnic University, Morocco</td>
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<td>Ritesh Kumar, IIT Kharagpur, Kharagpur, West Bengal, India</td>
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<td>Ferdous Sarwar, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh</td>
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<td>S. M. Ahmed, T.K. Biswas, Department of Industrial &amp; Production Engineering, Jashore University of Science and Technology, Jashore, Bangladesh</td>
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**8:00 – 9:30, THURSDAY**

#### TQM and Technology Management

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<td>Israt Parveen, Mawlana Bhashahi Science &amp; Technology University, Tanghai, Bangladesh</td>
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<td>Anowar Parvez, BCM College of Engineering &amp; Technology, Bangladesh</td>
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<td>Md. Iqbal Mahmud, Department of Textile Engineering, Mawlana Bhashahi Science and Technology University, Bangladesh</td>
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<td>Haeng Muk Cho, Department of Mechanical Engineering, Kongju National University, South Korea</td>
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<td>Rajnish Uttam Katarne, NMIMS University, Mukesh Patel School of Technology Management and Engineering, Shirpur, Maharashtra, India</td>
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<td>Satyendra Sharma, Assistant Professor in Department of Mechanical Engineering, Sage University, India</td>
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<td>Jayant Negi, Ex-Professor of Mechanical Engineering Department, Devi Ahilya Vishwavidyalaya, India</td>
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**9:40 – 10:20 am - Thursday Morning Keynote I – Ballroom**

**Dr. Yousef Al-Assaf**  
President, Rochester Institute of Technology (RIT) – Dubai  
Dubai Silicon Oasis, Dubai, United Arab Emirates

**10:20 – 11:00 am - Thursday Morning Keynote II – Ballroom**

**Prof. Dr. Bhaskar Bhandarkar**  
Director General, Institution for Innovation, Industrial Engineering & Entrepreneurship  
Principal Investigator IUSSTF India and Former Chairman of IIIE
**Session Chair: Ameen Abdulla, SCTCE, Thiruvananthapuram, Kerala, India**

**11:30 – 1:00, THURSDAY**

**Case Studies**

Room 4

**ID 717** The Effect of Auditor’s Professionalism and Professional Ethics on Materiality Level Considerations in Audit Processes to the Financial Statements of Entities Indonesian Case Studies  
Ari Budiyanto, Rony Wardhana, Bayu Nurcahyo Andini, Anik Mubiatiingrum, and Ibnu Fajarudin, Faculty Economy and Business, Narotama University, Surabaya, Indonesia

**ID 726** Institutional Factors in Public Sector Reform: A Theoretical Analysis  
Malse Yulivestra, Doctoral Program of Administrative Science, Faculty of Administrative Science, Universitas Brawijaya Malang, Indonesia

**ID 727** “Kalesing Village” Energy in the Context of Social  
Saidna Zulfiqar bin Tahir, Risman Iye, A Yusufianti Tenriawali, Azwan, and Karim, Department of Indonesian Literature Faculty, University of Iqra Buru, Namlea, Indonesia

**ID 728** Cia-Cia Vocational Inventoryzation in Buru District  
Hansya Harun, Doctoral Program of Administrative Science Faculty of Administrative Science, Universitas Brawijaya Malang, Indonesia

**ID 729** Initiating Digitalization As Institutional Changes In Institutional Government Bureaucracy  
Bambang Suripryono, Bambang Santoso Haryono, and Endah Setyowati, Public Administration Deparmtent, Faculty of Administrative Science, Universitas Brawijaya Malang, Indonesia

**ID 730** Mappalili Existence in South Sulawesi  
M Chauri Basrun Umanailo, Department of Agricultural and Forestry, University of Iqra Buru, Namlea, Indonesia

**ID 731** Muhu Holy Forest, Protected Area of Mahuze Clan as a Natural and Cultural Conservation  
I.D. Palittin, Trinovianto G. R. Hallatu, and Demerista Mahuze, University of Musamus, Merauke-Indonesia

**ID 732** Analysis and Improvement of Facility Layout in a Furniture Factory: A Case Application  
Mehmet Savsar and Aminah Aldehaim, Industrial & Management Systems Engineering Department, Kuwait University, Kuwait

**ID 733** Increasing Coverage Day Aviation Fuel Through Development of Modular Aviation Fuel Terminal System in Aviation Fuel Terminal Tual (Maluku - Papua Area)  
Maulana Ardiansyah, Widi satira Nugraha, and Noviantari, Reliabilities Project Development VIII, Pertamina (Persero), Papua Indonesia

**ID 734** Dust Particles Detection on Camera Lens  
DhinakaranKoilpitchai and Manoj Ravindra Phirke, Imaging Tech Lab HCL Technologies, Bangalore, India

**ID 735** Sustainable Approach for the Production of Biodiesel from Waste Cooking Oil Using Static Mixer Technology  
Chandrs Mohl R. Madhuranthakam, Azzih Mohammed Nour Kamyabi, and Gharisa Mohamed Almirhi, Chemical Engineering Department, Abu Dhabi University, Abu Dhabi, United Arab Emirates

**ID 736** Surrogate-Based Process Optimization: A Case Study on Simple Natural Gas Processing Plant  
Faah Alhameli1, Mohammed Alkatheri1, Ali Elkamel1, Ali Almansoori1, and Peter Douglas2

1Department of Chemical Engineering, Khalifa University of Science and Technology, SAN Campus, P. O. Box 2533, Abu Dhabi, United Arab Emirates
2Department of Chemical Engineering, University of Waterloo, Waterloo, Ontario, N2L 3G, Canada

**ID 737** Dynamical Transmission of HIV/AIDS and TB Co-infection Model  
Md. Haider Ali Biswas and Sk. Abdus Samad, Mathematics Discipline, Science Engineering and Technology School, Khulna University, Khulna, Bangladesh
ID 810  Critical Analysis of Software Vulnerabilities through Data Analytics
Masan Rama Parimi, Research Associate, Amrita Vishwa Vidyapeetham, Bengaluru, India
Prof. Shekar Babu PhD, Founding Head, AMRITA Vishwa Vidyapeetham, Bengaluru, India

ID 811  The Impact of Grouping Efficiency Measures in Cellular Manufacturing Systems
Nadia Dahmani, Zayed University, Abu Dhabi, United Arab Emirates
Adnan Mukdathash, Department of Industrial Engineering, Faculty of Engineering, Hashemite University, Zarqa Jordan

ID 833  Machine Learning using Apache Spark for solving the Big Data Classification Problem
Azhar Mourad1, Abbara Abdallah2, Eftaki Badi3, 1Laboratory of Engineering Sciences and Modeling, Faculty of Sciences- Ibn Tofail University Kenitra, Morocco
2Laboratoire de Modélisation Mathématiques et de Calculs Economiques, FSJES, University Hassan 1er, Settat, Morocco
3Laboratory of Research in Computer Science, Data Sciences and Knowledge Engineering, Department of Data, Content and knowledge engineering School of Information Sciences Rabat, Morocco

ID 837  Batching and Resource Allocation under Stochastic Unreliable Flexible Flow Shop
Hudafiah Abdullah Syawal and Umar M. Al-Turki, System Engineering Department, King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia

11:30 – 1:00, THURSDAY  Energy  Room 7

Session Chair: All Elkamel, University of Waterloo and Khalifa University of Science and Technology, Abu Dhabi, United Arab Emirates
ID 725  Life Cycle Assessment on a 500 MW Oil-Fired Power Plant in Sudan
Omer Ahmed Eltayeb, Md. Mizanur Rahman, Aminuddin Saat and Hasan Mohd Faizal, School of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia

ID 755  Smart Integration of Intricate Energy Sources –or Grid-Connected Hybrid Renewable Energy Systems
SAED AMER, Khalifa University, United Arab Emirates
Landon Onyebueke, Tennessee State University, United States
Jaby Mohammed, Illinois State University, United States
Nelson King, Khalifa University, United Arab Emirates

ID 756  Design of an Oilfield Produced Waste Water Treatment Plant – UAE Perspective
Chandra Mouli R. Madhurananthakam, Archana Thomas, and Zainab Akhter, Chemical Engineering Department, Abu Dhabi University, Abu Dhabi, United Arab Emirates
Ali Elkamel, Chemical Engineering Department, University of Waterloo, Waterloo, Ontario, Canada and Chemical Engineering Department, Khalifa University of Science and Technology, Abu Dhabi, United Arab Emirates

ID 814  AN ANP approach to select the biofuel pretreatment process
Abdul Sattar Safaei, Department of Industrial Engineering, Babol Noshirvani University of Technology, Shariati St., Babol, Iran

ID 384  Wave Energy Converters: Barriers and Drivers
Misaa Alkhayyat, Graduate Student, Master in Energy Engineering, College of Engineering, Effat University, Jeddah, Saudi Arabia
Tayeb Braham, Energy Research Lab, College of Engineering, Effat University, Jeddah, Saudi Arabia
Sabique Langodan, Physical Sciences and Engineering, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia
Ibrahim Hotel, Physical Sciences and Engineering, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia

11:30 – 1:00, THURSDAY  Operations Research/ Operations Management  Room 8

Session Chair: Jessica Marcela Villarreal Padilla, Universidad de Monterrey, San Pedro Garza Garcia, Mexico
ID 697  Event of Crime against Property: Robbery & Theft Prediction using Probabilistic Graphical Model
Rex Aurelius Robielos and Nico Duran, Mapua University, Manila, Philippines

ID 816  Production Capacity Improvement with Theory of Constraint at Heavy Equipment Component Industry
Iveline Anne Marie, Debbie Kemala Sari, Pudji Astuti and Cecep Setiawan, Industrial Engineering Department, Faculty of Industrial Technology, Trisakti University Kampus A Usakti, Jl. Kyai Tapa No.1, Grogol, Jakarta Barat 11440, Indonesia

ID 125  Modeling a Bi-Objective Multi-Skill Resource-Constrained Project Scheduling Problem to Minimize Project Makespan and Skill Divergence Span
Dheeraj Joshi, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India
M.L. Mittal, Manish Kumar, Professor, Department of Mechanical Engineering, Malaviya National Institute of Technology, Jaipur, India

ID 395  A Unified Uncertainty Mathematical Model for Input Oriented Data Envelopment Analysis
Assem A. Tharwat, Professor, College of Business Administration, American University in the Emirates, UAE
Basma E. El-Demerdash, Assistant Lecturer, Department of Operations Research and Management, Faculty of Graduate Studies for Statistical Research, Cairo University, Egypt.

ID 833  The Impact of Managerial Ownership, Institutional Ownership and Independent Commissioners on Voluntary Disclosure in Companies Classified as LQU45 Stock Index on the Indonesia Stock Exchange in 2015-2018
Dyah Arum Wigati1, Avi Sunani1, Rony Wardhana2, Bayu Nurcahyo Andini1, Ibtun Fajarudin2, and Abdul Talib Bin Bon2
1Faculty Economy and Business, Narotama University, Surabaya, Indonesia
2Faculty Economy and Business, Narotama University and Student of Doctoral Accounting in Universitas Airlangga

ID 835  Critical Success Factors for the Evaluation of Operational Excellence
Jessica Marcela Villarreal Padilla and Jacobo Tijerina Aguilera, Extension, Consulting and Research Department, Universidad de Monterrey, San Pedro Garza Garcia, Mexico
Fernando Gonzalez Aleu, School of Engineering and Technology, Universidad de Monterrey, San Pedro Garza Garcia, Mexico
Jose Arteuro Garza-Reyes, Professor of Operations Management and Head of the Centre for Supply Chain Improvement, University of Derby, Derby, U.K.

1:00 – 2:30 pm – Thursday Networking Lunch Buffet and IEOM Student Chapter Presentations
MAPUA University, Philippines
University of West Bohemia, Pilsen, Czech Republic
P.D.A. College of Engineering, India
Sebelas Maret University (UNS), Indonesia
Shipbuilding Institute of Polytechnic Surabaya, Indonesia
Session – Thursday (March 12) – 2:30 – 4:00 pm

Panel V – Lean Six Sigma
Ballroom

Panel Chair: Steven Sibrel
Senior Supplier Quality Manager, Harman / Becker, Novi, Michigan, USA
Professional Development Chair and Past Chair – ASQ Greater Detroit

Panel Speakers

<table>
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<tr>
<th>Name</th>
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<tr>
<td>Dr. Souraj Salah</td>
<td>Process Improvement Manager, Abu Dhabi Port, UAE</td>
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<tr>
<td>Sunil Thawani</td>
<td>Quality Indeed Consulting Ltd., Abu Dhabi, UAE</td>
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<tr>
<td>Dr. Saso Krstovski, MBB</td>
<td>Lean Manufacturing Coach / Six Sigma Master Black Belt Van Dyke Transmission Plant, Ford Motor Company, MI, USA</td>
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<tr>
<td>Dr. Fawzi Bawab, CSSM/BB, CQM/OE</td>
<td>Partner and Senior Consultant, Meirc Training and Consulting, Dubai, UAE</td>
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<tr>
<td>Neetu Choudhary</td>
<td>Executive Committee Member, Continuous Improvement Subgroup, Dubai Quality Group, Dubai, UAE</td>
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2:30 – 4:00, THURSDAY  Global Engineering Education IX  Room 1

Session Chair: Dr. S. Balamurugan, Director-Research and Development, Intelligent Research Consultancy Services (iRCS), Coimbatore, Tamilnadu, India

2:30 – 3:00 (Thursday)
Dr. Luiz Pinheiro da Guia
Professor of Civil Engineering, Department of Mechatronics of CEFET-MG, Varginha, Brazil

ID 582 The use of mobile robotics to pre-mapping areas for Orienteering Competition – “Projeto Azimute Norte Varginha” – Uso de drones
Luiz Da Guia, Centro Federal de Educação Tecnológica de Minas Gerais, Varginha, Minas Gerais, Brazil

3:00 – 3:30 (Thursday)
Dr. Shekar Babu
Professor & Founding Head, Department of Management, Amrita Vishwa Vidyapeetham University, Bengaluru, India

3:30 – 4:00 (Thursday)
Dr. S. Balamurugan
Director-Research and Development, Intelligent Research Consultancy Services (iRCS), Coimbatore, Tamilnadu, India

2:30 – 4:00, THURSDAY  Industry Solutions IX  Room 2

Session Chair: Miss. Iman Youssef, DBA candidate, California Intercontinental University, USA

2:30 – 3:00 (Thursday)
Dr. Wazir Zada Khan
Head of Research, Department at College of Computer and Information Technology
Co-Founder of Farasan Networking Research Laboratory, Jazan University, Saudi Arabia

Combating the Impact of Advanced Persistent Threats in Industrial Internet of Things (IIoT)

3:00 – 3:30 (Thursday)
Marcos Dieste
Postdoctoral Research Fellow, Department of Management and Engineering
University of Padova, Vicenza, Italy

Title of the Talk - Industry 4.0 and Lean Thinking: a case study on their linkages

3:30 - 4:00 pm (Thursday)
Miss. Iman Youssef
CEO, Amour Fragrances and Amour Boutique, LaSalle, Ontario, Canada

ID 834 Conducting a Feasibility Analysis and Developing an Effective Entrepreneurial Business Plan
Iman Youssef, DBA candidate, California Intercontinental University, USA
Daw Alwerfalli, Professor, College of Engineering, Lawrence Technological University, Southfield, Michigan 48705, USA

2:30 – 4:00, THURSDAY  Supply Chain Management (SCM)  Room 3

Session Chair: Hasan Balfaqih, University of Business and Technology, Jeddah, Makkah, Saudi Arabia

ID 532 A mathematical model for strategic and tactical planning of the oil & gas upstream supply chain after a merger
Abdalla Alnaqbi Adnoc, and Fikre Dweiri, Abu Dhabi, United Arab Emirates
Amin Chaabane, Systems Engineering Department, École de technologie supérieure, Montreal, Canada

ID 539 A Systematic Review on Halal Supply Chain Research
Azm Muhammad Islam, Andy Susilo Lukito-Budi, Nurul Indarti, Universitas Gadjah Mada, Sieman, Indonesia

ID 654 Analyzing Inhibitors of Circular Supply Chain Management: A Fuzzy-AHP Approach
Chitranshu Khandelwal, Indian Institute of Technology, Roorkee, India

ID 539 Determination of Optimum Layout and Marketing Strategies based on Association Rules - Market Basket Analysis: Case Study on Mirota Kampus Retailer
Palmy Rawinda Meliala, Arbian Abdillah, Nael Naufal Fiantama, and Zakka Ugih Rizqi, Dept. of Industrial Engineering, Universitas Islam Indonesia, Yogyakarta, Indonesia

ID 350 Closed-loop Supply Chain for Water Desalination: A Performance Measurement Model
Hasan Balfaqih, University of Business and Technology, Jeddah, Makkah, Saudi Arabia

ID 608 Project prioritization for portfolio selection using MCDA
Ghizlane Elbok and Abdelazziz Berrado, Research team AMIPS, Ecole Mohammedia d’Ingénieurs, Mohammed V University in Rabat, Morocco

ID 815 System Dynamics Simulation based on SCOR Performance at Table Tennis Table Manufacturer in Indonesia
Yuniaristanto, Iqbal Wahyu Saputra, Muhammad Hisjam, and Roni Zakaria, Department of Industrial Engineering, Universitas Sebelas Maret, Surakarta, Indonesia
2:30 – 4:00, THURSDAY  
Operations Research  
Room 4  

Session Chair: Sara Aryaee, Faculty of Management, University of Tehran, Tehran, Iran

ID 113  Impact of Intellectual Capital on the Performance of Higher Education Institutions
Chandan Jha, Amit Sachan, Arnab Adhikari, and Sayantan Kundu, Indian Institute of Management Ranchi, India

ID 156  Locating with WMC and WMC models with partial coverage using GIS capabilities
Sara Aryaee, Faculty of Management, University of Tehran, Tehran, Iran

ID 432  Matrix Geometric Approach on Priority Queues with Impatient Customers
Hsing Luh, National Chengchi University, Taipei, Taiwan

ID 653  Operational Efficiency of Perishable Product Supply Chain Using Petri Net Technique
Manisha Bhardwaj, and Rajat Agrawal, Indian Institute of Technology Roorkee, Roorkee, Uttararakhand, India

ID 279  Optimization of Digital Advertising Portfolio using Analytical Hierarchy Process (AHP)- Based Goal Programming (GP) Model
Rex Aurelius C. Robelos, and Neil T. Awit, Mapua University, Manila, Philippines

ID 312  Solution Approaches for the Berth Allocation Problem in Container Terminal Logistics – A Review
Ankita Panchaniya, and M. Mathirajan, Indian Institute of Science Bangalore, Bangalore, Karnataka, India

ID 819  The Influence of Organizational Culture, Compensation and Leadership Styles on Employee Performance Case Study in Sumber Barokah Case Studies
Anodis Tegar Pranatha, Nurul Qomari, Nurul Iman, Tri Lestari, and Cholifah, Faculty Economy, Universitas Bhayangkara, Surabaya, Indonesia
Rony Wardhana, Faculty Economy and Business, Narotama University, Surabaya, Indonesia
Abdul Talib Bin Bon, Fakulti Pengurusan Teknologi dan Perniagaan, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

2:30 – 4:00, THURSDAY  
Environmental Engineering and Management  
Room 5

Session Chair: William Law, Kennesaw Mountain High School, Powder Springs, United States

ID 567  An Overview of Monitoring the Emissions of CO2 from Space
Amal Abdelsattar, Prince Sultan University, Riyadh, Saudi Arabia

ID 231  Analysis of Coal Dust Concentration in Open Cast Mine at Thar Sindh, Pakistan for Block II: A Case Study
Kanwal Zehra, and Aurangzeb. J, MUET, Karachi, Sindh, Pakistan

ID 410  For a Sustainable Use of Biocides in Saudi Arabia: Opportunities, Risks, and Perspectives
Talal Moulais, Graduate Student, Renewable Energy Engineering Programme, Effat University, Jeddah, Saudi Arabia
Budoor Salem Alwated, Graduate Student, Renewable Energy Engineering Programme, Effat University, Jeddah, Saudi Arabia
Tayeb Brahimi, Energy and Technology Research Center, Effat University, Jeddah, Saudi Arabia
Imtiaz Ahmad, Natural Sciences, Mathematics and Technology Unit, College of Engineering, Effat University, Jeddah, Saudi Arabia

ID 150  Impact of Environmental Law and Physical Planning Law to the Construction Projects in Sri Lanka
Akila Pramodh Rathnasinge, Isuru Pramodh Rathnasinge, and Mahesh Devinda Abeynayake, Department of Building Economics, University of Moratuwa, Moratuwa, Western Province, Sri Lanka

ID 434  Optimization of a Dissolved Air Flotation System using Factorial Experimental Design in a Water Treatment Plant at Laguna De Bay
Aaron S. Cornista, and Rianina D. Borres, Mapua University, Manila, Philippines

ID 535  Performance of activated carbon water filtering materials
Jamaliah Idriss, Yeo K S, and Zamani Ahmad, Universiti Teknologi Malaysia, Johor Bahru, Malaysia

ID 682  Preliminary Tests for Disappearance of Ponceau S from Artificial Seawater by UV-H2O2 Process
Yasmine Laftani, Baylassane Chatib, Abdulghani Boussaoud, Mohammed El Makhfouk, Mohsine Hachkar, and Mohammed Khayar, Industrial Systems and Computer Science, High School of technology, Cadi Ayyad University, Morocco

ID 803  Analyzing the Physical Properties of Plastic-infused Concrete Aggregate
William Law, Kennesaw Mountain High School, Powder Springs, United States

2:30 – 4:00, THURSDAY  
Business Management  
Room 6

Session Chair: Prof. Shekar Babu PhD, Founding Head, AMRITA Vishwa Vidyapeetham, Bengaluru, India

ID 597  A Review of Green Business Practice: Its Significances and Challenges to Multinational Companies
Siti Sarah Omar, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

ID 082  Accounting Students’ Interest in Chartered Accountant Accounting Profession (Empirical Study of Accounting Students at State and Private Universities)
Cory Paulina, Agus Dwi Sasono, Rony Wardhana, Nurul Aini, Rudi Harianto, and Ariyani, Faculty Economy and Business, Narotama University, Surabaya, Indonesia
Abdul Talib Bin Bon, Fakulti Pengurusan Teknologi dan Perniagaan, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

ID 639  Are corporates renouncing Shareholder Capitalism and moving towards Stakeholder Capitalism?
Anur K, Amrita Vishwa Vidyapeetham, Amritapurth, Kollam, Kerala, India
Prof. Shekar Babu PhD, Founding Head, AMRITA Vishwa Vidyapeetham, Bengaluru, India

ID 205  Business Process Reengineering For Reducing Time of Procurement and Inventory Process in Telecommunication Tower Company
Rahmat Nurcahyo, Indramawan, Yadrifil, Muhammad Habiburrahman and Nurhadi Wibowo Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 358  Competitiveness in Global Transformation: A Systematic Review
Nurhadi Wibowo, and Rahmat Nurcahyo, Universitas Indonesia, Depok, West Java, Indonesia

ID 204  CRM Dimensional Analysis and ANP Method for Oil and Gas Industry Sub-contractor in Indonesia in the Context of Reducing Customer Complaints
Rahmat Nurcahyo, Dody Prasetyo N., Yadrifil, Muhammad Habiburrahman and Nurhadi Wibowo Industrial Engineering Department, Faculty of Engineering Universitas Indonesia, Depok, Indonesia

ID 638  CSR Communication Strategy of Indian Organizations
Anur K, Amrita Vishwa Vidyapeetham, Amritapurth, Kollam, Kerala, India
Prof. Shekar Babu PhD, Founding Head, AMRITA Vishwa Vidyapeetham, Bengaluru, India
2:30 – 4:00, THURSDAY  Human Factors and Ergonomics  Room 7
Session Chair: Nyunho Jung, The University of Fukuchiyama, Fukuchiyama, Kyoto, Japan

ID 239  A Biomechanical Risk Assessment of Lifting Tasks in the Logistics Industry in the Philippines
Ma. Janice J. Gumasing, Romeo Carlo J. Casella, Mapua University, Manila, Philippines

ID 175  Aggressive Driving Behavior: A Case Study of Mehran UET, Jamshoro, Pakistan

ID 238  An Ergonomic Approach on Facilities and Workstation Design of Public School Canteen in the Philippines
Janice Gumasing, Ma. Janice J. Gumasing, Eidref Joseph E. Espejo, Mapua University, Manila, Philippines

ID 100  Analysis Model of Communication Network under Complexity
Nyunho Jung, The University of Fukuchiyama, Fukuchiyama, Kyot, Japan
Takaaki Kawanaka, Institute for Innovation in International Engineering Education, Graduate School of Engineering, The University of Tokyo, Tokyo, Japan
Hiroshi Yamashita, Department of Commerce, Meiji University, Tokyo, Japan

ID 411  Assessment of Customers’ Satisfaction in Hospital’s Outpatient Department Using Kansei Engineering
Jeremy Laurence Barhez, Hans Christian N. Buluran, Rhea M. Molina, Errol G. Ricoafort, Bulacan State University, Guiguinto, Bulacan, Philippines

ID 176  Assessment study on research and applications of Ergonomics in industries in Bangladesh
Abu Raihan Md. Harunur Rashid, Islamic University of Technology (IUT), Gazipur, Dhaka, Bangladesh

ID 433  Ergonomic Intervention for Radiology Department of Public Hospitals in Metro Manila
Ranil D. Borres, John Paulo S. Lagonoy, Mapua University, Manila, Philippines

2:30 – 4:00, THURSDAY  Operations Research  Room 8
Session Chair: Marjan Gharavipour, Amirkabir University of Technology, Tehran, Iran

ID 655  A Class of Spectral Nonlinear Conjugate Gradient Method with Descent Condition for Unconstrained Optimization
Mustafa Mamat, and Ibrahim Mohammed Sulaiman, Universiti Sultan Zainal Abidin, Kuala Terengganu, Terengganu, Malaysia

ID 234  A Sustainable Travelling Purchaser Problem Model
Khalid Khamis, Sustainable Engineering Asset Management (SEAM) Research Group, University of Sharjah and Vision Ps Gmbh, Sharjah, U.A.E
Sadique Hamdan, Laboratoire Génie Industriel, Centrale Supélec, Université Paris-Saclay, 91192 Gif-sur-Yvette, France
Ali Cheaitou and Imad Alsyouf, Sustainable Engineering Asset Management (SEAM) Research Group and Industrial Engineering and Engineering Management Department, University of Sharjah, Sharjah, UAE

ID 096  Optimal promotional policy in innovation diffusion model considering brand image in segmented specific market
Pradeep Kumar, Kuldeep Chaudhary, and Kanika Sardana, Department of Applied Mathematics, Amity University, Uttar Pradesh, India

ID 344  Optimization of the Technician Routing and Scheduling Problem for a Telecommunication Industry
Eman Almehdawi, University of Regina, Regina, Saskatchewan, Canada
Ehsan Pourjavad, Department of Mathematical and Industrial Engineering, Polytechnique Montreal, Montreal

ID 151  Optimizing a hub-arc location problem with set-up cost and isolated hub nodes
Marjan Gharavipour, and Mohsen S. Sajadieh, Amirkabir University of Technology, Tehran, Iran

ID 857  Internal Control Analysis of the Effectiveness of Inventory Management in PG. KA
Rony Wardhana, Faculty Economy and Business, Narotama University and Student of Doctoral Accounting in Universitas Airlangga, Indonesia
Ibtisam, Avi Sunani, and Soebandi, Faculty Economy and Business, Narotama University Surabaya, Indonesia
Abdul Talib Bin Bon, Fakulti Pengurusan Teknologi dan Perniagaan,Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

4:00 – 4:30 pm  Networking Break

Session – Thursday (March 12) – 4:30 – 6:00 pm

4:30 – 6:00, THURSDAY  Panel VI – Healthcare Systems Engineering  Ballroom
Panel Chair:
Dr. Mohammad T. Khasawneh, Ph.D.
Professor & Chair, Systems Science and Industrial Engineering
Associate Director, Watson Institute for Systems Excellence
Director, Healthcare Systems Engineering Center
Graduate Program Director, Executive Master of Science in Health Systems
Thomas J. Watson School of Engineering and Applied Science
State University of New York at Binghamton, Binghamton, New York 13902, U.S.A.

PANEL SPEAKERS

Dr. Abdelaziz BERRADO
Full Associate Professor and Chair, Industrial Engineering Department
Ecole Mohammadia d’Ingénieurs, Mohammed V University, Rabat, Morocco

Dr. Mohamed Adel Serhani
Full Professor and the Assistant Dean for Research and Graduate Studies
College of Information Technology
United Arab Emirates University, Al Ain, UAE

Mohammad Mehedy Masud, Ph.D.
Associate Professor, College of IT
United Arab Emirates University
Al Ain, UAE

Ma. Janice J. Gumasing
Professor, School of Industrial Engineering and Engineering Management
Mapua University
Manila, Philippines

Dr. Md. Haider Ali Biswas
Professor, Mathematics Discipline
Science Engineering and Technology School
Khulna University
Khulna-9208, Bangladesh

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4:30 – 6:00, THURSDAY  Global Engineering Education X  Room 1
Session Chair: Dr. Albertus Retnanto, Professor of the Practice of Petroleum Engineering, Texas A&M University at Qatar

Dr. Banu Y. Ekren
Full Professor, Department of Industrial Engineering
Yasar University, Izmir, Turkey

ID 565  Engineering Education towards Industry 4.0
Banu Y. Ekren, Department of Industrial Engineering, Yasar University, Izmir, Turkey
Vikas Kumar, Bristol Business School, University of the West of England, Bristol, Somerset, United Kingdom

Dr. Albertus Retnanto
Professor of the Practice of Petroleum Engineering
Texas A&M University at Qatar

ID 024  Building Communication Strengths and Skills for Non-native English Speaking Engineering Students
Albertus Retnanto, Texas A&M University at Qatar, Doha, Qatar

Neetu Choudhary
Executive Committee Member- Continuous Improvement Subgroup, Dubai Quality Group
Team Leader - UAE Innovation Awards
Compliance Analyst, DP World
Dubai, United Arab Emirates

Lean approach for effective presentation

4:30 – 6:30, THURSDAY  Industry Solutions X  Room 2
Session Chair: Dr. Jiří Tupa, University of West Bohemia, Pilsen, Czech Republic

Fazal Akbar
Assistant Researcher, Faculty of Technology Management and Entrepreneurship
Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

ID 714  The Industrial Revolution 4.0 and Entrepreneurial Orientation with Innovation as mediation Effect on the Performance of Malaysian Furniture Industry. A Proposed Framework
Fazal Akbar and Abdul Talib Bin, Faculty of Technology Management and Business, University Tun Hussein Onn Malaysia, 86400, Johor, Malaysia
Fazli Wadood, Faculty of Management Science, University of Buner Sowari, Khyber Pakhtunkhwa, Pakistan

Dr. Jiří Tupa
Vice Dean for Faculty Development, Faculty of Electrical Engineering
University of West Bohemia, Pilsen, Czech Republic

ID 722  The role of process management in the context of Industry 4.0
Jin Tupa, Tomas Renicha, and Frantisek Steiner, Department of Technologies and Measurement, University of West Bohemia in Pilsen, Univerzitni 8, Czech Republic

Driss SERROU
Research laboratory
Higher Institute of Transport and Logistics
Rue Capitaine Vuillanier - Route de Rabat Quartier Ain Sebaa, Casablanca-MOROCCO

ID 130  Improvement of the industry 4.0 by digital maintenance
DRISS SERROU, ISTL Casablanca, Casablanca, Morocco
Hakim NISSOUL, Mechanical and Industrial Engineering Department, Sultan Qaboos University, Muscat, Oman

4:30 – 6:00, THURSDAY  Inventory Control  Room 3
Session Chair: Thembinoski Luthuli, University of Johannesburg, Johannesburg, Gauteng, South Africa

ID 366  E-Kanban Hybrid Model for Malaysian Automotive Component Suppliers with IoT Solution
M. R. Idris and P. Shiva Prakash, Department of Engineering Business Management, Universiti Kuala Lumpur Malaysia Italy Design Institute, Cheras, Kuala Lumpur 56100, Malaysia
A. Abdullah, Faculty of Accountancy, Universiti Teknologi MARA, Shah Alam, Malaysia
A. Talib Bon, Faculty Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

ID 254  Framework for spare parts inventory management in warehouse
Arvind Bhardwaj, Dr B R Ambedkar National Institute of Technology, Jalandhar, India
Rahul S Mor, National Institute of Food Technology Entrepreneurship and Management, Sonipat, India
Vishal Kharka, Indian Institute of Technology, Indore, India

ID 077  Spare Parts Inventory Replenishment by Utilization of End-of-Use Returns: Case of Smartphones
Vaibhav Agrawal, and Aklivesh Kumar, Indian Institute of Technology Kharagpur, Kharagpur, West Bengal, India

ID 629  Stocking decisions in a multiple location periodic review inventory system with order crossover
Yahel Giat, Jerusalem College of Technology, Jerusalem, Israel

ID 197  The impact of Inventory Control on Productivity of Steel Firms
Thembinoski Luthuli, and Anup Pradhan, University of Johannesburg, Johannesburg, Gauteng, South Africa

4:30 – 6:30, THURSDAY  Decision Sciences and e-Business  Room 4
Session Chair: Mohammed Obeidat, Jordan University of Science and Technology, Irbid, Jordan

ID 250  Decision making through fuzzy soft aggregation operator on fuzzy soft sets
Ajay Verma, and Nisha Singhal, Maulana Azad National Institute of Technology Bhopal, India

ID 431  A Service Quality Study on the In-Demand Motorcycle Hailing Applications
Mary Christy O. Mendoza, Adrian Kendrick S. Casas, and Rhona H. Reyes, School of Industrial Engineering and Engineering Management, Mapua University, Manila
ID 363  Assessment and Improvement of Facebook Business Platforms for SMEs in the Philippines
Jenalyn Shigella G. Yandug, Diana Marie B. De Francia, and Joymicha O. Paulo, Mapua University, Manila, Philippines

ID 501  Design and Interface Development of Business to Consumer (B2C) E-Commerce Websites in the Philippines
Rianina D. Borres, Mary Christy O. Mendoza, Shiela Marie A. Samaniego, Eunise Ina, and M. Panganiban, Mapua University, Manila, Philippines

ID 364  Exploring adoption of e-commerce among Indian women-owned SMEs: a study in Bangalore
Nilanjani Chattopadhyay, Presidency University, Bangalore, Karnataka, India

ID 856  The Study of Business Model for Soy yogurt Product on Small-Scale Rural Agro-Industry Development Using BCG and SWOT Analysis
Atis Suyantohtadi, Agroindustrial Department, Agricultural Technology Faculty, Universitas Gadjah Mada, Bulaksumur, Yogyakarta, Indonesia

ID 033  Towards Developing Quality Standards: A review for managing South Africa’s Carbon Emissions
Mohammed Obeidat, and Haneen Traini, Jordan University of Science and Technology, Irbid, Jordan

4:30 – 6:30, THURSDAY  Information Systems and Information Technology  Room 5
Session Chair: Ahmed Shuhaiber, Zayed University, Abu Dhabi city, United Arab Emirates

ID 575  A model for on-premises system and cloud ERP integration
Ms. Amizthini Nakkeeran, Ms. Mahikala Niranga, Dr. Ruwan Wickramarachchi, Department of Industrial Management, University of Kelaniya, Sri Lanka

ID 160  An Advanced Transportation System Based on Internet of Things
Sotiris P. Gayalias, Grigoris D. Konstantakopoulos, Evripidis P. Kechagias, Georgios A. Papadopoulos, National Technical University of Athens, Athens, Greece

ID 420  Hybrid Methodology for application development of the mobile learning type

ID 106  Investigating Effect of Technological Variables and Organizational Learning on Organizational Performance Through the Mediation of Organizational Innovation (Case Study: Iranian Banking industry)
Mahdi Joneidi Jafari, BM, Tehran, Iran

ID 109  Monitoring a cold rolling process using Xbar&EWMA charts
Mohammad Shamsuzzaman, Salah Haridy, Imad Alysouf, Hamdi Bashird, University of Sharjah, Sharjah, United Arab Emirates

ID 154  Optimal EWMA Chart for Monitoring Failure Rate
Salah Hardy, Mohammad Shamsuzzamanb, Hamdi Bashirc, and Imad Alysouf, University of Sharjah, Sharjah, United Arab Emirates
Ahmed Magede, Department of Systems Engineering and Engineering Management, City University of Hong Kong, Kowloon, Hong Kong

ID 110  Optimization design of economic EWMA control chart based on random process shifts
Mohammad Shamsuzzaman, Salah Haridy, Imad Alysouf, Hamdi Bashird, University of Sharjah, Sharjah, United Arab Emirates

ID 206  Statistical Quality Control in MSMEs of Recycled Plastic Wood
Andrés R. Cruz Herrera, Lupe P. Taimal Cuasapud, Jeanette del P. Ureña Aguirre, Santiago M. Vacas Palacios, Leandro L. Lorente Leyva, Universidad Técnica del Norte, Ibarra, Imbabura, Ecuador

ID 033  Towards Developing Quality Standards: A review for managing South Africa’s Carbon Emissions
Nita Sukdeo, P Naidoo, University of Johannesburg, Johannesburg, Gauteng, South Africa

ID 158  A Salient Feature for Enhancing the Detection Speed of EWMA Scheme
Salah Hardy, Mohammad Shamsuzzamanb, Hamdi Bashirc, and Imad Alysouf, University of Sharjah, Sharjah, United Arab Emirates
Ahmed Magede, Department of Systems Engineering and Engineering Management, City University of Hong Kong, Kowloon, Hong Kong

ID 691  Application of Taguchi Design in Quality Improvement for Construction Industry
Ziout, A., Zayed University, Abu Dhabi city, United Arab Emirates
### Session Chair: Osama Al Meanazel, The Hashemite University Al Zarqa, Jordan

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<td>M. Affan Badar, Indiana State University, Terre Haute, IN, United States, Mohammad Iqbal, Md. Abdullah Abu Sayeed, Salma Akhter, and A.R.M. Harunur Rashid, Islamic University of Technology (IUT), Gazipur, Dhaka, Bangladesh</td>
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<td>Prabhavathi Kalshetty, Ballari Institute of Technology, Affiliated to VTU, Bellary, Karnataka, India, Prabhavathi Kalshetty, Ballari Institute of Technology, Affiliated to VTU, Bellary, Karnataka, India</td>
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### Session Chair: M. Affan Badar, Indiana State University, Terre Haute, IN, United States

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### Session Chair: M. Affan Badar, Indiana State University, Terre Haute, IN, United States

**7:00 pm – 10:00 pm (Thursday, March 12)**

**CONFERENCE AWARD DINNER**

**AWARD KEYNOTE**

**Professor Charles Mbohwa**

Pro-Vice Chancellor Strategic Partnerships and Industrialisation

University of Zimbabwe

Mt Pleasant, Harare, Zimbabwe
Industry 4.0 - Distinguished Speakers

Tuesday, March 10, 2020

Session I: Industry 4.0 – Robotics and Automation (Room 2) - 8:00 – 9:30 (Tuesday, March 10, 2020)
Session Chair: Heveine Baban, Heriot Watt University, Dubai, UAE

8:00 – 8:30 (Tuesday)

Hashim Nomani
Lead Engineer - Special Airport Systems at Dubai Aviation Engineering Projects
Manager Projects - Special Airport Systems
IO Systems Ltd
Dubai, United Arab Emirates

8:30 – 9:00 (Tuesday)

Aya Mansour
Mechanical Engineering Department
College of Engineering United Arab Emirates University

ID 692  Evaluating the 3D Printing Capabilities
Aya Mansour, Hailemah Alabdouli, Hend Alqaydi, Huda Al Khawaja, and Waleed Ahmed, Mechanical Engineering Department, College of Engineering United Arab Emirates University, UAE
Hamad Al Jassmi Civil and Environmental Engineering Department, College Of Engineering, UAE University, United Arab Emirates

9:00 – 9:30 (Tuesday)

Heveine Baban
Project Controls Commercial Manager, School of Energy, Geoscience, Infrastructure and Society
Heriot Watt University, Dubai, UAE

Heveine Baban has a First-Class BSc in Quantity Surveying from the University of Salford, UK and is a Project Controls Commercial Manager with 6 years' experience working for Jacobs Ltd UK. She has been the point of reference in managing circa 30 Project Managers on the £4.6billion AMP6 United Utilities Framework in the UK, which runs roughly 120-200 projects simultaneously/annually. Within her role, Heveine has experience in the commercial and contract management aspects of NEC3, setting up projects, carrying out monthly applications for payment and has worked to assist numerous Project Managers with their projects, including assistance with forecasting issues and payments. Heveine is currently a PhD student at the Heriot Watt University, Dubai Campus.

ID 247  Exploring the Potentials of Project Controls within the Construction Industry: Drivers and Challenges
Heveine baban, Krisanthi Seneviratne, and Yasemin Nielsen, Heriot-Watt University Dubai, Juraina, Sharjah, United Arab Emirates

Session II: Industry Solutions – Lean Six Sigma (Room 2) - 2:30 – 4:00 pm (Tuesday, March 10)
Session Chair: Dr. Naill Momani, Dubai Police Academy, United Arab Emirates

2:30 – 3:00 (Tuesday)

Dr. Souraj Salah
Process Improvement Manager, Abu Dhabi Ports
Adjunct Professor at the Hamdan Bin Muhammad Smart University

Dr. Souraj Salah is currently working as a Process Improvement Manager at Abu Dhabi Ports and also as an Adjunct Professor at the Hamdan Bin Muhammad Smart University. He has about 20 years of experience in process improvement, quality methodologies, and excellence systems, working in the contracting, services, manufacturing and logistics sectors. He earned his PhD from the University of New Brunswick in Canada, Masters from Concordia University and Bachelors from Jordan University of Science and Technology. He has published one book on company-wide management system and more than 20 papers in various international journals. He is also certified as a Six Sigma Master Black Belt and as a Lean Leader trained by the Juran Institute, Lead Advisors, Alignment Strategies in Canada and Johnson Controls Intl. in the USA, and as a Quality, Health, Safety and Environment Management Systems (ISO 9001, ISO 14001, OHSAS 18001) Lead Auditor by the Bureau Veritas. He won the United Arab Emirates Quality Professional Award by the American Society for Quality (ASQ) in 2015.

3:00 – 3:30 (Tuesday)

Dr. Nadir Ali Kolachi
University Professor (Mgt/HRD), College of Business Administration
University of Fujairah, United Arab Emirates

LEAN MANAGEMENT: Tactics to save time & energy (Mini cases on Corporate & Academic world)

Dr. Nadir is a Corporate Trainer, Case Study writer, Keynote Speaker and University Professor (Management / OD / HRD). He has vast experience in different Universities at National & International levels. He has MBA (Management), MPhil (Management), PhD (Management) and Post Doctorate Research(HRD) from North Carolina A&T State University, USA. His career remained in four major areas as Teaching, Training, Case Research & Curriculum Design. Dr. Nadir has utmost passion in Case Teaching & Training methods. He is a certified case method trainer, Case writer and Case participant at The Case Center, Ivey Business School and Harvard Business School. He has conducted 25 trainings in various countries. He has published 42 papers and Case studies. He has also presented 45 conference papers around the world. He has represented Universities in various International research
Session III: Industry 4.0 – Internet of Things (IoT) (Room 2) - 4:30 – 6:00 pm (Tuesday)
Session Chair: Dr Sarbjit Singh, National Institute of Technology, Jalandhar, India

IoT as an Enabler for Enhancing Guest Experience in Hospitality

Dr. Sanjay Nadkarni is the Director of Innovation & Research at the Emirates Academy of Hospitality Management, Dubai. His domain expertise is in the convergence space of Digital, Analytics & Sustainability in the service sector. Sanjay’s portfolio comprises of academic and applied research, advisory and consultancy for corporate, government and multilateral agencies, in addition to his pedagogic practice which includes visiting professorships at leading academic institutions in Asia and Europe. His professional achievements include academic awards and citations of merit. Sanjay supports social entrepreneurship and endeavors to make his research and pedagogy actionable and impact-driven to benefit industry and society. He is passionate about leveraging open data and open source platforms for the benefit of small and micro-businesses and enjoys mentoring in digital entrepreneurship.

Satya Saurabh Khosla was a joint venture partner of Suzuki Motorcycle (Pvt) Ltd was Vice Chairman of the company till he sold his stake before the recession in 2008. He predicted the 2008 global economic recession in an article that was published a few days before the USA and global stock indices started falling. This article stated that USA Housing, excessive misuse of derivatives etc. will lead the global economy to a recession. The article’s mathematical calculation showed that the pain would become evident to all after December 2007. The author felt it is of more interest if a way to prevent it is pointed out. The book titled: How to Prevent a Global Economic Recession was published in 2007. He predicted the 2008 global economic recession in an article that was published a few days before the USA and global stock indices started falling. This article stated that USA Housing, excessive misuse of derivatives etc. will lead the global economy to a recession. The article’s mathematical calculation showed that the pain would become evident to all after December 2007. The author felt it is of more interest if a way to prevent it is pointed out. The book titled: “Recession: Using Ancient Wisdom and Management Ideas carries a Foreword by His Holiness the Dalai Lama and is reviewed by Prof Sir Cary Cooper of Manchester Business School and former Director of Institute of Management, Ahmedabad - Prof Pradip Khandwalla. His Holiness the Dalai Lama concludes his review as follows: “...This is a very profound concept put in a very simple and elegant format.”

In 2017 The World Economic Forum presented its report on Future of Government to every national and state government. This report lists 24 sources in its end notes. At no. 5 is the work: How to Prevent Recession - using ancient wisdom and management ideas (Author: Satya Saurabh Khosla). He has just completed a book of Essays in Mathematics, Sciences, Economics and Management and How to Prevent Recession. His Holiness the Dalai Lama concludes the review as follows: “...with a view to strengthen the economy and benefit the widest number of people, Satya Saurabh Khosla has examined how to apply ancient wisdom...”. He has been a Chief Guest and keynote speaker at international conferences. He written the course material for the World’s largest Open University, was on the Course Design Committee of the National Management Program and Member, Advisory Committee, National Conference on Government Policy and Corporate Strategy: Interlink ages – Organized by Indian Institute of Management, Ahmedabad, India. The WASC Senior College and University Commission in USA has asked for a copy of his work.
Dr. Sarbjit Singh
Associate Professor
National Institute of Technology
Jalandhar, India

Green Supply Chain Management

Dr. Sarbjit Singh is having more than 34 years of experience in Teaching, Research, education administration and Industry. He as worked as Associate Professor, Associate Dean/Chair of Industrial and Production Engineering department at National Institute of Technology, India. He has done his PhD in sustainable supply chain management. He has completed his Bachelors and Masters in Industrial Engineering. He has supervised more than 40 Master Thesis and 5 PhD thesis. He has published more than 100 research papers/articles/book chapters/books in the field of Industrial Engineering and operations management.

Session IV: Industry Solutions (Room 2) 8:00 am – 9:30 am (Wednesday, March 11)
Session Chair: Qipeng Phil Zheng, University of Central Florida, Orlando, Florida, USA

8:00 – 8:30 (Wednesday)

Qipeng Phil Zheng, Ph.D.
Associate Professor and Director of Applied Operations Research Lab
Graduate Coordinator, Industrial Engineering & Management Systems
University of Central Florida, Orlando, Florida, USA

Dr. Qipeng Phil Zheng is an Associate Professor and the graduate coordinator in the Department of Industrial Engineering and Management Systems, and the director or Applied Operations Research Lab at University of Central Florida. He is also the Editor-In-Chief of Energy Systems, a Springer Nature journal. He received his Ph.D. in Industrial and Systems Engineering at University of Florida, and a M.S. degree in Automation Science and Engineering at Tsinghua University, Beijing China. He has worked in the fields of stochastic programming, network optimization, integer programming, applied game theory, and applications in a variety of areas, such as energy systems, transportation planning, production planning, sustainability, supply chain management, water-food-energy nexus, Artificial Intelligence and applications (e.g., social media, predictive maintenance), among many others. He has published more than 40 articles in various high-quality journals, including flagship journals in Industrial & Systems Engineering (IISE Transactions), Operations Research and Management Science Education (INFORMS Transactions on Education), Power Systems (IEEE Trans on Power Systems), European Journal of Operational Research, Journal of Optimization Theory and Applications, Annals of Operations Research, etc.

8:30 – 9:00 (Wednesday)

Waleed Emam, MIBA
VSAT Expert
United Arab Emirates

Akash Mavle
Senior Data Science Professional, AI and ML professional and Senior Consultant
Las Vegas, Nevada Area

Session V: Industry 4.0 – PLM, MSV, AR/VR, MES and Digital Twin - 2:30 – 4:00 pm (Wednesday, March 11)
Session Chair: Dr, Wazir Khan, Jazan University, Saudi Arabia

2:30 – 3:00 (Wednesday)

Adil Matin
President & Chief Editor WeTel-TV
Director- Centre for Design & Technology, UAE

Communication Design Technology in Design Thinking for Industry 4.0

A postgraduate in Mass Communication from the prestigious MCRC- Mass Communication Research Centre, Jamia University (India 1st ranking institute in Media), graduation in Economics with a Post-graduation in Computer Electronics and PhD in Mass Communication, Adil has over 17 years of hands-on experience spanning across Media business verticals. He was associated with the 1st IPTV of India (IOL-Netcom Ltd in association with MTNL- Government of India, for IPTV across four metro cities of India) as Vice President – Technology. In a leadership profile, he was the Group Vice President for “India-News” and “News-X” satellite TV Channels in India. And in academic profile, he worked as Assistant Professor in Amity University and Associate Professor in Manipal Rachna University, India. In his current profile, he is working as Chief Editor of 24×7 Education Television Channel “WeTel-TV”, available on Etisalat elite TV in UAE, and Director of WeTel Centre for Design Thinking & Technology, UAE.

3:00 – 3:30 (Wednesday)

Manish Kotwala
Business Partner, Exponential Digital Solution
United Arab Emirates

Intelligent Automation: Convergence of RPA with AI to drive excellence

Manish has over 25 years’ international consulting and management experience. He has been in the Middle East markets for over 2 decades, enabling organisations to transform their operations. His areas of expertise include formulation and implementation of business strategies, Balanced Scorecard, operational efficiency improvement, project management, and enabling the client’s team using cutting edge Digitech Solutions. Manish has worked across various industries including diversified business groups, oil & gas, government, manufacturing, retail, and others. Manish was also the Director of Strategic Planning & Performance Management (SPPM) with the Khalifa Fund for Enterprise Development, an Abu Dhabi Government entity focused on SME development, where he set up and managed the SPPM department for over 8 years. Manish was responsible for managing and implementing the strategic initiatives through the Project Management Office (PMO). He was a part various corporate initiatives, including development of the digital strategy, vendor selection and monitoring the implementation of the digital systems, and other key initiatives. Manish is a postgraduate in Management from NMIMS, Mumbai and engineer from MIT, Manipal.
Industry 4.0; big data analytics; internet of things and smart cities etc. in developing economies context.

management; sustainable supply chain management; sustainable consumption and production; renewable/sustainable energy technologies; circular supply chains; Press, Taylor & Francis Group, LLC and New Age International Publisher (P) Ltd. etc. His specific areas of interest are operation management; green supply chain

Sunil Luthra Government Polytechnic Nilokheri, Haryana, India, Gunjan Yadav, Production Engineering Department, Veermata Jijabai Technological Institute, Mumbai, India, Anil Kumar, Anthony Anosike, Centre for Supply Chain Improvement, The University of Derby, Derby, United Kingdom, Sachin Kumar Mangla, Knowledge Management and Decisions, Plymouth Business School, University of Plymouth, United Kingdom, Dixit Garg, Department of Mechanical Engineering, National Institute of Technology, Kurukshetra, India

Session VI: Industry Solutions (Room 2) - 4:30 am – 6:00 pm (Wednesday)

Session Chair: Sunil Thawani, Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates

4:30 – 5:00 (Wednesday)

Ts. Dr. Mehran Doulat
Associate Professor of Engineering/Operations Management
MBA Program Committee/Coordinator
Director of Spectral Centre for Operational Excellence Research (COER)
Xiamen University
Sepang, Selangor, Malaysia
Director Academy of Research and Training (SART Sdn. Bhd.)

"Dubai We Learn": Benchmarking for the Dubai Government Sectors

5:00 – 5:30 (Wednesday)

Sunil Thawani
Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates
Member, Board of Directors, Dubai Quality Group

Sunil is a leading management professional with over 35 years of experience in TQM, Business Excellence, Corporate Governance, Strategy deployment, Re engineering, Service excellence in diverse industries such as e-Government, Social Housing, Manufacturing, Services, Healthcare, Oil & Gas, Banking, Education, etc. He has a successful track record of transforming/ building organizations which are highly customer focused, continually improving & differentiated in market place for excellence. Some of his leadership roles are:

Addressed conferences locally, regionally & globally – UAE, Sweden, Mauritius, India, Indonesia, Azerbaijan, Bahrain, Nigeria, Slovenia, etc.

International Consultant – Quality & Excellence, United Nations
CEO of Quality Indeed Consulting.

Member of the Board, Dubai Quality Group, 2019-2021.
Member of the Board, American Society for Quality, 2016-2017. 1st from MENA.
Recipient, ASQ Lancaster Medal, 2015, 1st in MENA in 30 years.
Author, Business Excellence Awards – Strategies for Winning”
Fellow, American Society for Quality (ASQ), 1st in GCC. (2009)
Jury member, Dubai Quality Award, Sheikh Khalifa Excellence Award
Invited by United Nations to participate in international conferences on public services, innovation, governance, UN SDGs 2030
Champions United Nations Sustainable Development Goals 2030
Presented and published 50+ technical papers and case studies in journals & conferences.

Sunil has trained thousands of professionals in Excellence, Customer Experience, Management Systems, Service Excellence, Benchmarking, Business Process Management etc. He has helped many organization to implement Quality & Excellence frameworks such as EFQM/ UAE 4th Generation Excellence Model/ United Nations Public Service Award/ Lean to enhance performance and create a culture of excellence, continual improvement and customer service. Sunil has travelled all over the world on motorcycle. He lives in United Arab Emirates.

ID 276  Gift of Quality to United Nations Sustainable Development Goals
Sunil Thawani, Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates
5:30 – 6:00 (Wednesday)

Sunil Luthra
Assistant Professor
State Institute of Engineering and Technology (formerly known as Government Engineering College)
Nilokheri, Haryana, India

Sunil Luthra is working as an assistant professor, State Institute of Engineering and Technology (formerly known as Government Engineering College), Nilokheri, Haryana, India. He is also working as Honorary Research Fellow at Bradford School of Management, University of Bradford, Bradford, United Kingdom. He has been associated with teaching for the last seventeen years. He has contributed over 180 research papers in international refereed & national journals, and conferences at international and national level. He has an excellent research track record (over 290 cumulative impact factor points; received more than 3,400 citations and H-index – 30 on Google Scholar). He has received many Awards and Honours for the research and teaching. He is as a Guest Editor of many reputed journals such Journal of Cleaner Production, Production Planning & Control, Resources Policy, Resources, Conservation and Recycling and Annals of Operations Research etc. He is reviewing papers for more 50 reputed journals. He is on editorial board of many reputed journals. He is technical committee member of various national and international conferences (ICMIE 2017, TEMSICON 2017 and IIIE conference) and delivered expert lectures in various institutes of repute. He has published 05 books with reputed publishers such as CRC Press, Taylor & Francis Group, LLC and New Age International Publisher (P) Ltd. etc. His specific areas of interest are operation management; green supply chain management; sustainable supply chain management; sustainable consumption and production; renewable/sustainable energy technologies; circular supply chains; industry 4.0; big data analytics; internet of things and smart cities etc. in developing economies context.

ID 336  Study of Key Enablers of Industry 4.0 Practices Implementation Using ISM-Fuzzy MICMAC Approach
Sunil Luthra Government Polytechnic Thawani, Quality Indeed Consulting Ltd., Abu Dhabi, United Arab Emirates
Session VII: Industry 4.0 - 8:00 – 9:30 (Thursday)
Session Chair: Akhilesh Kumar, IIT Kharagpur, Kharagpur, West Bengal, India

Sachini Chandrasekara
Department of Industrial Management
University of Kelaniya, Sri Lanka

Ms. Sachini Chandrasekara is an undergraduate reading for Bachelors degree in Management and Information Technology (MIT) in the Department of Industrial Management at University of Kelaniya-Sri Lanka, Specializing in the field of Business Systems Engineering. This is her first research publication and is a part of her final year research. She has done a 6 months internship at MAS Holdings as a Junior SAP functional consultant. In there she has received exposure to SAP Materials Management, Business Analysis. Also she has studied the apparel procurement process. She has found this research topic with related to her work experience as an empirical research. Her research interests are in the fields of Enterprise resource Planning, Supply chain Management, Procurement, Operations Management.

ID 165 A Literature-Based Survey on Industry 4.0 Technologies for Procurement Optimization
Sachini Chandrasekara, University of Kelaniya, Ratnapura, Sri Lanka

Ademilade Aboginije
Researcher in Construction Management, Department of Construction Management and Quantity Surveying
Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Ademilade Aboginije holds a Bachelor of Engineering degree in Civil Engineering from the Federal University of Technology Akure, Ondo, Nigeria. He is currently a master degree student of Construction Management at the department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa. Ademilade does research in Construction waste management, Green technology adoption in construction, Green building project delivery, Infrastructure project financing, Circular Economy and Data mining application in construction.

ID 628 Harnessing Fourth Industrial Revolution (4IR) for Improving Poor Universities Infrastructure in Developing Countries-A Review
Ademilade Aboginije, University of Johannesburg, South Africa

Dr. Faridah Mustaffa Bakry
Department of Engineering Business Management,
Universiti Kuala Lumpur (Malaysia Italy Design Institute), Cheras, Kuala Lumpur Malaysia

Faridah Mustaffa Bakry is a Senior Lecturer in the Department of Engineering Business Management at Universiti Kuala Lumpur campus of Malaysia Italy Design Institute, Kuala Lumpur, Malaysia. She earned B.A (Hons) in Business Information Technology with International Business from Kolej Polytech MARA, Kuala Lumpur, Master Science in E-Business and Information Technology from University of Newcastle Upon Tyne, UK and PhD in Supply Chain from University of Strathclyde, Glasgow Scotland. She has taught courses in supply chain management, innovation management, marketing, technology management, transportation and logistics management and visual management system for undergraduate and postgraduate students. Her research interests include supply chain, innovation and technology management.

ID 652 The Fourth Industrial Revolution 4.0 and Knowledge Management Capabilities
Faridah Mustafa, Universiti Kuala Lumpur, Cheras, Kuala Lumpur, Malaysia

Dr. Akhilesh Kumar
Assistant Professor, Department of Industrial & Systems Engineering
Indian Institute of Technology, Kharagpur, India

Akhilesh Kumar is currently working as an Assistant Professor in the Department of Industrial & Systems Engineering at Indian Institute of Technology, Kharagpur. Previously, he worked as a Solution Architect in Consulting Team at JDA Software, Bangalore. He received his B.Tech degree in Manufacturing Engineering from National Institute of Foundry and Forge Technology (India) and Ph.D. degree in Industrial Engineering from Wayne State University (U.S.A.) in the year 2005 and 2011, respectively. He has authored several technical papers. His publications appeared in such journals as International Journal of Production Economics, European Journal of Operational Research, Expert System with Applications, IEE. Currently, he is working on a consultancy project with Shell on Conditioned Based Maintenance. He is also team lead for IoT in predictive maintenance project with Department of Heavy Industry andTata Sons. He was part of collaborative research team in US with Ford Motor Company and Delphi Automotive LLP. He also appeared on Marquis Who’s Who in America in 2011 and in World in 2017.

ID 373 Combining Text Mining and Survival Analysis for Asset Health Management Using Maintenance Log
Akhilesh Kumar, IIT Kharagpur, West Bengal, India

Haftu Bailu
Director, Public Service Commission
Ethiopia Kaizen Institute, Addis Ababa, Ethiopia

ID 465 The practice of Kaizen philosophy and Its’ effect on Ethiopian manufacturing industries: case of chemical industries
Haftu Berhe, Ethiopia Kaizen Institute, Addis Ababa, Ethiopia

Session VIII: Industry 4.0 – Al, iCloud and Data Analytics) - 2:30 – 4:00 pm (Thursday, March 12)
Session Chair: Miss. Iman Youssef, DBA candidate, California Intercontinental University, USA

2:30 – 3:00 (Thursday)

Dr. Wazir Zada Khan
Head of Research, Department at College of Computer and Information Technology
Co-Founder of Farasan Networking Research Laboratory
Jazan University, Saudi Arabia

Combating the Impact of Advanced Persistent Threats in Industrial Internet of Things (IoT)

Currently working with the College of CS & IT, Jazan University, Saudi Arabia. He is Co-Founder of Farasan Networking Research Laboratory and also serving as Head of Research Department at College of Computer and Information Technology Jazan University, Saudi Arabia. Dr. Khan is also serving as a Researcher at the ‘Global Foundation for Cyber Studies and Research’ which is an independent, non-profit, and non-partisan cybersecurity think-tank based in Washington D.C. Dr. Khan has published over 70 research papers in the journals and conferences of international repute. He is serving as a reviewer of many reputed journals and also a member of the technical program committee for many international conferences. He has more than 15 years of teaching/professional experience in Pakistan and Saudi Arabia. His current research interests are in the area of Security, Privacy and Trust. He is a Senior Member of the IEEE.
Marcos Dieste
Postdoctoral Research Fellow
Department of Management and Engineering
University of Padova, Vicenza, Italy

Industry 4.0 and Lean Thinking: a case study on their linkages
Marcos Dieste is a Postdoctoral Research Fellow at the Department of Management Engineering of the University of Padova (Italy). He received his Ph.D. in Management Engineering from the University of Padova, Master’s degree in Management Engineering from the University of Zaragoza (Spain), and his bachelor’s degree in Business Administration and Management from the University of Zaragoza. After some years working in industrial, consultancy and managerial environments, Dieste is currently researching in diverse fields such as strategy and operations management, sustainability, climate change, logistics, supply chain, tourism and service management.

Miss. Iman Youssef
CEO. Amour Fragrances and Amour Boutique
LaSalle, Ontario, Canada

ID 834 Conducting a Feasibility Analysis and Developing an Effective Entrepreneurial Business Plan
Iman Youssef, California Intercontinental University, USA
Daw Awerfalli, Professor of Engineering, Lawrence Technological University, Southfield, Michigan 48705, USA

Ms. Youssef is a Canadian woman-entrepreneur, community activist, CEO of two companies, Amour Fragrances, and Amour Boutique located in LaSalle, Ontario, Canada. Ms. Youssef is a humanitarian activist, national and international volunteer who regularly manages sponsorships and raises funds to support international causes. Iman continuously participates in humanitarian and voluntary community work, she is fully engaged in sup-porting many charity organizations. Ms. Youssef is a member of board of directors of Daughters for Life Foundation; a non-profit Organization, providing full scholarships for quality education for unprivileged young wom-en of the Middle East to achieve lasting peace. Ms. Youssef has more than two decades of experience in entrepreneurship, and a member of the Canada Arab Chamber of Com-merce who awarded her the Business Excellence Award in 2013. In 2018 she was select-ed by the Canadian Chamber of commerce to join a prominent team of highly recognized Canadian businesses on a trip to Palestinian authorities in support of Palestinian business development. She is a recognized community leader and mentor who works closely with Windsor women organizations that support women training and development such as W5 (Windsor Women Working With Immigrant Women) and WEST (Women Enterprise Skills Training) as a guest and motivational speaker on workforce development for women.

Ms. Youssef is currently pursuing her Doctorate of Business Administration (DBA) at Cali-fornia Intercontinental University with a research focused on Entrepreneurship among fe-male immigrants. Iman is fluent in Arabic, English and Sign language, she has applied these skills to pursue other opportunities in business. In 2007, Iman participated in hosting a health and beauty segment on My Second Home, a weekly television program through Rogers T.V., Canada. The purpose of this show was to help new immigrants to Canada by providing them with information to assist in the transition to Canada. Ms. Youssef, is an active member of the publishing team of the International Industrial Engineering and Operations Management Conference (IEOM). This conference is held annually for prominent professors, CEO’s and management experts from around the world. She was the first Arab Canadian speaker who was selected to be the recipient of the best graduate student research award for her paper “Impact of Entrepreneurial Education and Training Programs on the Success of Small Business Entrepreneurs” It is published in the Proceeding of the 2017 International Conference on Industrial Engineering and Operations Management, Rabat, Morocco, April 11-13, 2017.

Iman has recently presented two papers at the 2018 International Conference on Industrial Engineering and Operations Management, Paris, France, July 26-27, 2018. First is titled “Challenges Facing Women Entrepreneurs in New Business Markets.” Second is titled “Strategic Leadership and Knowledge Management “Driving Organizational Suc-cess”, Ms. Youssef also presented a paper in IEOM conference on October 23-25, 2019 in Toronto, Canada. The paper title is “Entrepreneurs: The Driving Force Behind Small Business.” Iman is in the process of submitting another research paper to the IEOM con-ference to be held in Dubai, UAE in March 10-12, 2020. The title of the paper is “Con-ducting a feasibility Analysis and Crafting a Winning Entrepreneurial Business Plan”. Ms. Youssef was cited in the book titled heroes Next Door by Subarna Gupta which was published by Next Century Publishing, Las Vegas Nevada, 2016. The book has helped thousands of people to think big. Iman has an interesting Entrepreneurial journey was one of ten inspiring stories published by the author. One of Iman’s recent recognitions, she is being nominated to the prestigious award for the Canadian Women Entrepreneur Award by the Royal Bank of Canada (RBC) in their 26th annual dinner for this award in November 21, 2018.

Session IX: Industry 4.0 – 4:30 – 6:00 pm (Thursday)
Session Chair: Dr. Jiří Tupa, University of West Bohemia, Pilsen, Czech Republic

Fazal Akbar
Assistant Researcher, Faculty of Technology Management and Entrepreneurship
Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

Fazal Akbar is an assistant researcher in the Faculty of Technology Management and Entrepreneurship at Universiti Tun Hussein Onn Malaysia. He earned his Master’s in Technology Management from Universiti Tun Hussein Onn Malaysia. He has published journal and conference papers and his research interests include Marketing Management and Entrepreneurship, Strategic Management, and Innovation. Currently, the researcher has interest in Industrial Revolution 4.0 and Entrepreneurship.

ID 714 The Industrial Revolution 4.0 and Entrepreneurial Orientation with Innovation as mediation Effect on the Performance of Malaysian Furniture Industry: A Proposed Framework
Fazal Akbar and Abdul Taib Bin, Faculty of Technology Management and Business, University Tun Hussein Onn Malaysia, 86400, Johor, Malaysia
Fazl Wadood, Faculty of Management Science, University of Buner Sowari, Khyber Pakhtunkhwa, Pakistan
ID 722  The role of process management in the context of Industry 4.0
Jiri Tupa, Tomas Rericha, and Frantisek Steiner, Department of Technologies and Measurement, University of West Bohemia in Pilsen, Univerzitni 8, Czech Republic

Driss SERROU
Research laboratory
Higher Institute of Transport and Logistics
Rue Capitaine Vuillanier - Route de Rabat Quartier Aïn Sebaa, Casablanca-MOROCCO

DRISS SERROU is a research professor the Institute of Transport and Logistics. He has a PhD from the National School for Applied Sciences at the university IbnTofail, Kenitra Morocco. He obtained his master degree in industrial engineering from Sciences and technologies Faculty in Fes, Morocco. He has 8 year of experience in the industrial domain. His research interests include manufacturing, simulation, optimization, reliability, maintenance and manufacturing.

ID 130  Improvement of the industry 4.0 by digital maintenance
DRISS SERROU, ISTL Casablanca, Casablanca, Morocco
Hakim NISSOUL, Mechanical and Industrial Engineering Department, Sultan Qaboos University, Muscat, Oman

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IEOM KAU-Rabigh Student Chapter
Bulacan State University, Philippines

Guru Nanak Dev Engineering College, Punjab, India

Universitas Tarumanagara, Indonesia

University of Malaysia, Sabah
University of Windsor, Canada

Lawrence Technological University

University of New Brunswick at Fredericton, Canada

Government College University Faisalabad (GCUF), Pakistan
IEOM Student Chapter at Universiti Tun Hussein Onn Malaysia (UTHM)

Khulna University, Bangladesh

IEOM Botswana Chapter

IEOM University of Johannesburg Student Chapter
Zagazig University, Egypt

Sheridan College, Brampton, Ontario, Canada

IEOM Student Chapter at Sudan University of Science and Technology, Khartoum

IEOM Student Chapter at Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University of Rabat, Morocco
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Dr. Mariam Ali Alasmari

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- Director of Communication: Reema Altuwaijri and Yara Alghamdi

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- Director of Communication: Nouf Obaid Alzaabi

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University of Costa Rica Event
2nd IMEOM Dhaka Conference, December 12-13, 2019

IEOM Detroit Office Visits
First GCC Conference in Riyadh, Saudi Arabia, November 26-28, 2019

4th North American IEOM Conference, October 23-25, 2019
Third European IEOM Conference in Pilsen, Czech Republic, July 23-26, 2019

First Central American Symposium on Industry 4.0, Logistics 4.0 and Manufacturing 4.0, San Jose, Costa Rica, June 12-13, 2019
Second IEOM Fellows Induction at the IEOM Bangkok Conference on March 6, 2019
University of Monterrey (UDEM), Mexico Visit, May 29-30, 2018

Faculty of Civil and Industrial Engineering of Sapienza – University of Rome, Italy
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<th>Country</th>
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Pro-Vice Chancellor Strategic Partnerships and Industrialisation
University of Zimbabwe
Mt Pleasant, Harare, Zimbabwe

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Professor of Technology Management, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia

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Federal Institute of Sao Paulo (IFSP) – Sorocaba Campus
Sorocaba, Sao Paulo, Brazil

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Head of the Centre for Supply Chain Improvement
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USA

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Professor, Department of Engineering
Universidad de Monterrey
San Pedro Garza Garcia, NL
Mexico

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<tr>
<th>Director of Membership and Chapter</th>
<th>Director of Program</th>
<th>Director of Publication</th>
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<tr>
<td>Professor Donald M. Reimer</td>
<td>Dr. Mohammad Khadem</td>
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| President, Small Business Strategy Group, Detroit, Michigan, USA | Associate Professor
Department of Mechanical and Industrial Engineering
Sultan Qaboos University
Muscat, Oman | Associate Professor
Manufacturing and Construction Management
Central Connecticut State University
New Britain, CT, USA | Associate Professor and Director of IE Program, A. Leon Linton Dept. of Mechanical, Robotics and Industrial Engineering, Lawrence Technological University, Southfield, Michigan, USA |

Adjunct Faculty – Lawrence Tech
Southfield, Michigan, USA
Upcoming Events

2nd South American Conference on Industrial Engineering & Operations Management
São Paulo, Brazil, April 14-16, 2020
Venue: Maksoud Plaza Hotel, São Paulo

www.ieomsociety.org/brazil2020/

4th EU International Conference on Industrial Engineering & Operations Management
Rome, Italy, July 22-24, 2020
Venue: Sapienza – University of Rome

Conference Website: www.ieomsociety.org/rome2020/

5th North American Conference on Industrial Engineering & Operations Management
Monterrey, Mexico, Sept. 30-Oct. 2, 2020
Venue: CINTERMEX-Monterrey Convention Center

www.ieomsociety.org/monterrey2020/

Third IMEOM 2020 Dhaka
2020 IEOM Dhaka Conference
Third International Conference on Industrial and Mechanical Engineering and Operations Management (IMEOM)
December 26-27, 2020, Dhaka, Bangladesh, Venue: Krishibid Institution Bangladesh, Farmgate

11th IEOM International Conference
Hilton Hotel, Orchard Road, Singapore
March 9-11, 2021

Conference Website: www.ieomsociety.org/ieom2021/