Welcome to the First GCC International Conference on Industrial Engineering and Operations Management

To All Conference Attendees:

On behalf of Prince Sultan University and the IEOM Society International, we would like to welcome you to Riyadh, Saudi Arabia for the First GCC International Conference on Industrial Engineering and Operations Management. Under the theme of: The Role of Industrial Engineering in the Realization of Saudi Vision 2030. This unique international conference provides a forum for academics, researchers and practitioners from many industries to exchange ideas and share recent developments in the field 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. After a thorough peer review process, 175 papers and abstracts are accepted out of more than 300 submissions from 35 countries. The program includes many cutting edge topics of industrial engineering and operations management.

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

- H.E. Eng. Osama Al Zamil, Deputy Minister at Ministry of Industry and Mineral Resources
- Dr. Andreas Schwer, CEO of the Saudi Arabian Military Industries-SAMI
- Eng. Suliman Almazroua, CEO – VRP Office of the National Industrial Development and Logistics Program
- Dr. Mohammed Al-Majed, Senior Advisor to the Minister, Ministry of Industry and Mining, Saudi Arabia
- Dr. Surendra M. Gupta, Professor of Mechanical and Industrial Engineering, Director of Laboratory for Responsible Manufacturing (LRM), Northeastern University, Boston, Massachusetts, USA
- Dr. Sami Alnuaim, The President of the Society of Petroleum Engineers International
- Eng. Saleh I Al-Shabnan, President Haffaz Industrial & Management Consultants

We will continue to offer special session on Global Engineering Education Series. This session will feature distinguished speakers who will discuss the workforce readiness. 30 featured speakers will address engineering education challenges and opportunities.

The Industry Solutions Track will address industry needs in order to survive in the competitive environment. Distinguished practitioners will share their experiences and journey.

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.

We would also like to thank the students who are participating in this event. Conference Organizing Committee wants to welcome you to Riyadh and wishes you an enjoyable learning experience at the conference and exploring Saudi Arabia. We hope you a safe and memorable adventure exploring Saudi Arabia.

Enjoy the conference!

Dr. Abdulhakim A. Almajid
Conference Chair
Dean, College of Engineering
Prince Sultan University
Riyadh, KSA

Dr. Bandar A. AlKhayyal
Conference Co-Chair
Director of Master in Engineering Management Program
Prince Sultan University
Riyadh, KSA

Dr. Ahad Ali
Conference Co-Chair
Associate Professor and Director of Industrial Engineering Program
Lawrence Technological University, Michigan, USA
26 November 2019

A temperate welcome to you all to Riyadh and Prince Sultan University. November is a very good time to visit the Kingdom of Saudi Arabia. I am confident you will enjoy the warmth from the heart here, if not in the weather during your visit.

PSU is honored to be the first university in the GCC region to hold the first International Conference on Industrial Engineering and Operations Management. The overarching theme of the conference deals with *The Role of Industrial Engineering in the Realization of the Saudi Vision 2030*. Saudis have accepted the challenges and we have the drive and confidence to reify the Vision – a land distinguished by a vibrant society, thriving economy, and an ambitious nation.

PSU is ambitious too. It is known for the quality of its graduates and its role as a pioneer in higher education. We are the first private university in the Kingdom. As the turn of the century approached, there was a strong sense that change in higher education was needed. The focus had to lock in on meeting the needs of the labor market and opening the doors to the sons and daughters of expat families in Saudi. PSU was the first university, public or private, to offer a Bachelors of Law degree to women in 2006, the first private university to fully be accredited by the NCAAA - the national accreditation body in 2010, and the first school to offer BS degrees in Engineering Management in 2011. There is more to add, but you Engineers already know how to manage things.

With the warmest regards,

[Signature]

Dr Ahmed Yamani

Rector, Prince Sultan University
Conference Program

November 25, 2019 (Monday)
13:00 – 20:00 Registration

November 26, 2019 (Tuesday)
08:00  REGISTRATION
09:00  Welcome Address: Dr. Ahmed S. Yamani, Rector, Prince Sultan University, Riyadh, Saudi Arabia
09:30  Opening Keynote I: H.E. Eng. Osama Al Zamil, Deputy Minister at Ministry of Industry and Mineral Resources
10:15  Opening Keynote II: Dr. Andreas Schwer (Saudi Arabian Military Industries-SAMI CEO)
11:00  Networking/Coffee Break
11:15  Keynote: Dr. Sami Alnuaim, The President of the Society of Petroleum Engineers International
12:15  Networking Buffet Lunch/ Dhuhr Prayer
01:30  Parallel Sessions & PANEL SESSION: Tracks: Industrial & Manufacturing
03:00  Networking/Coffee Break/Asr Prayer
03:30  Parallel Sessions & PANEL SESSION: Tracks: Transport and Logistics
05:00 – 6:30 pm: Poster Competitions

IEOM Gulf Student Simulation Competition
Lab G-A11: Tuesday from 3 PM to 11 PM and Wednesday from 3 PM to 6 PM
Winners Announcement at the Awards Dinner

November 27, 2019 (Wednesday)
08:30  Parallel Sessions
10:00  Networking/Coffee Break
10:15  Keynote: Dr. Mohammed Al-Majed, Senior Advisor to the Minister, Ministry of Industry and Mining, Saudi Arabia
11:00  Keynote: Eng. Suliman Almazroua, CEO at National Industrial Development & Logistics Program
11:45  Networking Buffet Lunch/ Dhuhr Prayer
01:00  Parallel Sessions and PANEL SESSION: Entrepreneurship and Innovation
02:30  Networking/Coffee Break/Asr Prayer
03:00  Parallel Sessions
07:00 – 10:00 pm, Conference Awards and Recognition Dinner - Outdoor

November 28, 2019 (Thursday)
08:30  Parallel Sessions
10:00  Networking/Coffee Break
10:15  Keynote: Dr. Surendra M. Gupta, Professor of Mechanical and Industrial Engineering, Director of Laboratory for Responsible Manufacturing (LRM), Northeastern University, Boston, Massachusetts, USA
11:00  Keynote: Eng. Saleh I Al-Shabnan: President Haffaz Industrial & Management Consultants, Riyadh, Saudi Arabia
11:45  Networking Buffet Lunch/ Dhuhr Prayer
02:30  Networking/Coffee Break/Asr Prayer
03:00  Parallel Sessions
04:30  Closing Remarks
### IEOM Riyadh Conference
**November 26-28, 2019**

#### Program Matrix - Building 105

**Tuesday, November 26, 2019**

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#### IEOM Gulf Student Simulation Competition
Lab G-A11: Tuesday from 3 PM to 11 PM and Wednesday from 3 PM to 6 PM, Winners Annoucement at the Awards Dinner

**Wednesday, November 27, 2019**

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<th>Time</th>
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**Keynote and Panel Sessions will be in auditorium**

© IEOM Society International

First GCC Conference
Keynote Speakers

9:00 – 9:30 (Tuesday) Welcome Address

Dr. Ahmed S. Yamani
Rector, Prince Sultan University
Riyadh, Saudi Arabia

Dr. Ahmed S. Yamani is the rector of Prince Sultan University, the first private, non-profit university in the Kingdom of Saudi Arabia. He took up his post as Rector in June 2005. He has held a series of leadership roles (including Chairman, Vice Dean, Vice-Rector, and Rector) over a 25-year period. Dr. Yamani has a PhD in Structural Engineering from the University of Michigan, USA. He obtained his MSc and a BSc with summa cum laude (highest honor) from the University of North Carolina, USA. In addition, he earned a diploma in pre-Engineering from Gaston College, USA.

Prior to Prince Sultan University, Dr. Yamani started his academic career in the Department of Architecture and Building Sciences, College of Architecture and Planning, King Saud University, Saudi Arabia. Four years later, he became the chairman of the Department of Architecture and Building Sciences at the King Saud University.

He also held academic positions as the first Vice Dean to the newly founded Prince Sultan Private College, which evolved into the successful Prince Sultan University, Saudi Arabia; and as the acting Vice Rector of Prince Sultan University.

Dr. Yamani has played a major role in the development and implementation of academic strategy at Prince Sultan University, in both research and education. Under his leadership the University has consistently been rated the best private university in Saudi Arabia. He has an ongoing interest in Sustainable Higher Education more widely. Dr. Yamani has led the development of the university’s internationalization, with the goal of creating a leading university locally and throughout the Middle East through stakeholder engagement, community service and a strong research impact in line with the ‘Saudi Vision 2030’. Dr. Yamani is the founding editor of PSU Research Review: An International Journal (Emerald Group Publishing Limited, UK). He was the pioneer who brought forward the concept of this international journal and made it happen.

Dr. Yamani has chaired or has been a member of numerous academic, administrative and professional committees. He is a board member of Education Evaluation Commission – Higher Education Sector (EEC-HES) (formerly the National Commission for Academic Accreditation and Assessment – NCQA), Ministry of Education, Saudi Arabia. He is a board member of National Center for Assessment in Higher Education (Qiyas), Ministry of Education, Saudi Arabia. He has been awarded various prestigious awards.

9:30 – 10:15 (Tuesday) Opening Keynote I

H.E. Eng. Osama bin Abdul Aziz Al-Zamil
Deputy Minister of Industry and Mineral Resource
Saudi Arabia

H.E. Eng. Osama bin Abdul Aziz Al-Zamil, Saudi Arabia’s deputy minister of industry and mineral resources. He has also been the president of Zamil Group Holding Co. since December 2018, a global investment company with diverse interests and capabilities including shipbuilding and repair, port operations and maintenance, petrochemicals and chemicals, industrial investment and general construction. Al-Zamil was the vice president of the corporate business development department at Zamil Group from 2013 to 2016, and the group’s vice president for almost five years between 2014 and 2018. He is also the chairman of the Saudi Industries Development Co. (Tatweer) based in Buraidah, Al-Qassim region. It is a diversified organization with its main investments in the industrial sector, real estate sector and financial investment. Al-Zamil received his undergraduate education in systems engineering from King Fahd University of Petroleum and Minerals in Dhahran, Saudi Arabia. He also has a master’s degree in business administration and management from the University of Houston-Clear Lake in Houston, Texas, US.

10.15 – 11:00 (Tuesday) Opening Keynote II

Dr. Andreas Schwer
CEO, Saudi Arabian Military Industries (SAMI)

Dr. Andreas Schwer is the Chief Executive Officer of Saudi Arabian Military Industries (SAMI), spearheading efforts to drive forward the Kingdom’s military industry and deliver world-class military products and services. He is responsible for the management of SAMI’s operational business and achievement of the company’s business strategy and targets. Dr. Schwer is working closely with the Board of Directors to attain the company’s objective of becoming a top-25 global military company by 2030, drawing upon his wealth of experience and expertise in setting up and managing international defense and aerospace companies.

Prior to joining SAMI, Dr. Schwer was a member of the Executive Management Board of Rheinmetall Defense. Amongst his duties, he was President and CEO of Combat Systems Division, which is the core of the Rheinmetall enterprise with more than 7,000 staff in 16 countries. Dr. Schwer then served as the Chairman and President of Rheinmetall International AG where he was responsible for defining the company’s internationalization strategy leading to the implementation of multiple operating companies and joint ventures in key strategic export markets such as the Middle East.

In 2008, Dr. Schwer served as Executive Vice President of Global Engineering and Innovation at The Manitowoc Company, Inc. with engineering centers in US, Europe and Asia. He was also appointed as the General Manager of the company’s branch in Germany, where he led 2,000 employees.
Dr. Schwer began his career with Airbus Group Inc., where he held a number of leadership positions within their defense & space branch. Amongst those, he was one of the key industrial enabler of the Galileo Satellite Navigation Program founded by the European Union and the European Space Agency. In 1992, Dr. Schwer received his Master’s degree in Aeronautics Engineering from the University of Stuttgart, Germany, and subsequently his Ph.D. in 1997. In 1998, Dr. Schwer accomplished a second Master’s degree in Systems Engineering from Delft University of Technology in the Netherlands.

11:00 – 11:15 Networking/Coffee Break

11:30 – 12:15 (Tuesday) Keynote III

Dr. Mohammed Al-Majed
Senior Advisor to the Minister at Ministry of Industry and Mining
Saudi Arabia

Dr. Mohammed Al-Majed is a Senior Advisor to the Minister at Ministry of Industry and Mining in Saudi Arabia, Leading Industry 4.0 Efforts, and an advisor- External Board, for the Mechanical Engineering Department, University of California, Berkeley. Dr. Mohammed has been shaping the digital transformation in Saudi Arabia through various roles. Some of these roles include: Senior Advisor to HE Minister of Industry and Mineral Resources of Saudi Arabia, Senior Advisor to HH Taqnia Chairman of the Board, CEO of TDM that was officially incorporated for Industry 4.0 Technology Localization, CCO at the College of Excellence and many other roles. He received a bachelor’s degree in mechanical engineering in 1990. Subsequently, he joined the High Commission for the Development of Riyadh as a mechanical engineer. In 1992, Al-Majed left for the US, where he studied for a master’s degree at the University of California in Berkeley, majoring in mechanical engineering and went on to receive his Ph.D. in the same major from the same university in 1997. From 2017 to 2018, Al-Majed was CEO of Taqnia Digital Manufacturing in Riyadh. He returned to KACST in 2018 as the ICI4 director, before taking on his current role in 2019. He recently took part in the Saudi Arabia Energy Forum 2019 and spoke on the Saudi industrial revolution 4.0, as well as a keynote speaker at the Arab Conference at Harvard (Business Edition).

12:15 – 1:30 – Networking Buffet Lunch/ Dhuhr Prayer

Wednesday, November 27, 2019

10:15 – 11:00 (Wednesday) – KEYNOTE

Dr. Sami Alnuaim
President
Society of Petroleum Engineers (SPE) International

Title: “Orchestrating the Future Energy Transition through Energy Sustainability & Environment Strategy”

Sami Alnuaim has been with Saudi Aramco for 30 years, where he has worked in reservoir engineering, production engineering, research and development, and at the upstream computer center. He currently serves as manager of the petroleum engineering application services department where he leads information technology support for all upstream operations, including exploration, drilling, production, reservoir engineering, and facility design. A current area of focus is reservoir simulation of giga cells and giga models using Saudi Aramco's GigaPOWERS simulator. Alnuaim has a long history of service to SPE and is currently a member of the SPE Middle East Board of Directors. He has won several local, regional, and international awards, including the SPE Regional Service Award for the Middle East in 2010 and the SPE Distinguished Service and SPE Distinguished Member awards in 2011. He recently served on the society's DeGolyer, Rand, and McConnell Awards Committee and the 2017 SPE Annual Technical Conference and Exhibition Executive Advisory Committee. Alnuaim obtained BS and MS degrees from King Fahd University of Petroleum and Minerals, and a PhD degree from the University of Texas at Austin, all in petroleum engineering. He completed the Wharton Advanced Management Program at the University of Pennsylvania and the Advanced Asian Business and Culture Program at Pennsylvania State University.

11:00 – 11:45 (Wednesday) Keynote

Eng. Suliman Bin Khaled Almazroua
CEO
VRP Office of the National Industrial Development and Logistics Program

Eng. Suliman Almazroua, CEO of the National Industrial Development and Logistics Program (NIDLP) VRP office. In recent roles he acted as Executive Director in the National Transformation Program, where he managed the ministries' portfolios with the 37 strategic objectives of Vision 2030 and a budget of over SAR 300 Billion. Almazroua also acted as the Director General of the Delivery and Rapid Intervention Center where he managed a team of over 90 professionals and a budget of over SAR 100 Million to support the delivery of Vision 2030 goals.

Eng. Almazroua received his Bachelor of Science degree in Systems Engineering from King Fahd University of Petroleum and Minerals in 2001 and his Master degree in Business Administration from Hull University (UK) in 2006. Since then, he has gained a wealth of experience in technical, managerial, and leadership roles in industry, most notably at Saudi Aramco. He started his career with highly technical positions such as a Communications Engineer at Saudi Aramco then a Control Engineer at Aruba Networks (USA). In 2008, he attained a managerial position in the Information Technology Department at Saudi Aramco where he improved business processes and developed manpower optimization studies. In 2011, Almazroua acted as Manager of International Operations for Saudi Aramco in Houston, USA.
where he established North America Satellite Research and Development Centers, improved Cybersecurity defense in all Saudi Aramco international offices, among other accomplishments. Almazroua also played pivotal roles in the healthcare sector of Saudi Aramco, acting as Chief Technology Officer of Johns Hopkins Aramco HealthCare (JAH), Dhafran. Where he led the transformation of JAH by introducing new a Health Information System. In 2016, he was appointed as Director of IT Demand Planning at Saudi Aramco, where he notably implemented a new value creation model for technology planning, which resulted in benefits of up to $33 Million in 2017 and around $300 Million in 2018.

During his education and years of experience, Almazroua acquired the technical skills and industry knowledge that enabled him to build a unique problem-solving ability. Equipped with his skills and work ethics, Almazroua aspires to have a hand in the betterment of his country by playing a pivotal role in KSA's most prominent Vision Realization Program, NIDLP, which is focused on transforming Saudi Arabia into a pioneering industrial powerhouse and a global logistics hub by integrating growth in four key sectors: Mining, Industry, Logistics, and Energy (with focus on Industry 4.0) in line with Vision 2030.

11:45 – 1:00 Networking Buffet Lunch/ Dhuhr Prayer

7:00 pm – 10:00 pm (Thursday) Conference Awards Dinner

Thursday, November 28, 2019

10:15 – 11:00 (Thursday) Keynote

Dr. Surendra M. Gupta
Professor of Mechanical and Industrial Engineering
Director of Laboratory for Responsible Manufacturing (LRM)
Northeastern University
Boston, MA, USA

Dr. Surendra M. Gupta is a Professor of Mechanical & Industrial Engineering and Director of the Laboratory for Responsible Manufacturing at Northeastern University in Boston. He received his BE in Electronics Engineering from Birla Institute of Technology and Science, MBA from Bryant University and MSIE and Ph.D. in Industrial Engineering from Purdue University. Dr Gupta is a recipient of the Outstanding Research Award and the Outstanding Industrial Engineering Professor Award (in recognition of Teaching Excellence).


He has taught a variety of undergraduate and graduate courses in the areas of Production/ Manufacturing Systems and Operations Research. He has more than 30 years of teaching experience and has consistently received high student ratings. He has been elected to memberships and chairmanships of dozens of University, College and Department Committees as well as an elected member of the Faculty Senate representing the College of Engineering.
**Eng. Saleh I Al-Shabnan**  
President, Haffaz Industrial & Management Consultants  
Riyadh, Saudi Arabia

Saleh Al-Shabnan is a graduate in Industrial Management from King Fahad University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia in 1982. He was trained at the National Gas & Industrialization Co. (GASCO) in Riyadh, Saudi Arabia and then Aramco Services Company (ASC) in Houston, Texas before joining (SABIC) upon his graduation. Throughout his career with SABIC, he has supervised and managed various projects, logistics, business development and sales & marketing functions.

Between 2007 & 2011, Saleh was the EMDAD Project Executive with the responsibility to head up a global transformation initiative to develop an industry leading supply chain capability for the Saudi Basic Industries Corporation (SABIC) reporting directly to SABIC’s Vice Chairman and CEO. His mandate was to develop a globally integrated Supply Chain supported by a world class IT platform and global logistics network and infrastructure for SABIC’s Chemicals, Polymers, Metals, Fertilizers, Specialties and Performance Chemicals. Upon the successful implementation of the project, he was appointed as a Vice President, Global Supply Chain Center of Excellence in 2011 till his retirement from SABIC in April 2014.

Saleh Al-Shabnan served as the Chairman of the Board of Directors for Sabic Terminal Services Co. (Sabtank), and the Jubail Chemical Storage & Services Co. (JCSSC) as well as a member of the Board of Directors of Petrokemya, Sadaf and National Chemical Carrier Company (NCC). He also served as the Vice Chairman of the Gulf Petrochemical & Chemicals Association (GPCA)’s Supply Chain Committee till June 2016 and was a member of Europe’s LogiChem advisory board in Brussels. Saleh is a member of GPCA and the head of its Supply Chain Excellence Award. On the volunteering work side, Saleh was elected in October 2017 as the Chairman of the Board of Directors for the “Supply Chain & Procurement Society” - a non-profit organization of 230+ SC & Procurement professional volunteers. The Society is sponsored by the General Authority for Small & Medium Enterprises (Monshaat) – Ministry of Commerce & Investment. He was also the Vice President of the National Committee for Cement Companies and a member of the Saudi Committee for Labor Market at the Council of Saudi Chambers as well as Vice Chairman of the newly formed Industrial Exporters’ Society and the Chairman of the Cooperative Society for Agricultural and Environmental Studies & Services (under formation). Saleh is one of the founders of City Cement Company and was the company’s Chief Executive Officer (CEO) and a member of the its Board of Directors till May, 2019. Through his office “Haffaz for Consultation & Business Development”, Saleh provides consultation and business development services in a number of fields including: Supply Chain & Logistics, Energy & Alternative Fuels, Healthcare & Medical Devices, Environment & Sites Rehabilitation and Cement & Mining.

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<table>
<thead>
<tr>
<th>Simulation Competition Committee – IEOM Gulf Student Simulation Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Head of Organizing Committee</strong></td>
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<td>Leader Communication Committee Member</td>
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<td>Ambassador</td>
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<td>GSS Competition Coordinator</td>
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<td>Leader of Operations Committee</td>
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Panel Sessions

Panel Sessions

PANEL SESSION - Track: Industrial & Manufacturing (1:30 pm to 3:00 pm)
Panel Chair – Dr. Mohammed Al-Majed

Panel Speakers

<table>
<thead>
<tr>
<th>Dr. Hamad Alyousefi</th>
<th>Dr. Mohammad Alkahtani</th>
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<tbody>
<tr>
<td>CEO/DST: TAQNIA</td>
<td>Chief Technology Officer</td>
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<td>Defense and Security Technology (DST)</td>
<td>Saudi Arabian Military Industries (SAMI)</td>
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Eng. Ziad Al Mulsallam
EVP Engineering & Operation
Advanced Electronics Company

Mr. Ziad H. Al-Musallam is a senior technology executive with over thirty years of experience in strategically strengthening local hi-tech capabilities and localization of electronics manufacturing and software industries in Saudi Arabia. Mr. Ziad H. Al-Musallam is currently the Executive VP of Engineering & Operations (E&O) at AEC since 2017 and reports to the Chief Executive Officer; responsible for all core design, engineering, implementation & operational activities of the organization. Mr. Al-Musallam was previously the Senior VP of Engineering & Development from 2014 to 2017 where he was responsible for the technical and engineering function of the company in engineering management and development of its various sections. He was also the Senior VP & GM of the Energy Business Unit from 2015 to 2017 where he oversaw the study and adoption of industrial products in the Energy sector. Mr. Al-Musallam joined the Engineering and Development department at AEC as an Engineer in 1991 and has had an illustrious career rising through the ranks within the organization. Prior to AEC, he was a Design Engineer at the National Information Center, Ministry of Interior where he started his career in 1988. Mr. Al-Musallam is member of the Local Content Committee, Chairman of the Cost Optimization Committee, member of Saudi Arabian Smart Grid Steering Committee, Appraisal Sponsor for CMMI Level 3 certification; Software Engineering institute’s (SEI) standard Capability Maturity Model and Member of the RFTONICS Scientific Committee (KACST). Mr. Al-Musallam has a Master Degree in Electrical Engineering and a Bachelor of Science Degree in Computer Engineering from King Saud University in Riyadh, Saudi Arabia. He has attended management programs from INSEAD as well as several other technical and management courses.

PANEL SESSION - Tracks: Transport and Logistics (3:30 pm to 5:00 pm, Tuesday)
Panel Chair – Eng. Khalid Alghamdi

Panel Speakers

<table>
<thead>
<tr>
<th>Dr. Meshal Almofadhi</th>
<th>Mr. Abdulrahman Al-Mubarak</th>
<th>Mr. Rayan Qutub</th>
<th>Khalid Albakry</th>
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<tr>
<td>Logistics Consultant</td>
<td>Chief Ground Handling Officer</td>
<td>CEO</td>
<td>CEO</td>
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<td>Saudi Industrial Development Fund – SIDF</td>
<td>Saudia Cargo</td>
<td>King Abdullah Port</td>
<td>Baas International Group</td>
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</tbody>
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PANEL SESSION (1:00 pm to 2:30 pm, Wednesday)
Track: Entrepreneurship and Innovation

Panel Speakers

<table>
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<tr>
<th>Hattan Ahmed</th>
<th>Deemah AlYahya</th>
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<tr>
<td>Head of the Entrepreneurship Center</td>
<td>Digital Economy Advisor</td>
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<td>King Abdullah University of Science and Technology</td>
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IEOM Gulf Student Simulation (GSS) Competition
16th IEOM Global Engineering Education
Riyadh, Saudi Arabia, November 26-28, 2019

Global Engineering Education – I
1:30 – 3:00 pm, Tuesday, November 26, 2019, Room 2
Session Chair: Dr. Sidi M Ahmed Ghaly, Al Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi Arabia

1:30 – 1:50 (Tuesday)

Dr. Anwar Ali Yahya Esmail
Associate Professor of Artificial Intelligence
Computer Science department
Najran University, Saudi Arabia

Knowledge Discovery in Engineering Education: Mining Association Rules from Engineering Programs’ Data

Bio: Dr. Anwar Ali Yahya is an Associate Professor at Computer Science Department, College of Computer Science and Information Systems, Najran University in Saudi Arabia. Holds a Ph. D. in Artificial Intelligence from University Putra Malaysia, M. Sc. in Artificial Intelligence from University of Technology, Baghdad, Iraq, and B. Sc. in Computer Science from Basrah University, Iraq. He has many years of teaching, research and quality assurance experiences in higher education. He has published more than 30 publications in reputed ISI-JCR and Scopus indexed Journals of Taylor & Francis, Wiley, Elsevier, IEEE, and Springer. He is also a member of review board for several international journals. His research areas are educational data mining, machine learning, natural language processing, and evolutionary algorithms.

1:50 – 2:10 (Tuesday)

Dr. R. D. Senthilkumar
Associate Professor
Department of Mathematics and Applied Sciences
Middle East College
Al Rusayl, Sultanate of Oman

Title: Designing Dynamic Education for the 21st Century Students

Dr. R. D. Senthil Kumar is currently the Associate Professor of the Department of Mathematics and Applied Sciences in the Middle East College (MEC), Sultanate of Oman. Prof. Senthil has many years of teaching, research and administrative experiences in higher education, and organized numerous workshops particularly on the effective integration of ICT in education. Also he has supervised research projects of junior scientists who were pursuing Master of Science and Master of Philosophy (Physics) degrees. He has authored few book chapters and more than 20 research articles and published in peer-reviewed journals and indexed conference proceedings. He has reviewed different research papers, book chapters and adjudicated Ph.D. theses. Prof. Senthil has his Doctor of Philosophy in Physics and M.Sc. (Physics); both of these degrees were conferred by the Annamalai University, India. He takes much pride in being Senior Fellow of Higher Education Academy, Fellow of International Congress on Chemistry and Environment. He is also the Member of IEEE Education Society, Member of Omani Society for Educational Technology, and Life member of Indian Spectrophysics Association. Prof. Senthil has effectively integrated various innovative strategies in his teaching and learning and received the Best Teaching Award at MEC, Oman. He has a strong potential of building learning activities in SCORM packages for Flip Learning.

2:10 – 2:30 (Tuesday)

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

Title of presentation: Writing and Assessing Measurable Learning Outcomes of Engineering Program

Bio: Dr. Sidi M Ahmed Ghaly is an Assistant Professor at 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 for 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. He is the co-author of many publications. He received one grant in 2019 from King Abdulaziz City of Scientific Research KACST. He received three grants in 2014, 2016 and in 2018 from Deanship of Academic Research in Al Imam Mohammad Ibn Saud Islamic.
Dr. Ahmad H. Baik  
Assistant Professor  
Faculty of Environmental Designs  
King Abdul-Aziz University  
Jeddah, Saudi Arabia

The role of BIM in Education to understand architectural heritage

Bio: Arch/Dr. Ahmad Baik is Assistant Professor at King Abdul-Aziz University, Jeddah, Saudi Arabia. Holds a Ph.D. in BIM from University College London, a Masters of Geospatial Information from RMIT University, Australia, and Bachelor of Architecture from King Abdul-Aziz University. BIM specialist with progressive experience in Architecture Design, 3D laser scanning, Modelling and Simulation, Virtual Reality (VR), Augmented Reality (AR), Architecture documentation, Interior Design, and Graphics Design.

Dr. Abdullatif AlMunifi  
Associate Professor  
Civil Engineering Department  
Qassim University, KSA

Abdullatif AlMunifi has been working as an associate professor of Civil Engineering at Qassim University/KSA since he left Sana'a University/Yemen on sabbatical leave in 2014. He graduated as a civil engineer from the Aristotle University/Greece in 1987, and pursued his MSc and PhD of Earthquake Engineering and Engineering Seismology at the Imperial College / London University in 1995.

In his academic career, AlMunifi has been contributing effectively to the development of academic programs, and providing instructional and institutional support derived from his considerable past academic and industrial experiences. He has a very concrete experience relevant to higher education management, quality assurance & academic accreditation. He is an expert and trainer as well as a certified external reviewer for academic programs.

Besides academic duties, AlMunifi had been in executive management positions in the development field for ten years managing on a daily basis a portfolio of internationally and government funded education and construction projects and programs that amount to US$500 million. This position entails expert knowledge and command of planning, scheduling, budgeting, procurement, financial management, contracts administration, and other relevant administrative policies. Most important, it also demands an overall responsibility of management and coordination of a wide range of stakeholders, and participation in high-level local and international meetings and conferences. AlMunifi also has extensive experience in coordinating and delivering management and consulting services in the areas of engineering, social development, staff development, capacity building, quality assurance in higher education, and in supplying training solutions & systems.

AlMunifi's current field of research is relevant to his speciality as a civil engineer as to his accumulative experiences in academic programs development, higher education management, quality assurance, engineering education, and Construction Engineering and Management. He has attended, participated and organized national and international technical sessions, conferences, and high level meetings. He is a member of the Imperial College, the American Society of Civil Engineers, the American Construction Engineering Institute, Charter member of the American Structural Engineering Institute, and member of a number of projects steering committees and local professional societies.
Dr. Umar Mustafa Al-Turki  
Professor, Systems Engineering Department  
Former Dean, College of Computer Sciences and Engineering  
King Fahd University of Petroleum & Minerals  
Dhahran, Saudi Arabia

IEOM Curriculum Improvement in view of Saudi 2030 Vision

Umar Al-Turki is a Professor of Industrial Engineering and Operations Research in the Department of Systems at King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. He obtained his Ph.D. in Decision Sciences and Engineering Systems from Rensselaer Polytechnic Institute in 1994. He obtained M.Sc. in Industrial Engineering and Management from Oklahoma State University in 1989. He served as the Dean of College of Computer Sciences and Engineering, the director of the center of excellence in maintenance research and the head of the Systems Engineering Department. Dr. Al-Turki's research in production planning and scheduling is presented in many international conferences and published in highly prestigious international scientific journals. He is a senior member of the International Industrial Engineering Society, and a fellow and a member of the global advisory board of the Industrial Engineering and Operations Management Society International. He was involved in strategic planning for several national and international organizations in higher education and in water resource planning.

5:00 – 6:30 pm Poster Session

Wednesday, November 27, 2019

Global Engineering Education – III

8:30 – 10:00 pm, Wednesday, November 27, 2019, Room 2 - Auditorium C02

Session Chair: Nadeem Hassan, Albaha University, Kingdom of Saudi Arabia

8:30 – 8:50 (Wednesday)

Dr. Wahyudi Sutopo
Associate Professor, Department of Industrial Engineering  
Faculty of Engineering  
University of Sebelas Maret, Surakarta, Indonesia

Learning a Supply Chain Management Course by Problem Based Learning: Case Studies in the Newspaper Industry

Dr. Wahyudi is a Professional Engineer registered with Institute of Engineers Indonesia (PII). He obtained his Doctorate in the field of Industrial Engineering and Management from Institut Teknologi Bandung (Indonesia), Master of Science in Management from Universitas Indonesia and Bachelor of Engineering in Industrial Engineering from Institut Teknologi Bandung. He currently is the Head of Department of Industrial Engineering, Universitas Sebelas Maret (UNS). In UNS, he is Asset Auditor for Internal Audit Unit and Coordinator of Industrial Engineering and Techno-Economy (RITE) Research Group. He also as General Chairman of BKSTI (Agency for Cooperation of Higher Education of Industrial Engineering in Indonesia) FY 2017-2020. His research interests are Logistics & Supply Chain Management, Engineering Economy & Cost Analysis, and Technology Commercialization. He obtained 25 research grants and published 86 articles (Scopus indexed). He also has published 3 monographs and 7 book chapters. He co-supervised and graduated 1 doctorate student, supervised 7 Masters students (4 has graduated), and supervised 74 undergraduate students (67 graduated).

8:50 – 9:10 (Wednesday)

Eng. TaeYeual Yi
Lecturer, PMP®, PE, LEED®APs  
USGBC Faculty, Department of Engineering Management  
Prince Sultan University, Riyadh, KSA

Eng. TaeYeual Yi, a full-time lecturer in College of Engineering at PSU has been working as an instructor, a professional engineer, project manager and architect for about 21 years in the field of AEC industry. His main research fields, these days are BIM (Building Information Modeling) in construction management by using BIM tools such as Revit, Navisworks, ArchiCAD, Tekla Structure etc. and LEED (Leadership in Energy and Environmental Design) as Green Building strategies. Additionally, he has been studying and teaching digital algorithm design process by using Grasshopper & Dynamo in the field of architecture & interior design. Especially, he has five accredited professional LEED credentials (all LEED rating system) issued by Green Business Certification Inc., which are Building Design and Construction(BD+C), Interior Design and Construction(ID+C), Homes Design and Construction(HOMES), Neighborhood Developments(ND) and Building Operations and Maintenance(O+M). He is the 1st professional in KSA, 2nd professional in Middle East & North Africa, 34th professional in the world, who has five - all Accredited Professional Credentials in LEED Rating System. He is also a PMP®(Project Management Professional®) and PE(Professional Engineer) on the basis of his hands-on field experience in the construction management. He has been teaching various 3D Modeling tools, Siemens NX, Fusion360, AutoCAD for Production & Manufacture Area as well as Revit, Navisworks, Teklia Structure, Rhino, Sketchup for Construction & Architecture Field.
Dr. SukHee Yun
Associate Professor, Department of Architectural Engineering
Prince Sultan University
Riyadh, KSA

Dr. SukHee Yun is an Associate Professor at Prince Sultan University since 2011. She also led architectural design studios in Abu Dhabi and Dubai from 2013 to 2016. She studied at Pratt Institute for her Bachelor of Architecture, Master at GSAPP in Columbia University, NYC and received the Ph.D. degree at GSAK in Kyonggi University, Korea with an architectural design thesis on John Hejduk’s Chronotope in 2007. Her researches focus on discovering the architectural design parameters of Riyadh. Her ongoing design research projects; ‘2030 Housing Prototype of Riyadh (2017)’ ‘University Town in Riyadh: Emancipating Urban elements from Doxiadis’ Grid (2018)’ ‘The Loop, a Bottom-Up Urban Design in Riyadh, (2016)’ ‘From the Rational to the Radical; a Future Architectural Scenario for Public Transportation oriented Residential Blocks in Riyadh (2017)’ and ‘Shadows as Fence Walls (2019)’ have been presented and published in numerous international conferences and journals since 2016. Currently, she is conducting design researches on hybridity in architecture.

Nadeem Hassan, Ph.D. CS
Associate Professor of Computer Science
College of Computer Science & Information Technology
Albaha University (Main Campus)
Al-Baha, Kingdom of Saudi Arabia

9:30 – 9:50 (Wednesday)

Dr. Suhail Mohammad Ghouse
Assistant Professor of Marketing and Entrepreneurship
College of Commerce and Business Administration
Dhofar University, Oman

Dr. Suhail Mohammad Ghouse (FCIM) is an Assistant Professor of Marketing and Entrepreneurship at the College of Commerce and Business Administration, Dhofar University, Oman. His area of expertise includes marketing, entrepreneurship and international business. Suhail’s current research mainly focuses on internationalization strategy of the SMEs, entrepreneurial behavior of the GCC students, and consumer buying behavior of the Arab millennials. His research has been published in several high quality impact factor and ABDC listed research journals. He is in active research collaboration with the American, British and New Zealand researchers. He is a member of Academy of International Business (AIB), Chartered Institute of Marketing (CIM), American Council for Consumer Interests (ACCI) and Marketing Science Institute (MSI), and serves on the editorial/review boards of Inderscience and Emerald research journals. He has worked on teaching assignments in India, Kingdom of Saudi Arabia and presently in Oman

10:00 Networking/Coffee Break

10:15 Keynote: Dr. Mohammed Al-Majed, Senior Advisor to the Minister, Ministry of Industry and Mining, Saudi Arabia

11:00 Keynote: Eng. Suliman Almazroua, CEO at National Industrial Development & Logistics Program

11:45 Networking Buffet Lunch/ Dhuhr Prayer

Global Engineering Education IV: Business and Management Education
1:00 – 2:30 pm, Wednesday, November 27, 2019, Room 2 - Auditorium C02
Session Chair: Najmul Hoda, Umm Al-Qura University, Makkah Al-Mukarramah, Saudi Arabia

1:00 – 1:20 (Wednesday)

Najmul Hoda, PhD
Faculty – Department of Business Administration
College of Business
Umm Al-Qura University
Makkah Al-Mukarramah, Saudi Arabia

Business Students’ Satisfaction with the Studio Classes in Saudi Universities

Dr. Najmul Hoda is currently working as an Assistant Professor at College of Business, Umm Al-Qura University in Saudi Arabia. He is also an adjunct faculty at Institute of Islamic Banking and Finance, India. He earned his doctorate in microfinance, and is passionate about research in social banking. Dr. Hoda has been associated with business education for more than a decade. He has been actively coordinating quality assurance services at his present institution, serving as a member of the various committees for quality and accreditation. He holds the honor of being the founder head of the quality and accreditation unit at the college and is the main coordinator for the institutional and program accreditation with AACSB and EFMD. He has been effectively using technology tools for quality teaching and has been conducting research on the effectiveness of technology in learning. He also possesses rich experience at managerial level in the banking and finance industry. He has worked as an Assistant Manager with The Federal Bank at its various branches in India, where he had the opportunity to be posted at the corporate and international banking branch. Later, he also worked as a Director in a start-up microfinance institution named Sahulat Microfinance in India. He was able to set-up a research unit, publish a quarterly journal, conduct two recruitment campaigns and organized several training sessions on interest free microfinance and general microfinance operations across the country. He has published
several articles in international peer-reviewed journals and conferences. He is also a member of review board for several international journals. His case study on Islamic Microfinance was published in “Islamic Microfinance: Shari’ah Compliant and Sustainable?” a book edited by Prof Malcolm Harper. His doctoral dissertation was published as a book titled, “Faith-based Microfinance: An Alternative Tool of Poverty Alleviation”. He is also a mentor for the Nottingham Advantage Award module on Global Mentorship Program (NAA-GMP) of Nottingham University UK and Idea Gist, a US based virtual incubator.

1:20 – 1:40 (Wednesday)

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

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) from 1 September 2016 and Head of Program Bachelor of Technology Management (Furniture Design and Manufacturing) with Honours from 2014 until 2017. Before this he was the Deputy Dean (Research and Development) at the Faculty of Technology Management and Business in the Universiti Tun Hussein Onn Malaysia from 2008 until December 2011. Dr. Abdul Talib Bon has had over 30 year experience of teaching in higher learning education. A major part of his teaching experience involves teaching mechanical engineering students in polytechnics. However, from the year 1999, he was given the opportunity to be jointed in the Institut Teknologi Tun Hussein Onn (ITTHO), Universiti Teknologi Malaysia as a lecturer in Mechanical Engineering Department. In this institute, he teaches engineering management and quality control at the under-graduate level. Dr. Abdul Talib Bon has multidisciplinary research interests that encompass industrial engineering, quality management and production and operation management. His completed 17 research grant projects as project leader include applications of forecasting in industries. His current research project is looking into developing process quality improvement (PQI) in manufacturing industries. He has supervised more than 90 undergraduate and postgraduate research projects. He has served as a reviewer for a number of engineering management and computer science conferences and journals as part of his expertise sharing initiatives. He had published more than 200 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).

1:40 – 2:00 (Wednesday)

Dr. Samar S. Khan
Dean
Effat College of Business
Effat University
Jeddah, Kingdom of Saudi Arabia

Dr. Samar S. Khan is an aspiring Saudi woman who lives by the creed that one should strive to serve a higher purpose by going above and beyond the call of duty. Born in 1983, Dr. Samar received all of her schooling in the Kingdom of Saudi Arabia and earned her Bachelor’s degree in English Literature from King Abdul-Aziz University. After graduating, she decided to pursue her Master’s degree in Economics and Administration from Nottingham Business School at Nottingham Trent University. As she continued living in the UK, she discovered her passion for economics and administration, so she decided to pursue her PhD degree in Energy Security and Renewable Energy from business perspective at the same university. Currently, Dr. Samar is an assistant professor in entrepreneurship department and Dean of College of Business at Effat University. She is a member in AASCB Middle East advisory committee.

Dr. Abdulaziz T. Almaktoom, CSCA
Assistant Professor
Department of Operations and Information Management
Effat University, Jeddah, Saudi Arabia

Abdulaziz T. Almaktoom is an assistant professor in the Department of Operations and Information Management at Effat University, Jeddah, Saudi Arabia. He earned his PhD in Industrial Engineering from Wichita State University. Dr Almaktoom is a certified supply chain analyst. He has published journal and conference papers and his research interests include supply chain management and logistics, optimization under uncertainty, reliability based robust design optimization, resilience based design optimization, and lean supply chain management. He is a member of IIE, IEOM, INFORMS, CSCMP, ASQ, ISCEA and SME.
2:00 – 2:20 (Wednesday)  

Dr. Prakash Kumar Udupi, FIE  
Faculty, Program Manager and Centre for Post Graduation Studies  
Middle East College, Muscat, Sultanate of Oman  

Developing Lean Academic Initiatives for Flipped Teaching  

Dr. Prakash Kumar Udupi is currently a Faculty, Program Manager and facilitate the delivery, conduct overall management of the academic programmes at Centre for Post-Graduation Studies, Middle East College, Muscat, Sultanate of Oman. Prof. Prakash is the Fellow of Institutions of Engineers (India) and has many years of teaching, research, training, industrial and administrative experiences in higher education. He is a designated Chartered Engineer from IEI for professional engineering practices and also a life member of QCFI (Quality Circle Forum of India). In order to enhance teaching and learning experiences in higher education institutes and as a world class trainer on ICT, project management tools Dr. Prakash organized many tailor made research, ICT and project management specific workshops for under graduate and post graduation students. He also conducted many workshops under Faculty Development Programmes and Management Development Programmes. He presented and published many papers in international conferences and journals. He is also a visiting faculty, external examiner and jury member of various institutes and universities. Prof. Prakash also involved in various research activities related to interactive learning, flipped learning and project based learning.

Global Engineering Education – V: Industrial Engineering Education  
3:00 – 4:30 pm, Wednesday, November 27, 2019, Room 2 - Auditorium C02  
Panel Chair: Dr. Hesham K. Alfares, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

3:00 – 3:20 (Wednesday)  

Dr. Hesham K. Alfares  
Chairman and Professor  
Systems Engineering Department  
King Fahd University of Petroleum & Minerals  
Dhahran, Saudi Arabia  

Recent Trends in Industrial Engineering Education  

Hesham K. Alfares is Chairman and Professor in the Systems Engineering Department at King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia. He has a PhD in Industrial Engineering from Arizona State University. He has more than 110 publications, including 56 journal papers and a U.S. patent. Dr. Alfares has been as a visiting scholar at MIT and the University of North Carolina in the USA, in addition to four universities in the UK. He won one research grant from the US Fulbright Foundation, and four grants from the British Council. He won the Almarai Prize for Scientific Innovation in Industrial Engineering. He has been a member in the editorial boards of three international journals and in the program committees of 30 international conferences.

3:20 – 3:40 (Wednesday)  

Dr. Abdelhakim Abdelhadi  
Associate Professor  
Department of Engineering Management  
College of Engineering  
Prince Sultan University, Riyadh, Saudi Arabia  

Clustering Engineering Students into Groups According to their Learning Style  

Dr. Abdelhakim Abdelhadi is an Associate Professor at the College of Engineering at Prince Sultan University-Saudi Arabia. Dr. Abdelhadi received his Ph.D. in Industrial and Manufacturing Engineering from University of Wisconsin –USA in 2010, M.S., in Industrial Engineering from University of Jordan, and his B.Sc. in Civil Engineering from University of Jordan, Jordan. He has 12 years of industry experience and more than 18 years of academic experience. His research and teaching interest include group technology, maintenance scheduling and lean manufacturing. He is a fellow of the higher education academy, FHEA. Recently Dr. Abdelhadi published several researches in engineering education and authored an introduction in engineering economy book in Arabic Language.

3:40 – 4:00 (Wednesday)  

Dr. Ajrina Hysaj  
Lead English Language Instructor and Curriculum Designer  
Academic Study Skills Lead Instructor  
UOWD College  
University of Wollongong in Dubai  
Dubai, UAE  

Analysing the Correlation between Tutors’ Support and Undergraduate Engineering Students’ Academic Satisfaction  

Lead English Language Instructor, Academic Study Skills Coordinator and Curriculum Designer, UOWD College, University of Wollongong in Dubai. Ajrina is an advocate of continuous research in the field of education, culture and student mentoring. Her qualifications include BA in Language and Literature (Distinction) from Tirana University, Albania, CELTA (Certificate of English Language Teaching in Adults) from Cambridge University, UK, Master in Education from Murdoch University, Perth, Australia and Graduate Certificate in Teaching and Learning at Higher Education, Swinburne University, Australia. She is currently pursuing her Ph.D. in Education with University of Malaysia, Perlis, Malaysia. Mrs. Hysaj currently teaches Academic Study Skills to undergraduate students, design academic study
skills curriculum and coordinates all the academic study skills levels. She has been teaching English Language for more than a decade and is well equipped with the skills and knowledge to teach Academic, General and Business English at all levels.

Her approach to teaching is holistic and focuses on creating an inclusive, motivating, intriguing and nurturing classroom environment that maximises personal and academic growth. She is also keen on developing the interest of students to pursue further research in the areas of education, culture and multilingualism. Prior to relocating to the UAE in 2000, she has worked as a Curriculum Developer of ESL books in her native country. Mrs Hysaj’s research interests include Efficiency of Feedback Methods in Academic Writing in Tertiary Education, Students and Instructors Mentoring Needs and Methods of Effective Communication in Multilingual and Multicultural classrooms.

Qualifications:
Ph.D. Candidate – University Malaysia Perlis, Perlis, Malaysia
M.ED – Murdoch University, Perth, Australia, 2014-2015
CELTA-Certificate of English Language Teaching to Adults, Cambridge, UK, 2008
BA– Language and Literature, University of Tirana, Tirana, Albania, 1996-2000

7:00 – 10:00 pm, Wednesday - Conference Awards Dinner
Thursday, November 28, 2019

Global Engineering Education – VI
8:30 – 10:00 pm, Thursday, November 28, 2019, Room 2 - Auditorium C02
Session Chair: Dr. Mohammad Ali Kadampur, Al-Imam Muhammed bin Saud Islamic University, Riyadh, Saudi Arabia

8:30 – 8:50 (Thursday)
Mohammad Nawab
Faculty, Civil Engineering
College of Engineering
Shaqra University
Dawadmi, Ar Riyadh
Saudi Arabia

8:50 – 9:10 (Thursday)
Dr. Fady S. Alnajjar, PhD.
Head of AI and Robotics Lab
Assistant Professor
Department of Computer Science and Software Engineering
College of Information Technology (CIT)
United Arab Emirates University
Al Ain, UAE

Title: An Autonomous Attention Assessment System for Smart Classroom
Bio: Dr. Fady received his MSc in Artificial Intelligence and his PhD in System Design Engineering at the University of Fuku, Japan in 2007 and 2010, respectively. Since 2010, Dr. Fady worked as a research scientist at Brain Science Institute (BSI), RIKEN, Japan. He conducted neuro-robotics study to understand the underlying mechanisms for embodied cognition and mind. From 2012, he started an interest in exploring the neural mechanisms of motor learning, adaptation, and recovery after brain injury from the sensory- and muscle-synergies perspectives. His research target is to propose an advance neuro-rehabilitation application for patients with brain injuries. Since 2016, he joined a three-year joint research group, including Nagoya University-Japan, and the University of Michigan-USA, to develop a bio-inspired prosthetic arm. From 2018, he became the director of AI and Robotics Lab at UAE University.
Dr. Hamdi Hassen
Assistant Professor
Department of Computer Science
College of Science and Arts at Al-Ola
Taibah University
Medina, Saudi Arabia

Improving Performance of Robust and Efficient E-Learning Platform using Distributed Computing Technologies for Saudi Arabia institute

Hamdi Hassen received his Master of computer Science, and Ph.D. degrees, respectively, from the University of Safx (Tunisia), in 2009 and 2016. He is currently assistant Professor of Computer Science at the Faculty of Science and Arts at Al-Ola, Taibah University, Saudi Arabia and a member of the MIRACL Multimedia, InfoRmation Systems and Advanced Computing Laboratory. His research interests include Arabic OCR, distributed systems, performance analysis, and networks security.

Dr. Mohammad Ali Kadampur
Assistant Professor
Department of Information Management
College of Computer; Information Science
Al-Imam Muhammed bin Saud Islamic University
Riyadh, Saudi Arabia

Facilitating the Educator through academicutilities.com: Design and Development

Dr. Mohammad Ali Kadampur is an Assistant Professor in the Department of Information Management, in the College of Computer and Information Sciences, Al Imam Muhammed Ibn Saud Islamic University, Riyadh, KSA. He earned his Bachelor of Engineering degree in Electronics and Communication Engineering, Master of Technology in Computer Science and Engineering from National Institute of Technology Surathkal, India, and Ph.D in Computer Science and Engineering from National Institute of Technology, Warangal, India. He has over 20 years of academic and industrial experience and has executed several grant projects in his career serving in different positions. He has published over 35 research papers in leading International journals including Springer, Inderscience and Elsavier publishers. His current research interests are web engineering, e-learning and deep learning applications. He is a member of ACM and serving as reviewer and editor in many International Journals.

10:00 Networking/Coffee Break

10:15 Keynote: Dr. Surendra M. Gupta, Professor of Mechanical and Industrial Engineering, Director of Laboratory for Responsible Manufacturing (LRM), Northeastern University, Boston, Massachusetts, USA

11:00 Keynote: Eng. Saleh I Al-Shaban: President Haffaz Industrial & Management Consultants, Riyadh, Saudi Arabia

11:45 Networking Buffet Lunch/ Dhur Prayer

Global Engineering Education – VII
1:00 – 2:30 pm, Thursday, November 28, 2019, Room 2 - Auditorium C02
Session Chair: Dr. Sayyad Zahid Qamar, Sultan Qaboos University, Al-Khodh 123, Muscat, OMAN

Dr. Tayeb Brahimi
Assistant Professor
Electrical and Computer Engineering Department
Effat University
Jeddah, Kingdom of Saudi Arabia

Learning Outside the Classroom: From MOOCs to Makerspace

Dr. Tayeb Brahimi, Assistant Professor at the Department of Electrical and Computer Engineering (ECE), at Effat University, Jeddah, KSA, received his Ph.D. (1992) and Master Degree (1987) from Ecole Polytechnique, University of Montreal, Canada. He has worked as Research Scientist under Bombardier Chair/Canadair from 1992 to 1998. In 1998, he joined Jeppesen DataPlan in California, then Peregrine System (acquired by Hewlett-Packard in 2005), in Concord (CA), as a Technical Support Analyst. Then, as Quality Assurance Engineer and Consultant for Electronic data interchange (EDI) commercial software in Dallas, Texas, providing strategic support, guidance and technical resolution of problems related to EDI, ESD, and online web applications. Dr. Tayeb Brahimi is internationally recognized for his contribution to the development of teaching and research programs between university and government Institutions. He received internationally recognized awards and performed a leading role for a distinguished institution (Bombardier Chair/University of Montreal). He has been a consultant at IONPARA Inc. for wind energy and aeronautics. He published more than 80 articles in scientific journals, international conferences, and internal technical reports on novel methodologies of teaching and learning, renewable energy and sustainability, machine learning. Among other activities, Dr. Tayeb Brahimi is reviewer for many international journals, invited speaker by the Japan Society of Mechanical Engineering, Japan Turbo machinery Association (Ishikawajima-Harima Heavy Industries, Tokyo), The Gulf Educational Conference as well as the International Conference on Engineering Education & Research (FICCEER2015). He also participated in Public Debate on Energy organized by the Government of Quebec, Canada (Public Debate on Energy). Current research interest relates to renewable energy (solar, wind, wave, and waste to energy), sustainability, data mining, the use of technology to support learning, Engineering education, MOOCs, and Makerspace. Other areas of interest include social aspect of wind energy, testing and quality assurance, knowledge management, and integrating Islamic innovative heritage into the STEM.
1:20 – 1:40 (Thursday)

Dr. Mohd Soperi
Associate Professor
Computer and Information Science Department
Universiti Teknologi PETRONAS (UTP), Perak, Malaysia

Machine Learning Education in Malaysia

Mohd Soperi is currently an Associate Professor in Computer and Information Science department at Universiti Teknologi PETRONAS (UTP). Before that he served as a faculty member at Universiti Teknologi Malaysia (UTM) from 1995 until 2017. He has been a member of the Malaysian Board of Technology (MBOT) as Professional Technologist since 2018. His research interests include Internet routing protocols, Opportunistic Network forwarding schemes, Software Defined Networks Failure Recovery and ECG Analysis with machine learning methods. He has published several journals and conference papers in these areas. Mohd Soperi has a Bachelor degree in Mathematics and Computer Science from New Mexico State University, a Master degree in Computer Integrated Manufacturing from Rochester Institute of Technology and a PhD in Computer Science from University of Wisconsin Milwaukee, USA.

1:40 – 2:00 (Thursday)

Dr. Sabah Al-Fedaghi
Associate Professor
Computer Engineering Department
Kuwait University, Kuwait

2:00 – 2:20 (Thursday)

Dr. Sayyad Zahid Qamar
Mechanical and Industrial Engineering Department, College of Engineering
Sultan Qaboos University, Al-Khodh 123, Muscat, OMAN

Dr. Zahid Qamar, Sayyad is currently associated with the Mechanical and Industrial Engineering Department, Sultan Qaboos University (SQU), Muscat, Oman. He has over 20 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). On top of his experience as a researcher/academician, he has been actively involved in research and accreditation work related to engineering education. His technical 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 over 20 research funded projects in excess of 4 million dollars. He has around 200 research/technical publications to his credit (2 research monographs / books, 2 edited book volumes, 5 book chapters, 145 publications in refereed international journals and conferences, and 32 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, American Journal of Mechanical and Industrial Engineering).

Dr. Tasneem Pervez
Professor in the Department of Mechanical and Industrial Engineering
College of Engineering,
Sultan Qaboos University (SQU)
Muscat, Oman

Dr Tasneem Pervez is currently working as Professor in the Department of Mechanical and Industrial Engineering, Sultan Qaboos University (SQU). Received Ph.D. degree in Mechanical Engineering from University of Minnesota, USA in 1991. Served as Head of the Department and Assistant Dean for Postgraduate Studies and Research in SQU as well as other universities. Actively engaged in research and consulting work with various national and international organizations including Petroleum Development Oman, EGT, Swellfix, Ruma Rubbers, Brinkers, Maersk Oil Qatar, and PROTON, TNRD, AIROD, PERODUA and TNB of Malaysia. Current research interests are in Solid Expandable Tubulars, Swelling Elastomers, Composite Materials, Computational Mechanics, Computer Aided Engineering Analysis and Engineering Education. A part from teaching, research and consultancy, I have also actively participated in developing new engineering programs and accreditation of different engineering programs by ABET, a US accreditation agency.
Dr. Mahmood Al-Kindi
Associate Professor and Head
Mechanical and Industrial Engineering Department (MIED)
Sultan Qaboos University (SQU), Muscat, Oman

Dr. Mahmood Al-Kindi is an Associate Professor and Head of the Mechanical and Industrial Engineering Department (MIED), Sultan Qaboos University (SQU), Muscat, Oman. He is also Co-Director of the Academic Innovation Program at SQU. He has a PhD in systems and entrepreneurial engineering from University of Illinois in the USA. His research interests are in innovation, decision analysis, inventory management, and optimization.

ID 309 Engineering Education: Challenges, Opportunities, and Future Trends
Sayyad Zahid Qamar, Tasneem Pervez and Mahmood Al-Kindi, Department of Mechanical and Industrial Engineering, Sultan Qaboos University, Muscat, Oman

2:30 – 3:00 Networking/Coffee Break/Asr Prayer

Global Engineering Education – VIII
3:00 – 5:00 pm, Thursday, November 28, 2019, Room 2 - Auditorium C02
Session Chair: Prof. Sufian A. Forawi, British University in Dubai, United Arab Emirates

3:00 – 3:20 (Thursday)
Prof. Sufian A. Forawi
Professor of Science Education
British University in Dubai
United Arab Emirates

ID 324 Meaningful STEM Education Frameworks

Sufian A. Forawi is currently a professor of science education at the British University in Dubai. Prof. Sufian obtained an Ed.D. in Science Education from the University of Massachusetts Lowell, Massachusetts, USA. He obtained a bachelor degree in Biology from the University of Alexandria, Egypt and a master's degree in Education from Omdurman Islamic University, Sudan. His area of expertise spans through topics of the nature of science, STEM, school improvement, assessment & evaluation, and critical and creative thinking. He was awarded the distinguished US Fulbright scholar exchange at the UAE University. Prof. Sufian has many years of teaching and administrative higher education and high school experience. He has been supervising many master’s and doctoral students. He is a member of several science education organizations such as the National Association of Research on Science Teaching (NARST) and the European Science Education Research Association (ESERA). He was the editor of the International Journal of Excellence in eLearning (UAE) and the Missouri Academy of Science-Science Education (USA). He has published widely in peer-reviewed journals and participated in book publications. He has reviewed different research manuscripts, book chapters, grant proposals and promotion applications. He has a strong external grant record, e.g. NSF and Ohio State Department of Education and the Emirates Foundation.

3:20 – 3:40 (Thursday)
Dr. Amal Abbas Abdelsattar
Assistant Professor
Department of Architecture
College of Engineering
Prince Sultan University
Riyadh, Saudi Arabia

Active Learning in Engineering Education

Dr. Amal is currently working as an Assistant Professor at the College of Engineering, Prince Sultan University. Dr. Amal has received her Ph.D. in Environmental Engineering, from Ain Shams University, Egypt. She received her Master degree in construction management and her Bachelor in Civil Engineering from Cairo University, Egypt. She is a Fellow of the UK Higher Education Academy. She worked in the field of Geographic Information System and Remote Sensing applications for 12 years. Dr. Amal research interests include structural engineering, environmental engineering, and Higher education teaching and learning. Recently Dr. Amal published several researches in engineering education.

3:40 – 4:00 (Thursday)
Dr. Wafa Labib
Assistant Professor
Department of Architecture
College of Engineering
Prince Sultan University
Riyadh, Saudi Arabia

Architectural students learning styles and their implications for teaching
Dr. Wafa Labib has MSc in Structural Analysis form University of Jordan, Jordan. She then worked for two years at a reputable engineering company in Dubai as Structural Engineer. Then she joined Liverpool John Moores University, UK as a researcher in the area of sustainability and environmental issues. Dr. Wafa was awarded her PhD in structural Engineering from Liverpool John Moores University, UK in 2008. The title of her thesis is “An Experimental Study and Finite Element Analysis of Punching Shear Failure in Steel Fibre-reinforced Concrete Pile-supported Floor Slabs”. Dr. Wafa went on to become a lecturer in the Islamic Azad University and then an Assistant Professor in Bolton University. In 2012, she joined Prince Sultan University (PSU). She has 10 years of experience teaching structural analysis and structural design modules to Architectural, Civil and Interior Design students. In 2015, she became a Fellow of the Higher Education Academy (HEA) UK. Research Interest: Fibre Reinforced Concrete; Concrete Properties; Finite Element Analysis; Plant-based Natural Fibres; Engineering Education

4:00 – 4:20 (Thursday)

Dr. Ali Rizwan
Assistant Professor
Department of Industrial Engineering
King Abdulaziz University
Jeddah, Saudi Arabi

Title of the Talk: Impact of Instructor’s Emotional Intelligence on the Academic Performance of Students

Dr. Ali Rizwan is an international trainer of human success. He is an Assistant Professor in the Industrial Engineering Department at King Abdul Aziz University Jeddah, Saudi Arabia. He is a Consultant in the Centre of Excellence for the Alignment of Educational Outcomes with Labour Market Needs (CEOLM), at King Abdulaziz University, Saudi Arabia. He is an Adjunct Faculty Member at the University of Engineering and Technology, Taxila, Pakistan. He has a PhD in Engineering Management with specialization in Knowledge Management and Educational Leadership. He is passionate about emotional intelligence, human success, personality refinement, pedagogy, and quality enhancement. He is a Career Counsellor of JJIG-CAL, Australia in Pakistan. He has published numerous research articles in ISI-JCR and Scopus indexed journals. He has authored a chapter in a book besides reviewing multidisciplinary research papers, book chapters and adjudicated researches. He has been extensively involved in supervising post graduate and undergraduate researches in the fields of Emotional Intelligence, Student Learning, Pedagogy, Human Development, Knowledge Management, Organizational Development, and Quality Enhancement. In more than two decades of teaching, research and training experience, Dr. Ali has offered Professional Development Trainings to senior executives, middle management and working professionals around the globe. He is a pioneer of an Inside-Out Approach that prevents extremist and radical mind-set among thousands of youth in one of the most volatile regions of the world. He is providing individual counselling and mentoring for more than 20 Years. He is an author, social activist and member of different humanitarian organizations. Dr. Ali is frequently invited as a guest speaker by the prestigious public and private sector organizations. He is a member of Pakistan Engineering Council and Co-founder of Knowledge Kottage.
PARALLEL SESSIONS

November 26, 2019 (Tuesday)

9:00 am – 9:30 am, Tuesday: WELCOME ADDRESS

Dr. Ahmed S. Yamani
Rector, Prince Sultan University
Riyadh, Saudi Arabia

9:30 am – 10:15 am, Tuesday: OPENING KEYNOTE I

H.E. Eng. Osama Al Zamil
Deputy Minister at Ministry of Industry and Mineral Resources
Saudi Arabia

10:10 am – 11:00 am, Tuesday: OPENING KEYNOTE II

Dr. Andreas Schwer
CEO
Saudi Arabian Military Industries-SAMI

11:00 am - 11:15 am: Networking Break

11:15 – 12:15 Keynote:

Dr. Sami Alnuaim
President of the Society of Petroleum Engineers International

12:15 – 1:30 Networking Buffet Lunch/ Dhuhr Prayer

Simulation Competition – IEOM Gulf Student Simulation Competition
Lab G-A11: Tuesday from 3 PM to 11 PM (students can stay late)
Wednesday from 3 PM to 6 PM
Winners Announcement at the Awards Dinner

Teams Passed Second Stage and Selected for the Final Stage of the Competition
Abdullah alothman, King Abdulaziz University
Mohammad Ghannam, King Fahd University of Petroleum & Minerals
Arwa Salem, King Abdulaziz University
Linda Freih, King Abdulaziz University
Awaa Jamal Banabilah, King Abdulaziz University
Emad Hasan Bin Suwden, Prince Sultan University
Firas Abdo, Prince Sultan University
Osama Bha Aldeen, Prince Sultan university
Abdullah Al-Bassam, King Abdulaziz University
Abdullah Mushayt, King Abdulaziz University
Sultan Bafageeh, King Abdulaziz University
Muaaz Adra, American University of Sharjah
Khaled Altamimi, King Fahd University of Petroleum & Minerals
Abdulrahman Alaboudi, King Fahd University of Petroleum & Minerals
Nuha Aloud, Princess Nourah University
Reem Aseeri, Princess Nourah University
Ammar Alobaid, Prince Sultan University
Abdelaziz Ben Khadra, American University of Sharjah
### Session – Tuesday (November 26): 1:30 – 3:00 pm

<table>
<thead>
<tr>
<th>1:30 – 3:00, TUESDAY</th>
<th>PANEL SESSION: Tracks: Industrial &amp; Manufacturing</th>
<th>Room 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel Chair – Dr. Mohammed Al-Majed</td>
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</tbody>
</table>
| **Dr. Mohammad Alkahtani**  
Chief Technology Officer  
Saudi Arabian Military Industries (SAMI) |
| **Dr. Hamad Alyousefi**  
CEO/DST: TAQNIA  
Defense and Security Technology (DST) |
| **Eng. Ziad Al Mulsallam**  
EVP Engineering & Operation  
Advanced Electronics Company |

<table>
<thead>
<tr>
<th>1:30 – 3:00, TUESDAY</th>
<th>Global Engineering Education I</th>
<th>Room 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Chair: Dr. Sidi M Ahmed Ghaly, Al Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi Arabia</td>
<td></td>
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</tr>
</tbody>
</table>

**1:30 – 2:00 (Tuesday)**

| Dr. Anwar Ali Yayah Esmail  
Associate Professor of Artificial Intelligence, Computer Science Department  
Najran University, Saudi Arabia |

**Knowledge Discovery in Engineering Education: Mining Association Rules from Engineering Programs’ Data**

**2:00 – 2:30 (Tuesday)**

| Dr. R.D. Senthilkumar  
Associate Professor, Department of Mathematics and Applied Sciences  
Middle East College, Al Rusayl, Sultanate of Oman |

**Designing Dynamic Education for the 21st Century Students**

**2:30 – 3:00 (Tuesday)**

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

**Writing and Assessing Measurable Learning Outcomes of Engineering Program**

<table>
<thead>
<tr>
<th>1:30 – 3:00, TUESDAY</th>
<th>Industry 4.0</th>
<th>Room 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Chair: Dr. Mahmoud Alhader, Al Ain Distribution Company, Al Ain, United Arab Emirates</td>
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</tr>
</tbody>
</table>

**1:30 – 2:00 (Tuesday) November 26, 2019**

| Ilya Simonov  
World Trade Center  
Manama, Kingdom of Bahrain |

**Leading expert in the development and integration of virtual and augmented reality content and supervisor of end-to-end VR and AR projects**

**2:00 – 2:30 (Tuesday)**

| M Chairul Basrun Umanailo  
Department of Agricultural and Forestry  
University of Iqra Buru, Namlea, 97571, Indonesia |

**ID 326 Structure of Social Change in Industrial Society**

**M Chairul Basrun Umanailo, Department of Agricultural and Forestry, University of Iqra Buru, Namlea, 97571, Indonesia**

**2:30 – 3:00 (Tuesday)**

| Dr. Mahmoud Alhader  
Asset Information Section Head  
Al Ain Distribution Company  
Al Ain, United Arab Emirates |

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First GCC Conference  
28
1:30 – 3:00, TUESDAY  
**Environmental and Sustainability  
Room 5**  

Session Chair: Hadeer Aboelnagah, Prince Sultan University, Riyadh, KSA

**ID 213** Infrastructure Deficiency and Economic Performance in some selected West African Countries  
Abdulsalam S. Ademola and Abdullahi Badiru, Department of Economics and Development Studies, Federal University Dutsinma, Nigeria

**ID 151** A review on cementitious building materials reinforced with date palm fibres  
Wafa Labib, Assistant Professor, Architecture Department, College of Engineering, PSU, KSA

**ID 278** Agile capabilities as necessary conditions for maximising sustainable supply chain performance: empirical evidence from oil and gas industry  
Yahaya Yusuf and Dan’Asabe Godwin Geyi, Lancashire School of Business and Enterprise, Preston PR1 2HE, United Kingdom

**ID 008** Analysis of the Progress in the Implementation of the SDGs in Saudi Arabia  
Misaa Alkhayyat, Master student, Renewable Energy Engineering Effat University Jeddah, Saudi Arabia  
Maram Alqathami, Master student, Renewable Energy Engineering Effat University Jeddah, Saudi Arabia  
Tayeb Brahimi, Assistant Professor, Electrical and Computer Engineering Effat University Jeddah, Saudi Arabia

**ID 210** Bamboo Bandals for the River Bank Erosion Protection  
Md. Lutfur Rahman, Director, Hydraulic Research Directorate, River Research Institute, Faridpur-7800, Bangladesh

**ID 265** Carbon Emissions and Energy Balance in the Design of a Sustainable Food Waste Network Model  
Adel W. Fadhel, Department of Systems Engineering, King Fahd University of Petroleum and Minerals, Dhahran, 31261, Saudi Arabia  
Surendra M. Gupta, Department of Mechanical and Industrial Engineering, Northeastern University, Boston, Massachusetts 02115 U.S.A.

**ID 112** Collaborative Learning in Practice; Enhancing Students’ Involvement in Sustainability and 2030 Transformational Plan: PSU Go Green Campaign as an Example  
Hadeer Aboelnagah, College of Humanities, Prince Sultan University, Riyadh, KSA  
Walaa Metwally, Architectural Engineering Program, Prince Sultan University, Riyadh, KSA

**ID 101** Keeping Our Shores Clean; How to Move Towards a Safe Offshore Oil Industry in 21st Century  
Misbah Saboohi, College of Law, Prince Sultan University, Riyadh 11586 KSA

**ID 222** Improving Quality in Higher Education: Considering Surrounding Factors  
Suleman Alammary & Bandar A. Alkhayyal, Dept. of Engineering Management, Prince Sultan University, Riyadh, Saudi Arabia

**ID 032** In Quest of Performance Measures’ Golden Thread: A Case Study in Saudi Oil Company  
Abdullah Aldhafer, Michael Bourne, and Monica Franco-Santos, School of Management, Cranfield University, Bedford MK43 0AL, UK

**ID 224** Mathematical Modeling of Microbial Growth in Tilapia Sausage  
Eddy Afrianto, Department of Fishery, Faculty of Fishery and Marine Sciences, Universitas Padjadjaran, Indonesia  
Subiyanto, Department of Marine Science, Faculty of Fishery and Marine Sciences, Universitas Padjadjaran, Indonesia  
Pramono Sidi, Department of Mathematics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia  
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

**ID 260** Measurement of Employees Resistance to Change using Balanced Scorecard: A Case Study of the Central Correspondence Department at Jeddah Municipality  
Mostafa F. Fawzy, Industrial and Systems Engineering Department, University of Jeddah, Jeddah, Saudi Arabia

**ID 014** Modelling and Mapping University Business Processes  
Bachtiar H. Simamora, Bina Nusantara University, Jakarta Barat, Indonesia

**ID 158** Overview and Applications of the Integrated Approaches of Maintenance and Process Quality Control  
Mohammed A. Nomani1,2, Adel AL-Shayea3, Emad Aboelu Nasr1,3, Abdulaziz M. El-Tamimi1, and Husam Kaid1  
1Industrial Engineering Department, College of Engineering, King Saud University, Riyadh 11421, Saudi Arabia  
2Industrial Engineering Department, College of Engineering, Taiz University, Taiz, Yemen  
3Faculty of Engineering, Mechanical Engineering Department, Helwan University, Cairo 11732, Egypt

1:30 – 3:00, TUESDAY  
**Operations Management  
Room 6**

Session Chair: Mostafa F. Fawzy, University of Jeddah, Jeddah, Saudi Arabia

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2Industrial Engineering Department, College of Engineering, Taiz University, Taiz, Yemen  
3Faculty of Engineering, Mechanical Engineering Department, Helwan University, Cairo 11732, Egypt

1:30 – 3:00, TUESDAY  
**Undergraduate Student Paper Competition  
Room 7 (Faculty Lounge)**

Session Chair: Judging Committee Chair

**ID 198** A multi-period inventory replenishment policy for ATM network  
Abdullah Alsagoor, Abdulrahman Alharbi, and Mohammad A. M. Abdel-Aal, Systems Engineering Department, King Fahd University of Petroleum and Minerals, 5063, Dhahran 31261, Saudi Arabia

**ID 125** Identifying Enablers of Supply Chain Alignments  
Abrar A. Alsharif and Abdulaziz T. Almaktoom, Department of Operations and Information Management, Effat University, Jeddah, Saudi Arabia

**ID 051** Tunelling Automated Guided Vehicle Mobility Optimization by Using Taguchi Method  
Amizi Noor, Sha’ri Mohd Yusof, Khairul Rijal Jamaludin, Razak Faculty Of Technology And Informatics, Universiti Teknologi Malaysia, Kuala Lumpur

3:00 – 3:30: Networking Break
Session – Tuesday (November 26): 3:30 – 5:00 pm

**3:30 – 5:00, TUESDAY**  
**PANEL SESSION: Tracks: Transport and Logistics**  
**Room 1**

Panel Chair – Eng. Khalid Alghamdi

**Dr. Meshal Almofadhi**  
Logistics Consultant  
Saudi Industrial Development Fund – SIDF

**Mr. Abdulrahman Al-Mubarak**  
Chief Ground Handling Officer  
Saudia Cargo

**Mr. Rayan Qutub**  
CEO  
King Abdullah Port

**Khalid Albakry**  
CEO  
Baas International Group

**3:30 – 5:00, TUESDAY**  
**Global Engineering Education II**  
**Room 2**

Session Chair: Dr. Umar Mustafa Al-Turki, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

3:30 – 3:50 (Tuesday)

**Dr. Ahmad H. Baik**  
Assistant Professor  
Faculty of Environmental Designs  
King Abdul-Aziz University, Jeddah, Saudi Arabia

The role of BIM in Education to understand architectural heritage

3:50 – 4:10 (Tuesday)

**Salah Elaskari, Ph.D., IWE, P.Eng.**  
IE Accreditation Coordinator  
Assistant Professor, Industrial Engineering Department  
Faculty of Engineering  
University of Tabuk, Saudi Arabia

Reverse Engineering and 3D Printing Technology: A Case Study

4:10 – 4:30 (Tuesday)

**Dr. Abdullatif AlMunifi**  
Associate Professor  
Civil Engineering Department  
Qassim University, KSA

4:30 – 5:00 (Tuesday)

**Dr. Umar Mustafa Al-Turki**  
Professor, Systems Engineering Department  
Former Dean, College of Computer Sciences and Engineering  
King Fahd University of Petroleum & Minerals  
Dhahran, Saudi Arabia

IEOM curriculum improvement in view of Saudi 2030 vision

**3:30 – 5:00, TUESDAY**  
**Industry 4.0 / Industry Solutions II**  
**Room 3**

Session Chair: Ahmed Alghamdi, Director of Quality and Internal Audit & Program Manager, Riyadh, Saudi Arabia

3:30 – 4:00 (Tuesday)

**Majed Alsabiee**  
Mechanical/Manufacturing Engineer

PLM and Digital Manufacturing and Factory
4:00 – 4:30 (Tuesday)

Ahmed Alghamdi
Director of Quality and Internal Audit & Program Manager
Riyadh, Saudi Arabia

4:30 – 5:00 (Tuesday)

Dr. Rahmat Nurcahyo
Industrial Engineering Department, Faculty of Engineering
Universitas Indonesia, Depok, 16424, Indonesia

ID 102 Designing Quality Assurance System Using Gap Analysis Method on Automotive Spare Parts Company
Rahmat Nurcahyo, Maga Arsena, and Muhammad Habiburrahman, Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, 16424, Indonesia

3:30 – 5:00, TUESDAY Energy and Water Room 5

Session Chair: Leher Farooq, United Arab Emirates University, Al Ain, Abu Dhabi, UAE

ID 019 A hybrid Wind - Solar Power System for Remote areas of Saudi Arabia
Mashael Rajeh and Ahmed Bensenouci, Electrical and Computer Engineering Department, Effat University, Jeddah, KSA

ID 105 A review on the Electrodeposition of CIGS Thin-Film Solar Cells
Leher Farooq, Abdulrahman Alraeesi and Salem Al Zahmi, Department of Chemical and Petroleum Engineering, United Arab Emirates University, Al Ain, Abu Dhabi, UAE

ID 130 Adaptive Cuckoo Search Algorithm for Solving Dynamic Economic Dispatch Large Scale System
Rizka Abdullah and Farizal, Engineering, Industrial Engineering, University of Indonesia, Jalan Salemba Raya 4, DKI Jakarta, Indonesia

ID 279 Biosorption of Mercury (Hg) in Aqueous Solution through Mexican Coasts' Macroalgae Pelagia Sargassum
Andrea Paola Espinosa Treviño, Daniel Oliveira Galvão do Vale, José Orlando Alemán Valdés, Roberta Paola González Orozco, Sandra Tenorio Bolaños, Sheila Cassandra Coronel Sandoval, Basic Sciences, Universidad de Monterrey, San Pedro Garza García, Nuevo León, México

ID 054 Peak Oil: to what extent is it a threat to Saudi Arabia energy security?
Samar Khan, Assistant Professor at Effat University, Jeddah, KSA
Hafez Abdo, Professor of Accounting at Sheffield Hallam University, Sheffield, UK

3:30 – 5:00, TUESDAY Industrial and Manufacturing Room 6

Session Chair: Thaier Alawadh, UAEU, Al Ain, United Arab Emirates

ID 335 Innovation or Marketing: The Analysis of R&D and Advertising Budget of Indonesian Manufacturing Firms
Evo Sampetua Hariandja, Universitas Pelita Harapan, Tangerang, Banten, Indonesia

ID 281 Control and Measuring Consumption of Energy inside Mexican Households
César H. Gutiérrez, Gerónimo González, Jorge Gandar, Carlo M. Orozco, Ricardo Tafich and Pedro Canto, Tecnológico de Monterrey, Mexico

ID 133 CZTS Study Using Electrodeposition
Thaier Alawadh, UAEU, Al Ain, United Arab Emirates

ID 318 Availability of Clean Water, Sanitation and Electricity towards Economic Growth in Indonesia with 500 regencies and cities
John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia
Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

3:30 – 5:00, TUESDAY Competitions Room 7 (Faculty Lounge)

Session Chair: Judging Committee Chair

GRADUATE STUDENT PAPER COMPETITION
ID 104 Multi-Criteria Group Decision-Making for Fire Station Staffing
Abdulaziz S. Alzahrani and Hesham K. Alfares, Systems Engineering Department, King Fahd University of Petroleum & Minerals
Dhahran 31261, Saudi Arabia

ID 160 Design and implementation of deadlock control for automated manufacturing systems
Husam Kaid, King Saud University, Riyadh, Saudi Arabia

LEAN SIX SIGMA COMPETITION
ID 154 A Case of Eliminating Wastes using SS for a Household Electrical Appliance Warehouse
Ghalla W. Zagzoog, Mawadda M. Samkari, and Abdulaziz T. Almaktoom, Department of Operations and Information Management, Effat University
PO Box 34689, Jeddah 21478, Kingdom of Saudi Arabia

LOGISTICS AND SUPPLY CHAIN COMPETITION
ID 077 Criminal Supply for the Generated Organ Demand
Zeeahan Asim, Sir Syed University of Engineering and Technology, Karachi, Pakistan
Shahryar Sorooshian, University of Gothenburg, Gothenburg, Sweden
<table>
<thead>
<tr>
<th>ID</th>
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</thead>
<tbody>
<tr>
<td>157</td>
<td>Design and Implementation of Deadlock Control in Manufacturing Systems</td>
<td>Husam Abdu Ghaleb Kaid, Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia</td>
</tr>
<tr>
<td>131</td>
<td>Supply Chain Network Redesign, Case Study in Lubrication Industry</td>
<td>Khalid Al-Khodhairi and Ahmad Al Hanbali, Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM) Dhahran, Saudi Arabia</td>
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</tbody>
</table>

**5:00 – 6:30 pm, Tuesday: Poster Competition**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>Smart Stick for Blind Persons</td>
<td>Hammad Ur Rehman, Bahria University, Karachi, Pakistan</td>
</tr>
<tr>
<td>106</td>
<td>Real Time Car Engine Condition Monitoring By Using Instantaneous Angular Speed Analysis (IAS)</td>
<td>Abdulrahman Salt and Jamal Aliffi, Mechanical Engineering Technology Department, Yanbu Industrial College, Yanbu, Kingdom of Saudi Arabia</td>
</tr>
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<td>201</td>
<td>An Enumerative Algorithm for the Maximum Clique Problem</td>
<td>Mohamad Suyudi, Sukono, Endang Soeryana and Natasa Belladina, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia</td>
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<td>202</td>
<td>Find The Maximum Clique by Graph Coloring Using Heuristic Greedy</td>
<td>Mohamad Suyudi, Sukono, Endang Soeryana and Natasa Belladina, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia</td>
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**5:00 – 6:30 pm (Tuesday, November 26): Poster Session**

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<td>197</td>
<td>ARIMA-GARCH Model for Estimation of Value-at-Risk and Expected shortfall Some of Stocks in Indonesian Capital Market</td>
<td>Suliko, Endang Soeryana and Alberto Simanjuntak, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia</td>
</tr>
<tr>
<td>199</td>
<td>The Validation of New Formula of Islamic Home Financing Among Finance Expertise</td>
<td>Puspa Liza Ghazali, Sharifah Arni Syed Jaaffar, Hazimi Foziyah and Rosilida Abdul Razak, Faculty of Business and Management, Universiti Sultan Zainal Abidin, 21300 Kuala Nerus, Trengganu, Malaysia</td>
</tr>
<tr>
<td>200</td>
<td>Disabled Learning Students Before, During, and After the Rehabilitation Tools: A Case Study</td>
<td>Mustafa Mamat, Faculty of Informatics &amp; Computing, Universiti Sultan Zainal Abidin, 21300 Kuala Nerus, Terengganu, Malaysia</td>
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ID 203 Estimation of Aggregate Claim Risk Model on Insurance for Damage to Buildings Due to Flooding of the Citarum River in Bandung, Indonesia
Pramono Sidi, Department of Mathematics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Agus Santoso, Department of Statistics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, Malaysia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Subiyanto, Department of Marine Science, Faculty of Fishery and Marine Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 204 Measuring the Level of Ability to Pay Flood Insurance Premiums and the Factors That Influence It by Using the Contingent Valuation Method
Pramono Sidi, Department of Mathematics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Agus Santoso, Department of Statistics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, Malaysia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Subiyanto, Department of Marine Science, Faculty of Fishery and Marine Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 205 Analysis of Factors Influencing Students' Decisions to Choose Universitas Terbuka
Agus Santoso, Department of Statistics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Tina Ratnawati, Department of Urban and Regional Planning, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Mulyatno, Department of Mathematics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 206 Differences in Academic Achievement of Male and Female Students in the Faculty of Sciences and Technology Universitas Terbuka
Agus Santoso, Department of Statistics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Tina Ratnawati, Department of Urban and Regional Planning, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Mulyatno, Department of Mathematics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 211 Modeling and Forecasting Daily Temperature in Bandung
Solichatus Zahroh, Yuyun Hidayat and Resa Septiani Pontoh, Department of Statistics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Agus Santoso, Department of Statistics, Faculty of Sciences and Technology, Universitas Terbuka, Indonesia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 212 Effect Contextual Factor toward Entrepreneurial Intention among Young Educated
Dedi Iskamto, Puspa Liza Ghazali, Asyraf Aftanorhan, Faculty of Business and Management, Universiti Sultan Zainal Abidin, Terengganu, Malaysia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 213 Estimation Models of the Impacts of the Economic and Population Growth to Changes in CO2 Emissions in Indonesia using the Cobb-Douglas Production Function
Ruly Budiono and Muhamad Nurzaman, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Hafizan Juahir, East Coast Environmental Research Institute (ESERI), Universiti Sultan Zainal Abidin, Malaysia
Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, Malaysia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 214 Analysis of Determination of Adjusted Premium Reserves for Last Survivor Endowment Life Insurance Using the Gompertz Assumption
Riaman, Sukono, and Sudradjat Supian, Dept. of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Parit Raja, Johor, Malaysia

ID 215 Classical Assumption Test for Testing the Influence of The Composite Stock Price Index, Inflation Level, BI Rate, and Rupiah Exchange Rate Toward Stock Price in Indonesia
Riaman, Sukono, Sudradjat Supian, Dept. of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Parit Raja, Johor, Malaysia

ID 223 Operations and Quality Management: the Case of Hospitality Industry
Shumokh A. Faqeeh, Raghad M. Bafageeh, Rawan A. Salah, and Abdulaziz T. Almaktoom, Department of Operations and Information Management, Effat University, PO Box 34689, Jeddah 21478, Kingdom of Saudi Arabia

ID 232 Study on the Use of Alternative Concrete Mix Materials on Hollow Precast Foundations
Nawr Rasid, Department of Civil Engineering, Politeknik Negeri Malang, Malang, INDONESIA
Sri Wiwoho Mudjanarko, Department of Civil Engineering, Narotama University, Surabaya, 60117, INDONESIA
Firdaus Pratama Wiwoho, 4 Department of Civil Engineering, Universitas Negeri Surabaya, Surabaya, INDONESIA
Mohd Haziman Wan Ibrahim, 5 Fakulti Kejuruteraan Awam Dan Alam Sekitar, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia
Abdul Talib Bin Bon, Fakulti Pengurusan Teknologi dan Perniagaan, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

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ID 236  Analysis of the Effect of Career Planning, Training and Career Development on Employee Job Performance
Muhammad Djufr
Akademi Keuangan dan Bisnis Indonesia Internasional (AKBII), Bandung, Indonesia
Abdul Malek Bin A. Tambi, Faculty of Economics and Management Science, Universiti Sultan Zainal Abidin, Malaysia
Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, Malaysia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Ruly Budiono, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 237  Dynamical Analysis of Carbon Concentration Model Due to the Interaction with Biomass Production Based on Predator-Prey
Ruly Budiono, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Jatinangor, Sumedang, Jawa Barat, Indonesia
Hafizan Juahir, East Coast environmental Research Institute (ESERI), Universiti Sultan Zainal Abidin, Kuala Terengganu, Terengganu, Malaysia
Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, 21300 Kuala Terengganu, Terengganu, Malaysia
Sukono, Dept. of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Jatinangor, Sumedang, Jawa Barat, Indonesia
Adam Sukma Putra, Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Saegah Mada, Sekip Utara, Yogyakarta, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 262  Sargassum-based filter as a water decontaminant of heavy metals in Mexico
Christofer James Cárdenas Millán, Tecnológico de Monterrey, Monterrey, Mexico

ID 266  Removal of Mercury in Water using Sargassum Sea
Ana Priscila León Guadiana, María Fernanda Manlio Saide, Daniela Leal Arrambide, René Lozano Acosta, María de la Luz Giovana Díaz Alemán, Daniela Alejandra Díez González, Luis Andrés Martínez Dávalos, Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, Nuevo León, México

ID 267  The Influence of Loyalty, Education &Training and Performance on Job Promotions
Muhammad Djufr
Akademi Keuangan dan Bisnis Indonesia Internasional (AKBII), Bandung, Indonesia
Abdul Malek Bin A. Tambi, Faculty of Economics and Management Science, Universiti Sultan Zainal Abidin, Malaysia
Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, Malaysia
Sukono, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Ruly Budiono, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 268  Purification of Mercury in Water with Lime Peel
Alejandro Souza Sánchez, Sergio Alejandro Morado Frausto, Jose Adrian R. Bours Gandara and Yael Prieto González, ITESM, Monterrey, Mexico

ID 282  Analysis of Factors Affecting Consumer Decisions to Make a Purchase
Bab Foster, University of Business and Informatics Indonesia, Sukapura, Kiarakondong, Bandung City, West Java 40285, Indonesia
Muhammad Deni Johansyah, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 283  The Influence of Online Marketing Against Interest in Buying SMEs Products
Muhammad Deni Johansyah, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
Bab Foster, University of Business and Informatics Indonesia, Sukapura, Kiarakondong, Bandung City, West Java 40285, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 290  Reduction in Rejection Rate of Polypropylene Bags via Six Sigma
Muhammad Hamad Saqaj, Industrial Engineering Department, College of Engineering, Alfaisal University, Riyadh, Saudi Arabia

ID 310  Multi Agent Systems in Concurrent and Collaborative Engineering: A Review
Wadea Ameen1, 2 and Saber Darmoul1
1Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, 11421, Saudi Arabia
2Advanced Manufacturing Institute, King Saud University, Riyadh, Saudi Arabia

ID 315  Potential of Parabolic Trough Solar Concentrator for Electric Energy Production
Abed Alrzaq Alshqirate1, 2, and Adel Alblawi1, M. Asfer1
1Department of Mechanical Engineering, Engineering College, Shaqra University, KSA
2Al-Balqa Applied University, Jordan

ID 328  The Bioregional Principal at Banyuwangi Region Development in the Context of Behavior Maintenance
Ratna Darmiwati, Catholic University of Darma Cendika, Surabaya, Indonesia

ID 331  Legality of Electronic Business Actor Registration Regulations (E-Commerce)
Nynda Fatmawati Octarina, Faculty of Law, Universitas Narotama, Surabaya, Indonesia
Anissatul Ulfa, Faculty of Law, Universitas Narotama, Surabaya, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 332  Legalization of Rules for Determination of the Fake News Spreading Suspect As Seen From Law on Electronic Information and Transaction
Nynda Fatmawati, Faculty of Law, Universitas Narotama, Surabaya, Indonesia
Anissatul Ulfa, Faculty of Law, Universitas Narotama, Surabaya, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 333  Legalization of Human Rights Violations
Nynda Fatmawati Octarina, Faculty of Law, Universitas Narotama, Surabaya, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 337  Ethics in Artificial Intelligence
Ghada Al-Omran, Sarah Al-Abdulhadi and Roohi Jan, Prince Sultan University, Riyadh, Saudi Arabia
ID 342 Sustainable Mobility and Transportation Research in Indonesia
Muhammad Ikhsan Setiawan, Department of Civil Engineering, Narotama University, Surabaya, Indonesia
Mohd Adib Bin Mohammad Razi, Faculty of Civil and Environmental Engineering, University Tun Hussein Onn Malaysia, Johor Malaysia
Ronny Durruton Nasihien, Department of Civil Engineering, Narotama University, Surabaya, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 343 Indonesia Research in Tourism and Digital Tourism
I Nyoman Sudapet, Department of Management, Narotama University, Surabaya, Indonesia
Agus Sukoco, Department of Management, Narotama University, Surabaya, Indonesia
Mohd Hazim bin Wan Ibrahim, Faculty of Civil and Environmental Engineering, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia
Muhammad Ikhsan Setiawan, Department of Civil Engineering, Narotama University, Surabaya, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 344 Fish and Solar Cell Technology Research Trend
Muhammad Ikhsan Setiawan, Department of Civil Engineering, Narotama University, Surabaya, Indonesia
Dahlan Abdullah, Department of Informatics, Universitas Malikusaleh, Aceh, Indonesia
Veronica Nugraheni Sri Lestari, Fakultas Ekonomi dan Bisnis, Universitas Dr. Soetomo Surabaya, Indonesia
Yuniningsih, Fakultas Ekonomi dan Bisnis, Universitas Pembangunan "Nasional" Jawa Timur, Indonesia yuniningsih@upnjatim.ac.id
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 345 Tourism, Maritime Research in the World and its impact in Indonesia
I Nyoman Sudapet, and Agus Sukoco, Department of Management, Narotama University, Surabaya, Indonesia
Muhammad Ikhsan Setiawan, Department of Civil Engineering, Narotama University, Surabaya, Indonesia
Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 346 Sigit Trimayanto, Mukhamad Rojib Aminudin, and Laila Rezty Heriwi
Department of Chemistry, State University of Surabaya, Ketintang Street, Surabaya 60231, Indonesia

Undergraduate Student Paper Poster Competition

ID 338 Design and development of smart door closer mechanism
Khaled Musleh, Walid Aljadaan, Omar Almansour, Saud Sweidan, Emad Sweidan, and Tamer A. Sebaey, Engineering Management Department, College of Engineering, Prince Sultan University, Riyadh, Saudi Arabia

Undergraduate Research Poster Competition

ID 339 Design and development of a novel multifunctional travelling pillow
Mohammed ALGharably, Abdullah Albathi, Mohammed ALhoshan, Mohammed ALajlan, Ammar kachoua and Tamer A. Sebaey, Engineering Management Department, College of Engineering, Prince Sultan University, Riyadh, Saudi Arabia

ID 340 Design and development of a water gallons flipper for the Saudi market
Yazan Faroun, Khaled Al-Hindawi, Mohammed Al-Mulki, Hassan Al-Smaid, Kusai Saad, and Tamer A. Sebaey, Engineering Management Department, College of Engineering, Prince Sultan University, Riyadh, Saudi Arabia

ID 341 Development of a multifunctional hand watch to store and organize pills for elderly people
Nawaf ALmehemeed, Faisal AlDebaikhi, Jaser AlJaser, Abdulrahel AlMoudayer, Fahad AlRobaian, and Tamer A. Sebaey, Engineering Management Department, College of Engineering, Prince Sultan University, Riyadh, Saudi Arabia

November 27, 2019 (Wednesday)

Session: 8:30 – 10:30 am

8:30 – 10:00, WEDNESDAY Industry 4.0 / Industry Solutions Room 1 (Auditorium 1)
Session Chair: Md. Abdullah Al Mahmud, Manarat International University, Dhaka, Bangladesh

8:30 – 9:00 (Wednesday)
Mr. Md. Abdullah Al Mahmud
Founder & CEO, Thriving Skills Limited Assistant Professor of MIS
Manarat International University, Dhaka, Bangladesh

Skills Focused Self-education for Industry 4.0

9:00 – 9:30 (Wednesday)
Ali Akbar
Industrial IoT Expert
Siemens Malaysia Appointed Trainer for IIOT
IOT SATA PVT. LTD. Subang Bestari, Shah Alam
Selangor, Malaysia
9:30 – 10:00 (Wednesday)

M Chairul Basrun Umanailo
Department of Agricultural and Forestry
University of Iqra Buru
Namlea, 97571, Indonesia

ID 327 Negative Impact of Industry on Society Using Ralph Dahrendorf's Conflict Theory
M Chairul Basrun Umanailo, Department of Agricultural and Forestry, University of Iqra Buru, Namlea, 97571, Indonesia
Rita Dwi Pratiwi, Stikes Widya Dharma Husada, Tangerang, Indonesia
Fenita Purnama Sari Indah, Stikes Kharisma Persada, Indonesia

8:30 – 10:00, WEDNESDAY Global Engineering Education Room 2 (Auditorium 2)
Session Chair: Nadeem Hassan, Albaha University, Kingdom of Saudi Arabia

8:30 – 8:50 (Wednesday)

Dr. Wahyudi Sutopo
Associate Professor
Department of Industrial Engineering, Faculty of Engineering
University of Sebelas Maret, Surakarta, Indonesia

Learning a Supply Chain Management Course by Problem Based Learning: Case Studies in the Newspaper Industry

8:50 – 9:10 (Wednesday)

Eng. TaeYeual Yi
Lecturer, PMP®, PE, LEED®APs, USGBC Faculty
Department of Engineering Management
Prince Sultan University, Riyadh, KSA

Dr. SukHee Yun
Associate Professor, Department of Architectural Engineering
Prince Sultan University, Riyadh, KSA

ID 357 Interdisciplinary Approach in Engineering Education: Case studies of the elective course “Additive Manufacturing” and the special training course “Algorithm Architecture Design Workshop” in Prince Sultan University.

9:10 – 9:30 (Wednesday)

Nadeem Hassan, Ph.D. CS
Associate Professor of Computer Science
College of Computer Science & Information Technology
Albaha University (Main Campus), Al-Baha, Kingdom of Saudi Arabia

9:30 – 9:50 (Wednesday)

Dr. Suhail Mohammad Ghouse
Assistant Professor of Marketing and Entrepreneurship
College of Commerce and Business Administration
Dhofar University, Oman

Entrepreneurial Students of the Oman University Students

8:30 – 10:00, WEDNESDAY Doctoral Dissertation Competition Room 7 (Faculty Lounge)
Session Chair: Judging Committee Chair

ID 084 A review on the current status of facility management practices in building industry and prospective BIM intervention to manage the facilities effectively during its service life
Abdulaziz Aldowayan, University of Sharjah, UAE

ID 162 Application of Modified NSGA II (M-NSGA II) Algorithm to large Scale problems
Mohamed H. Gadallah and Abdel Rahman Ali M. Ahmed, Mechanical Design & Production Department, Faculty of Engineering, Cairo University

ID 053 Breach of Psychological Contracts and Discretionary Behaviours among Academic Staff in Nigerian Universities
Mustapha Olanrewaju Aliyu, Department of Industrial Relations and Personnel Management, Faculty of Management Sciences, University of Ilorin, Nigeria

10.00 – 10.15 – Break
10:15 – 11:00 am: **Wednesday Morning Keynote I**

**Dr. Mohammed Al-Majed**
Senior Advisor to the Minister, Ministry of Industry and Mining
Saudi Arabia

11:00 – 11:45 am: **Wednesday Morning Keynote II**

**Eng. Suliman Almazroua**
CEO
National Industrial Development & Logistics Program

11:45 – 1:00 – Networking Buffet Lunch / Dhuhr Prayer

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**Session – Wednesday (November 27): 1:00 – 2:30 pm**

**1:00 – 2:30, WEDNESDAY**

**PANEL SESSION: Entrepreneurship and Innovation**

**Room 1**

**Panel Chair –**

Hattan Ahmed
Head of the Entrepreneurship Center
King Abdullah University of Science and Technology

Deemah AlYahya
Digital Economy Advisor

**Panel Speakers**

**Hattan Ahmed**
Head of the Entrepreneurship Center
King Abdullah University of Science and Technology

**Deemah AlYahya**
Digital Economy Advisor

**1:00 – 2:30, WEDNESDAY**

**Global Engineering Education IV**

**Room 2**

Session Chair: Najmul Hoda, Umm Al-Qura University, Makkah Al-Mukarramah, Saudi Arabia

**1:00 – 1:20 (Wednesday)**

**Najmul Hoda, PhD**
Faculty – Department of Business Administration
College of Business
Umm Al-Qura University
Makkah Al-Mukarramah, Saudi Arabia

Business Students' Satisfaction with the Studio Classes in Saudi Universities

**1:20 – 1:40 (Wednesday)**

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

**1:40 – 2:00 (Wednesday)**

**Dr. Samar S. Khan**
Dean, Effat College of Business
Effat University
Jeddah, Kingdom of Saudi Arabia

**Dr. Abdulaziz T. Almaktoom, CSCA**
Assistant Professor
Department of Operations and Information Management
Effat University, Jeddah, Saudi Arabia

ID 336  Saudi Universities Education System: A Combination of Practical and Theoretical Knowledge

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2:00 – 2:20 (Wednesday)

Dr. Prakash Kumar Udupi, FIE
Faculty, Program Manager
Centre For Post Graduation Studies
Middle East College
Muscat, Sultanate of Oman

Title of the Talk: Developing Lean Academic Initiatives for Flipped Teaching

1:00 – 2:30, WEDNESDAY Industry 4.0 / Industry Solutions IV Room 3

Session Chair: Mohammed Khursheed Akhtar, King Abdulaziz University (KAU), Jeddah, Saudi Arabia

1:00 – 1:30 (Wednesday)

Mohammed Khursheed Akhtar, Ph.D.
Data Scientist at KAU-Web Observatory for Web Studies
King Abdulaziz University (KAU)
Jeddah, Saudi Arabia

1:30 – 2:00 (Wednesday)

Dr. Vijey Thayananthan
Associate Professor
Department of Computer Science
Faculty of Computing and Information Technology
King Abdul-Aziz University
Jeddah, Saudi Arabia

IoT for Industry 4.0 with Photonic Technology

2:00 – 2:30 (Wednesday)

Jalal Al-Muhtadi, PhD
Assistant Professor, College of Computer & Information Sciences,
Center of Excellence in Information Assurance (CoEIA), Director,
King Saud University, Riyadh, Saudi Arabia

1:00 – 2:30, WEDNESDAY Industrial and Manufacturing Room 4

Session Chair: Wadea Ameen, King Saud University, Riyadh, 11421, Saudi Arabia

ID 136 A Design of Enterprise Systems View on A Retailer Cashiers Shifts Scheduling
Mubarak Hakami, Abdulaziz Almoabdi, Abdullah Almoabadi and Mohammed Mahfouz, Industrial Engineering Department, King Abdualziz University, Jeddah, Makkah, KSA

ID 291 Achieving sustainability in manufacturing systems: A quantities study
Reda Nujoom, Maintenance Department, Transport Ministry, King Abdul Aziz Rd, Riyadh 11178, Saudi Arabia
Ahmed Mohammed, Faculty of Transport & Logistics, Muscat University, Al Ghubra North, Muscat, Oman

ID 013 An Assessment of Occupational Health and Safety (OHS) Standard at RMG Production Sewing Floor in Bangladesh
Mohammad Morshed, Department of Mechanical and Production Engineering, AUST, Dhaka, Bangladesh
Fazle Rabbi Zaber, Department of Materials and Production, Aalborg University, Copenhagen, Denmark
Abu Hamja, Department of Mechanical and Production Engineering, AUST, Dhaka, Bangladesh

ID 156 Deadlock Control Design and PLC Implementation of Automated Manufacturing Systems
Husam Kaid1, Abdulaziz M. El-Tamimi1, Abdulrahman Al-Ahmari1, Zhiwu Li1,2, Emad Abouel Nasr1,2, and Mohammed A. Noman1
1 Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, 11421, Saudi Arabia
2 Mechanical Engineering Department, Helwan University, Cairo, Egypt

ID 209 Design the support structures for fused deposition modeling 3D printing
Wadea Ameen1,2, Syed Hammad Mian1, Hisham Alkhalefah1,2
1 Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, 11421, Saudi Arabia
2 Advanced Manufacturing Institute, King Saud University, Riyadh, Saudi Arabia

ID 289 Development of a CAPP System for Prismatic Parts in Hybrid Manufacturing
Osama Abdulhameed1 and Abdulrahman Al-Ahmari1,2
1 Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia
2 Princess Fatima Alnijiri’s Research Chair for Advanced Manufacturing Technology (FARCAMT Chair), Advanced Manufacturing Institute, King Saud University, Saudi Arabia
1:00 – 2:30, WEDNESDAY
Operations Management
Room 5

Session Chair: Rahmat Nurcahyo, Universitas Indonesia, Depok, Indonesia

ID 080 The Impact of Entrepreneurial Leadership, TQM Practices, and Innovation Management on Organizational Performance of SMEs in Kuwait
Khairul Anuar Mohd Ali and Fahad Sawaean, Graduate School of Business, Universiti Kebangsaan Malaysia, UKM Bangi, Selangor, Malaysia

ID 034 The Role of Quality Control and Management with Good Corporate Governance on Fraudulent Financial Reporting: Evidence in Indonesia
Imam Ghozali, Mochammad Chabachib and Sugeng Wahyudi, Department of Management Faculty Economics and Business, Diponegoro University, Semarang, Indonesia
Imang Dapit Pamungkas, Ph.D Student Department Accounting Faculty Economics and Business, Diponegoro University, Semarang, Indonesia

ID 208 Use of Fractional Factorial Design and AHP to Determining the Best Marketing Strategy for a Lubricant Company
Anas Al-Dawalibi and Ibrahim H. Al-Dali, Systems Engineering Department, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia
Bandar A. Alkhayyal, Department of Engineering Management, College of Engineering, Prince Sultan University, Riyadh, Saudi Arabia

ID 234 Using Agent-Based Modeling for IoT Application A Case Study of Retail Pharmacy in Saudi Arabia
Amr Alghamdi, Bader Bugshan, Khalid Al-Ghafeer, Abdulkareem Alishammari, and Mohammed Basingab, Industrial Engineering Department, King Abdulaziz University, Jeddah, 22252, Saudi Arabia

ID 005 Using Industrial Engineering Tools in the Realization of Saudi Vision 2030 for Supporting Local Industry
Said Ali Hassan Elkality, Operations Research and Decision Support Department, Faculty of Computers and Information, Cairo University, Egypt
Waël Salah Al-Saeed Hassanain, Department of Industrial Engineering, King Abdulaziz University, Jeddah, Saudi Arabia

1:00 – 2:30, WEDNESDAY
Transport and Logistics
Room 6

Session Chair: Asad Ullah, Department of Management studies, Middle East College, Muscat, Oman

ID 218 A Multi-Objective Mathematical Model for Closed Loop Supply Chain Design
Awsan Mohammed*, Salih Duffuaa** and Ahmed M. Ghaithan*
Systems Engineering Department*
Construction Engineering and Management Department*
King Fahd University of Petroleum & Minerals, Dhahran, 31261, Saudi Arabia

ID 110 Evaluation of performance in the supply chain of t-shirts in the north of Ecuador
Neyfe Sablón – Cossio, Postgraduate Institute, Production and Services Group, Technical University of Manabi, Portoviejo, Ecuador
Erik Orozco – Crespo, Career Industrial Engineering, North Technical University, Ibarra, Ecuador
José Armando Pancorbo – Sandoval, Equinociatl Technical University, Santo Domingo, Ecuador
Leonardo Manuel Cuétara – Sánchez, Technical University of Manabi, Portoviejo, Ecuador
Sonia Emilia Leyva – Ricardo, Equinociatl Technical University, Santo Domingo, Ecuador
Andrés Marcelo Moreno – Monge, Career Industrial Engineering, North Technical University, Ibarra, Ecuador

ID 207 Identifying the Logistic Collaboration in SCM: A Study of Indian Automobile Manufacturing Companies
Asad Ullah, Department of Management studies, Middle East College, Muscat, Oman

ID 311 System Dynamics Modeling for Mitigation Strategies of the Energy Use and Greenhouse Gas Emissions in Lebanon’s Road Transport Sector
Marc Haddad, Charbel Mansour and Jad Diab, Department of Industrial and Mechanical Engineering, Lebanese American University, Byblos, Lebanon

ID 111 The Recycling of Fire Extinguisher; First Step Toward a Circular Economy
Ana Julia Acevedo - Urquiaga, University Foundation of San Mateo, European-Latin American Center for Logistics and Ecological Projects (CELALE), Bogotá, Colombia
José Antonio Acevedo - Suarez, Logistic and Production Management Laboratory (LOGESPRO), Havana Technical University “José Antonio Echevarría” (CUJAE), Havana, Cuba
Neyfe Sablón – Cossio, Postgraduate Institute, Production and Services Group, Technical University of Manabi, Portoviejo, Ecuador
Stefan Köhler, Institute of Agricultural and Urban Ecological Projects (IASP), Humboldt University of Berlin, Germany
Sebastiana del Monserrate Ruíz – Cedeño, University Cooperation Unit, Technical University of Manabi, Portoviejo, Ecuador
Erik Orozco – Crespo, Career Industrial Engineering, North Technical University, Ibarra, Ecuador

ID 329 Norm’s Violence as a Strategy of the Violin Group in Maintaining Economic Resources in the Road
Adelita Paramanti, Departmen of Sociology Faculty of Social and Political Science Universitas Nasional Jakarta
Alifa Pangastika Kuswara, Departmen of Sociology Faculty of Social and Political Science Universitas Nasional Jakarta
Syamsiah Badruddin, Departmen of Sociology Faculty of Social and Political Science Universitas Nasional Jakarta, Surabaya, East Java, Indonesia

2:30 – 3:00 pm – Networking Break
**Session – Wednesday (November 27): 3:00 – 4:30 pm**

### Industry 4.0 / Industry Solutions

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<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tr>
<td>3:00 – 3:30</td>
<td>Olayan Alharbi, PhD</td>
<td>Lead Data Science at Obeikan Digital Solution</td>
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<td>Assistant Professor</td>
<td>Majmaah University</td>
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<td>Saudi Arabia</td>
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<td>3:30 – 4:00</td>
<td>Dr. Ahmed Aljabr</td>
<td>Operational Excellence Department</td>
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<td><strong>Topics</strong> Challenges and Opportunities for Business Excellence Performance: Lean Six Sigma Approach**</td>
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<td>4:00 – 4:30</td>
<td>Dr. Raja Sreedharan V.</td>
<td>Assistant Professor in Supply Chain Management</td>
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<tr>
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<td>Rabat Business School</td>
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<td><strong>AI in logistics and supply chain management</strong></td>
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### Global Engineering Education V

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<tr>
<th>Time</th>
<th>Speaker</th>
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<tr>
<td>3:00 – 3:20</td>
<td>Dr. Hesham K. Alfares</td>
<td>Chairman and Professor</td>
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<td>Systems Engineering Department</td>
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<td>King Fahd University of Petroleum &amp; Minerals</td>
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<td>Dhahran, Saudi Arabia</td>
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<td>3:20 – 3:40</td>
<td>Dr. Abdelhakim Abdelhadi</td>
<td>Associate Professor</td>
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<td>Department of Engineering Management</td>
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<td></td>
<td><strong>Recent Trends in Industrial Engineering Education</strong></td>
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<td>3:40 – 4:00</td>
<td>Dr. Ajrina Hysaj</td>
<td>Lead English Language Instructor and Curriculum Designer</td>
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<td>Academic Study Skills Lead Instructor</td>
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<td>UOWD College</td>
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<td>University of Wollongong in Dubai</td>
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<td><strong>Analysing the Correlation between Tutors’ Support and Undergraduate Engineering Students’ Academic Satisfaction</strong></td>
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<td>4:00 – 4:20</td>
<td>Dr. Mohammad Nurunnabi, CMA, FAIA(Acad), SFHEA, FRSA</td>
<td>Editor-in-Chief, PSU Research Review: An international Journal (PRR)</td>
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<td>Aide to the Rector on Research &amp; Internationalization</td>
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<td>Chair, Department of Accounting</td>
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<td><strong>Clustering Engineering Students into Groups According to their Learning Style</strong></td>
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</table>
3:00 – 4:30, WEDNESDAY  |  Environmental and Sustainability  |  Room 3
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**Session Chair:** Amal AbdelSattar, Prince Sultan University, Riyadh, Saudi Arabia

**ID 137**  |  Life of a Worker: A Case of Construction Industry  
Shabir Hussain Khahro, Prince Sultan University, Riyadh, Saudi Arabia

**ID 221**  |  Measurement of Mosques Inner and Outer Sound Levels  
Saad Alabdulkarim, Saud Almahfud, and Ahmed Almutairi, Industrial Engineering Department, King Saudi University, Riyadh, Saudi Arabia

**ID 126**  |  Monitoring Air Pollution Using Satellite Data  
Amal AbdelSattar, Prince Sultan University, Riyadh, Saudi Arabia

**ID 135**  |  Natural lighting and sustainability in traditional environmental architecture  
Salma Dwidar, Architectural Engineering Department, Prince Sultan University, Riyadh, KSA

**ID 049**  |  Sustainable Waste Management through Waste to Energy Technologies in Saudi Arabia: Opportunities and Environmental Impacts  
Tayeb Brahimi, Electrical and Computer Engineering, Effat University, Jeddah, KSA

**ID 152**  |  Thermal and Acoustic Characteristics of Promised Hybrid Insulation Wasted Materials Made of Apple of Sodom and Palm Tree Surface Fibers as New Insulation Materials for Buildings  
Mohamed E. Ali and Abdallah Mrabti, King Saud University, College of Engineering, Mechanical Engineering Dept., Riyadh, Saudi Arabia

**ID 330**  |  The Risk of Commercialization Local Culture and Digital Community Growth of Rural Environment  
Adilta Pramanti and Paisal Halim, Department Sociology Universitas Nasional Jakarta, Indonesia

3:00 – 4:30, WEDNESDAY  |  Energy and Water  |  Room 4
---|---|---

**Session Chair:** Hasan Mousa, Sultan Qaboos University, Muscat, Oman

**ID 058**  |  Simulating the Dynamic Behavior of Renewable Energy Patents  
Alberto Méndez and Milton M. Herrera, Centre Research in Economic Sciences, Universidad Militar Nueva Granada, Bogotá, Colombia

**ID 317**  |  Solar Irradiation Prediction Using Machine Learning Techniques: The Case of Saudi Arabia  
Tayeb Brahimi, Energy and Technology Lab, College of Engineering, Effat University, Jeddah 22332, KSA

**ID 227**  |  Study to Improve Productivity in Decontamination of Mercury in Water through the Ananas Comosus  
José Alfredo Anibal Badillo, Nidia Patricia Félix Rivera, Fernanda Alcalde Herrera, Graciela Hurtado Montoya, Paola Hernández Zapata and Ana Paula Christy Gonzalez, Department of Basic Sciences, Universidad De Monterrey, San Pedro Garza Garcia, NL 66238, Mexico

**ID 031**  |  Using Artificial Intelligence Techniques for Solar Irradiation Forecasting: The Case of Saudi Arabia  
Fatima Alhebshi, Master student, Renewable Energy Engineering, Effat University Jeddah, KSA

**ID 009**  |  Using Artificial Intelligence to Analyse Wind Energy Production  
Fatima Alhebshi Master student, Renewable Energy Engineering, Effat University Jeddah, KSA

**ID 002**  |  Using PCM as energy storage material in water tanks: Theoretical and experimental investigation  
Hasan Mousa1,2, Jamil Naser1 and Omar Houche1

1 Department of Petroleum and Chemical Engineering, Sultan Qaboos University, P.O. Box 33 Al-Khod, PC 123, Muscat Oman
2 Department of Chemical Engineering, Jordan University of Science and Technology, Irbid, Box 330, PC 1110, Jordan

3:00 – 4:30, WEDNESDAY  |  Entrepreneurship and Innovation  |  Room 5
---|---|---

**Session Chair:** Sabah Al-Fedaghi, Kuwait University, Kuwait

**ID 306**  |  Enhancing Students’ Learning in Construction Management Courses at PSU  
Basel Sultan, Engineering Management Department, Prince Sultan University, Riyadh, Saudi Arabia

**ID 035**  |  Financial Leverage and Financial Performance of Oil and Gas Companies in Nigeria  
Ahmadu Abubakar, Department of Business Management, Federal University Dutsein-Ma, Katsina State, Nigeria
ID 155  Impact Analysis of Violent Conflict and Enabling Business Environment on Entrepreneurial Performance in North East Zone of Nigeria
OLADEJO Lukman Gbolagade, OLUSEGUN Kazeem Lekan, ABDULRAHMAN Abdulrazzaq Morenikeji, Department of Business Management, Faculty of Management Sciences, Federal University Dutsinma, Katsina, P.M.B.5001, Katsina State, Dutsinma  Nigeria

ID 124  Predicting Employee Attrition Using Machine Learning
Imtinan F. Alsauhim, Feddah A. Alotaibi, Malak A. AlAsiri, Munirah S. Alkharij, and Shahad A. Alharthi, School of Computing, Dublin City University, Dublin, Ireland

ID 134  Project-Based Learning in Engineering Education: Advantages, Challenges, and Implementation Strategies
Dr Wafa Labib & Dr Amal Abdelsattar, Architecture Department, College of Engineering, PSU, Riyadh, Saudi Arabia

ID 220  Do Incubator Specialization and Networking Affect Achievement of Technological Outcomes of Institution Incubated Startups?
Muralidharan Loganathan and MH Bala Subrahmany, Department of Management Studies, Indian Institute of Science, Bangalore, India

3:00 – 4:30, WEDNESDAY  Industrial and Manufacturing  Room 6

Session Chair:  Razan Maglad, Effat University, Jeddah, Kingdom of Saudi Arabia

ID 109  Furniture Manufacturing from Conventional to Automation System
Abdul Talib Bon, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Johor, MALAYSIA

ID 030  Adoption of Point Of Sales Technology in Nigerian Retail Industry: A Partial Least Squares Approach
Faruq Muhammad Abubakar, Department of Business Administration, Bauchi State University Gadau, Bauchi State,740001, Nigeria
Hartini Ahmad, School of Business Management, Universiti Utara Malaysia, Sintok, Kedah, Malaysia

ID 288  Impact of Initial Public Offering on the Financial Performance of Petrochemical Industry in Saudi Arabia
Razan Maglad, Finance Department, Effat College of Business, Effat University, Jeddah, Kingdom of Saudi Arabia
Rozinta Shaheen, Assistant Professor, Finance Department, Effat College of Business, Effat University, Jeddah, Kingdom of Saudi Arabia
Mawadda Samkari, Department of Operations and Information Management, Effat College of Business, Effat University, Jeddah, Kingdom of Saudi Arabia

ID 235  Manufacturing Systems based on Petri Nets: A bibliometric Analysis
Abdulmajeed Dabwan, Husam Kaid and Mohammed A. Noman, College of Engineering, Industrial Engineering Department, King Saud University, Riyadh 11421, Saudi Arabia

ID 061  Mathematical Modeling of Friction during High-Speed End Milling
Sunday Ojolo, University of Lagos, Akoka Yaba, Nigeria

ID 334  SEM Analysis of the Impacts of Job Demands on Employees’ Work Engagement
Abdul Talib Bon and Abdirahman Mohamud Shire, Faculty of Technology Management, Business and Entrepreneurship, University Tun Hussein Onn Malaysia, Parit Raja, 86400, Malaysia

Senior Design / FYP Poster Competition  (4:30 – 6:00 pm, Wednesday, November 27)

ID 017  Automatic Seed Sowing Machine
Muhammad Akram Akhund1, Nafees Ahmed Memon1, Tauha Hussain Ali1, Aftab Hameed Memon2 and Hafiz Usama Imad2
1 Civil Engineering Department, Mehran University of Engineering and Technology, Jamshoro, Pakistan
2 Civil Engineering Department, Quaid-e-Awam University of Engineering Science and Technology, Nawabshah, Pakistan

7:00 – 10:00 pm (Wednesday)  Conference Awards and Recognition Dinner  Outdoor
November 28, 2019 (Thursday)

Session: 8:00 – 9:30 pm

8:30 – 10:00, THURSDAY

Industry 4.0 / Industry Solutions VI Room 1

Session Chair: Majed Alsubiei, Mechanical/Manufacturing Engineer

8:30 – 9:00 (Thursday)

Majed Alsubiei
Mechanical/Manufacturing Engineer

Automation and Robotics

9:00 – 9:30 (Thursday)

Hamiru Hamiru
Department of Economy
University of Iqra Buru
Namlea 97571, Indonesia

ID 325 Public Relations Management Strategy through Management by Objective (MBO) of PT Kereta Api Operational Area 7 Madiun, Indonesia Tulungagung Station
Hamiru Hamiru, Department of Economy, University of Iqra Buru, Namlea 97571, Indonesia
M Chairul Basrun Umanailo, Department of Agricultural and Forestry, University of Iqra Buru, Namlea, 97571, Indonesia

8:30 – 10:00, THURSDAY

Global Engineering Education VI Room 2

Session Chair: Dr. Mohammad Ali Kadampur, Al-Imam Muhammed bin Saud Islamic University, Riyadh, Saudi Arabia

8:30 – 8:50 (Thursday)

Mohammad Nawab
Faculty, Civil Engineering
College of Engineering
Shaqra University
Dawadmi, Ar Riyadh
Saudi Arabia

8:50 – 9:10 (Thursday)

Dr. Fady S. Alnajjar, PhD.
Head of AI and Robotics Lab
Assistant Professor
Department of Computer Science and Software Engineering
College of Information Technology (CIT)
United Arab Emirates University
Al Ain, UAE

Title: An Autonomous Attention Assessment System for Smart Classroom

9:10 – 9:30 (Thursday)

Dr. Hamdi Hassen
Assistant Professor
Department of Computer Science
College of Science and Arts at Al-Ola
Taibah University
Medina, Saudi Arabia

Improving Performance of Robust and Efficient E-Learning Platform using Distributed Computing Technologies for Saudi Arabia institute

9:30 – 9:50 (Thursday)

Dr. Mohammad Ali Kadampur
Assistant Professor, Department of Information Management
College of Computer Information Science
Al-Imam Muhammed bin Saud Islamic University
Riyadh, Saudi Arabia
### IEOM Riyadh Conference  
**PARALLEL SESSIONS**  
**November 26-28, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 – 10:00, THURSDAY</td>
<td><strong>Industrial and Manufacturing</strong></td>
<td>Room 6</td>
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<tr>
<td></td>
<td>Session Chair: Mohammed Alkahtani, King Saud University, Riyadh 11421, Saudi Arabia</td>
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<td>ID 057</td>
<td>Mathematical Modeling of Friction in the Cutting Zone during Orthogonal Machining</td>
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<td>Ojolo Sunday Joshua, Sobamowo Gbeminiyi Musbau, Adedayo Mercy, Department of Mechanical Engineering, University of Lagos, Lagos. Nigeria</td>
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<td>ID 263</td>
<td>Performance Measures for Turnaround Maintenance</td>
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<td>Umar Al-Turki and Salih Duffuua, Systems Engineering Department, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia</td>
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<td>ID 238</td>
<td>Supply Chain in the Era of Additive Manufacturing</td>
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<td>Mohammed Alkahtani, Industrial Engineering Department, College of Engineering, and Raytheon Chair for Systems Engineering (RCSE), Advanced Manufacturing Institute, King Saud University, Riyadh 11421, Saudi Arabia</td>
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<td>Mustufa Haider Abidi, Raytheon Chair for Systems Engineering (RCSE), Advanced Manufacturing Institute, King Saud University, Riyadh, Saudi Arabia</td>
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<td>ID 129</td>
<td>The Analysis of Market Concentration of Indonesian Automotive Industry</td>
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<td>Evo Sampetua Hariandja, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang, Indonesia</td>
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<td>ID 356</td>
<td>Ergonomics Effects of Arid Environment in Human Performance</td>
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<td>Ibtihaj Al-Harrasi, and Mohammad Khadem, Department of Mechanical and Industrial Engineering, Sultan Qaboos University, Oman</td>
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<td>ID 358</td>
<td>The Analysis of Adaptive Delta-Modulator in Sliding Mode Control</td>
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<td>Dhafer Almakhles, Prince Sultan University, Riyadh, Saudi Arabia</td>
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**10:00 – 10:15 break**

| 10:15 – 11:10 am | **Thursday Morning Keynote I** |            |
|                  | Dr. Surendra M. Gupta         |            |
|                  | Professor of Mechanical and Industrial Engineering |            |
|                  | Director of Laboratory for Responsible Manufacturing (LRM) |            |
|                  | Northeastern University |            |
|                  | Boston, Massachusetts, USA |            |
| 11:00 – 11:45 am | **Thursday Morning Keynote II** |            |
| Eng. Saleh I Al-Shabnan | President Haffaz Industrial & Management Consultants |            |
| Riyadh, Saudi Arabia |            |

11:45 – 1:00 Networking Buffet Lunch/ Dhuhr Prayer

**Session – Thursday (November 28): 1:00 pm – 2:30 pm**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room 2</th>
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<tbody>
<tr>
<td>1:00 – 2:30, THURSDAY</td>
<td><strong>Global Engineering Education VII</strong></td>
<td>Room 2</td>
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<tr>
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<td>Session Chair: Dr. Sayyad Zahid Qamar, Sultan Qaboos University, Al-Khodh 123, Muscat, OMAN</td>
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<td>Dr. Tayeb Brahimi</td>
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<td>Learning Outside the Classroom: From MOOCs to Makerspace</td>
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First GCC Conference  
44
1:20 – 1:40 (Thursday)

Dr. Mohd Soperi  
Associate Professor  
Computer and Information Science Department  
Universiti Teknologi PETRONAS (UTP)  
Perak, Malaysia

**Machine Learning Education in Malaysia**

1:40 – 2:00 (Thursday)

Dr. Sabah Al-Fedaghi  
Associate Professor  
Computer Engineering Department  
Kuwait University, Kuwait

**ID 269 Thinging MATLAB for Computer Engineering**  
Sabah Al-Fedaghi, Computer Engineering Department, Kuwait University, Kuwait

2:00 – 2:20 (Thursday)

Dr. Sayyad Zahid Qamar  
Mechanical and Industrial Engineering Department  
College of Engineering  
Sultan Qaboos University  
Al-Khodh 123, Muscat, OMAN

Dr Tasneem Pervez  
Professor in the Department of Mechanical and Industrial Engineering,  
College of Engineering,  
Sultan Qaboos University (SQU)  
Muscat, Oman

Dr Mahmood Al-Kindi  
Associate Professor and Head  
Mechanical and Industrial Engineering Department (MIED)  
Sultan Qaboos University (SQU), Muscat, Oman

**ID 309 Engineering Education: Challenges, Opportunities, and Future Trends**  
Sayyad Zahid Qamar, Tasneem Pervez and Mahmood Al-Kindi, Department of Mechanical and Industrial Engineering, Sultan Qaboos University, Muscat, Oman

1:00 – 2:30, THURSDAY  
Industry 4.0 / Indsutry Solutions VII  
Room 3

Session Chair: Mohammad Fakhruddin, Dolf Technologies Co. Ltd., Khobar, Saudi Arabia

1:00 – 1:30 (Thursday)

Ahad Ali, Ph.D.  
Associate Professor  
Director, Bachelor of Science in Industrial Engineering (BSIE)  
Director, Master of Science in Industrial Engineering (MSIE)  
Director, Smart Manufacturing and Lean Systems Research Group  
Coordinator, Siemens Electro-Matic Industrial Engineering Lab  
A. Leon Linton Dept. of Mechanical Engineering  
Lawrence Technological University  
Southfield, Michigan, MI 48075, USA

**MSV of Industry 4.0 Tech Report**

1:30 – 2:00 (Thursday)

Mohammad Fakhruddin  
Senior Manager  
Dolf Technologies Co. Ltd.  
Khobar, Saudi Arabia

**Augmented Reality for Manufacturing: Bringing Digital Transformation to Skilled Workers**

2:00 – 2:30 (Thursday)
IEOM Riyadh Conference  PARALLEL SESSIONS  November 26-28, 2019

1:00 – 2:30, THURSDAY  Energy and Water  Room 5
Session Chair: Hadi Hamad Alyami, College of Technology in Tabuk, Tabuk, Saudi Arabia

ID 292  Mercury decontamination in water based fluid through the core of the fruit of the tree Mangifera indica
Anacecilia Juárez, Andrea González, Arantza Solís, Alejandra Ortiz, Daniela Juárez, Lilian Esparza y Roberta Faudoa.
Universidad de Monterrey, México

ID 280  MIDE-W
Geronimo Gonzalez Martinez, ITESM, Monterrey, Mexico

ID 312  New Energy Source and Alternative Fuel in Saudi Arabia
Hadi Hamad Alyami, Electrical and Renewable Energies Department, College of Technology in Tabuk, Tabuk, Saudi Arabia

ID 132  Optimization of Gas Pipeline Route Selection with Goal Programming Considering Environmental Aspects
Soufyan Maliki and Farizal, Department of Industrial Engineering, Universiti Teknologi Malaysia, 81310 UTM, Johor Bahru, Malaysia

ID 050  Renewable Energy Support Policy in Malaysia: A Comparative Analysis with Two Successful Countries
Siti Masytar Norazizman, Md. Mizanur Rahman, Hasan Mohd Faizal, Aminuddin Saat and Mazlan Abdul Wahid
School of Mechanical Engineering, Universiti Teknologi Malaysia, 81310 UTM, Johor Bahru, Malaysia

ID 261  Contribution of infrastructure assets integrity management strategy to a sustained quality water service delivery in an urban municipality
Mabaso Emmaculate Nicolas Jobe and Antoine F. Mulaba-Bafubiandi, Mineral Processing and Technology Research Centre, Department of Metallurgy, School of Mining, Metallurgy and Chemical Engineering, University of Johannesburg, Doornfontein 2028, Johannesburg, South Africa

1:00 – 2:30, THURSDAY  Operations Management  Room 6
Session Chair: Ghada Elnaggar, King Abdulaziz University, Jeddah, Saudi Arabia

ID 195  Convex Optimization Collaborative Filtering to Find Causality in Market Indices
Talal Al-Sulaiman and Ali Al-Matouq, Department of Engineering Management, Prince Sultan University, Riyadh, 12435, Saudi Arabia

ID 082  Dynamical Behavior of Terrorist Mathematical Model in the Present of Fuzzy Parameters
Asep K. Supriatna, Department of Mathematics, Padjadjaran University, Bandung 45363, Indonesia
Hennie Husni, Department of Industrial Engineering, Langlangbuana University, Bandung 40261, Indonesia
Aprillya R. Lanz, College of Humanities and Social Sciences, Grand Canyon University, Phoenix, AZ 85017, USA and School for Engineering of Matter, Transport and Energy, Arizona State University, Tempe, AZ 85287, USA

ID 161  Effect of Operator Skill Level on Assembly Line Balancing in Apparel Manufacturing: A Multi-Objective Simulation Optimization Approach
Ghada Elnaggar, Industrial Engineering Department, King Abdulaziz University, Jeddah KSA

ID 225  Ergonomics Intervention for Increasing Productivity and Safety in Garment Industry
Farheen Bano, Industrial Engineering Department, King AbdulAziz University, Jeddah, Saudi Arabia

ID 075  Identification of Key Risks Impacting Project Completion Time in UAE’s Building Projects- Towards Developing a BIM Solution
Deena Badran, Doctoral Student in Engineering Management, University of Sharjah, Sharjah, United Arab Emirates
Prof. Radhi AlZubaidi, Department of Civil & Environmental Engineering, University of Sharjah, Sharjah, United Arab Emirates
Dr. Senthilkumar Venkatachalam, Civil Engineering Department, Indian Institute of Technology Palakkad, Palakkad, India

2:30 – 3:00 pm – Networking/Coffee Break/Asr Prayer
1:40 – 2:00 pm Lunch Keynote

Session – Thursday (November 28) – 3:00 – 4:30 pm

3:00 – 4:30, THURSDAY  Industry 4.0 / Industry Solutions VIII  Room 1
Session Chair: Mohammad Ali Shalan, Aqarat Real Estate Development Company, Jeddah, Saudi Arabia

3:00 – 3:30 (Thursday)
Dr. Kashif Saleem
Associate Professor, Center of Excellence in Information Assurance (CoEIA)
King Saud University, Riyadh, Saudi Arabia and Visiting Fellow at Macquarie University, Sydney, Australia

IloT Security Challenges and Recommendations
3:30 – 4:00 (Thursday)
Abdulrahman Hamam
QHSE Manager (ISO, Lean, Six Sigma, Risk Management, CQM, TQM, Compliance), Saudi Arabia

4:00 – 4:30 (Thursday)
Dr. Fahad A Alfifi, (SMP, OMP, PMI, BSC, KPI) - Certified Trainer
Corporate Strategic and Business Planning Consultant, Saudi Railway Company

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3:00 – 3:20 (Thursday)

Prof. Sufian A. Forawi
Professor of Science Education
British University in Dubai, United Arab Emirates

ID 324  Meaningful STEM Education Frameworks
Sufian Forawi, British University in Dubai, United Arab Emirates

3:20 – 3:40 (Thursday)

Dr. Amal Abbas Abdelsattar
Assistant Professor, Department of Architecture
College of Engineering
Prince Sultan University, Riyadh, Saudi Arabia

Active Learning in Engineering Education

3:40 – 4:00 (Thursday)

Dr. Wafa Labib
Assistant Professor, Department of Architecture
College of Engineering
Prince Sultan University, Riyadh, Saudi Arabia

Architectural students learning styles and their implications for teaching

4:00 – 4:20 (Thursday)

Dr. Ali Rizwan
Assistant Professor
Department of Industrial Engineering
King Abdulaziz University, Jeddah, Saudi Arabia

Title of the Talk: Impact of Instructor’s Emotional Intelligence on the Academic Performance of Students

4:20 – 4:40 (Thursday)

3:00 – 4:30, THURSDAY          Environmental and Sustainability
Room 3

Session Chair: Tariq Megahed Aid, South Delta Electricity Distribution Co., Riyadh, Saudi Arabia

ID 060  Conception of Critical Success Factors for Corporate Social Responsibility Initiatives in Industry
Anat Anaqie Zahidy, Shahryar Sorooshian and Fazeeda Mohamad, Universiti Malaysia Pahang, Gambang, Pahang, Malaysia

ID 107  Construction Waste Management Techniques: Merits and Challenges for Recycling and Reusing
Muhammad Akram Akhund1, Nafees Ahmed Memon1, Tauha Hussain Ali1, Aftab Hameed Memon1 and Hafiz Usama Imad1
1Civil Engineering Department, Mehran University of Engineering and Technology, Jamshoro, Pakistan

ID 264  Environmental Impact Analysis of the Activated Biochar Production from Macadamia Husks
Antoine F. Mulaba-Bafubiandi, Mineral Processing and Technology Research Centre, Metallurgy Department, School of Mining, Metallurgy and Chemical Engineering, Faculty of Engineering and The Built Environment, University of Johannesburg, South Africa

ID 018  Environmental Remediation through the Application of the Vermicomposting Technology for Bio waste Management
M. M. Manyuchi and C. Mbohwa, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

E. Muzenda, Department of Chemical Engineering Technology, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa and Department of Chemical, Materials and Metallurgical Engineering, Faculty of Engineering and Technology, Botswana International University of Science and Technology, P Bag 16, Palapye, Botswana.

ID 059  Extracting Cellulose Whiskers from Fully Cotton-Based Textile and Apparel Wastage
Riasat Zaman, Dept. of Apparel Engineering, Bangladesh University of Textiles, Tejgaon Industrial Area, Dhaka 1208
Hosne Ara Begum, Faculty of Textile Engineering, Bangladesh University of Textiles, Tejgaon Industrial Area, Dhaka 1208

ID 076  Fire Resistant halogen-free Cables industry Promising prospects for sustainable technology
Tariq Megahed Aid, South Delta Electricity Distribution Co., Riyadh, Saudi Arabia
### IEOM Riyadh Conference

#### PARALLEL SESSIONS

**November 26-28, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room</th>
<th>Topic</th>
<th>Authors/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3:00 – 4:30, THURSDAY</strong></td>
<td>Operations Management</td>
<td><strong>Room 4</strong></td>
<td>Simple Accurate Approximations of the Two-Threshold Control Limit Policy in Condition Based Maintenance</td>
<td>Ahmad Al Hanbali, Noman Ullah Noman Ullah, Systems Engineering Department, College of Computer Science &amp; Engineering, King Fahd University of Petroleum &amp; Minerals, KSA</td>
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<td>The Equilibrium Solution of Word-of-Mouth Marketing Strategy</td>
<td>Hennie Husnia, Department of Industrial Engineering, Langlangbuana University, Bandung 40261, Indonesia</td>
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<td>Critical Factors Influencing Sustainable Infrastructure Projects Financing in Nigeria</td>
<td>Ademilade Aboginije, University of Johannesburg, Johannesburg, South Africa</td>
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<td><strong>3:00 – 4:30, THURSDAY</strong></td>
<td>Energy and Water</td>
<td><strong>Room 5</strong></td>
<td>Decontaminating Effect of Sifted Watermelon Rind Applied In Water with Mercury</td>
<td>Valeria Cárdenas Morales, Dayan Alondra Garza Cantú, Aleyda Herrera Melgoza, Leslie María Sánchez Franco, Emilio Sánchez Torres, Julia Michiel Tijerina Fernández, Astrid Vega Domínguez, Extension, Consulting, and Research Division, Universidad de Monterrey, San Pedro Garza García, Nuevo León, México</td>
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<td>Decontamination of Water Polluted with Hazardous Materials Using Bio-adsorbent Local Waste Products</td>
<td>Ana Paula Guerra, Diego Pérez, María Fernanda Lozano, Marcelo Moreno, Pablo Torres, and Yanelly Estefania Castruita, Health Academy department, University of Monterrey, San Pedro Garza García, Nuevo León, Mexico</td>
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<td>Decontamination of Water with Mercury through Mango Seed</td>
<td>Andrea Teniente Torres, Fernanda López Lozano, Kassandra Sarahí Baca Sánchez, Martha Angélica Solís Martínez, Ana Cristina Montiel Lara, Gabriela Anahi González Tamez, Jonathan Eduardo Gaytan Cavazos, Extension, Consulting, and Research Division, Universidad de Monterrey, San Pedro Garza García, Nuevo León, México</td>
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<td>Design a Hybrid Wind-Solar Power System for Remote Areas of Saudi Arabia</td>
<td>Mashael Abdullah Rajeh and Ahmed Bensenouci, Electrical and Computer Engineering Department, Effat University Jeddah, Saudi Arabia</td>
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<td>Filtro sargazo</td>
<td>José Luis Rodríguez González, Oscar Marcelo Garza García, Emiliano Saucedo Jiménez, Victor Camarillo, Mónica Valle Vicente Valdez Cantú, Raúl Salinas, Universidad de Monterrey, San Pedro Garza García, Nuevo León, México</td>
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<td>Flow simulation inside an axial tubine stage</td>
<td>Khaled Sahnoone and A. Benbrik, Laboratory of Petroleum Equipment Reliability and materials, Université M'Hamed Bougara Boumerdes, Algeria</td>
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<td><strong>3:00 – 4:30, THURSDAY</strong></td>
<td>Operations Management</td>
<td><strong>Room 6</strong></td>
<td>Analysis and Prediction of students’ absence using Educational Data Mining</td>
<td>Souad Larabi-Marie-Sainte, College of Computer and Information Sciences, Price Sultan University, Riyadh, KSA</td>
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<td>Application of Lean Manufacturing to Hospitality Sector; Case Study, Ritz-Carlton Hotel, Riyadh, Kingdom of Saudi Arabia</td>
<td>Ziad Alhisan, Nasooq Airfaifa, Alwaleed K. Dhabban, Osama A. Samour, and Abdelhakim Abdelhadi, Prince Sultan University, Saudi Arabia</td>
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<td>Applying immersive technologies to production digitalization and personnel training</td>
<td>Ilya Simonov, CROC VR Director, Moscow, Russia</td>
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<td>Business Excellence Models Implementation in Saudi Nonprofit Organizations: Critical Success Factors and Key Barriers Hindering Adaptation</td>
<td>Osama Mohamed Salih, Sha’ni Mohd Yusof, and Rozzeta Dolah, Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia, KL</td>
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<td>Condition Based Monitoring of Gearbox Transmission Using Wear Particle Analysis Technique</td>
<td>Sayed Y. Akl, Hesham A. Abou El Anein and Sherif El-Soudy, The British University in Egypt, Cairo, Egypt</td>
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<td>A convex programming approach for university timetabling</td>
<td>Ali AlMatouq, Prince Sultan University, Riyadh, Saudi Arabia</td>
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Industry 4.0 / Industry Solutions

Industry Solutions I – Industry 4.0 – Room 3
1:30 – 3:00 pm, Tuesday, November 26, 2019
Session Chair: Dr. Mahmoud Alhader, Al Ain Distribution Company, Al Ain, United Arab Emirates

1:30 – 2:00 (Tuesday)
Ilya Simonov
World Trade Center
Manama, Kingdom of Bahrain

Leading expert in the development and integration of virtual and augmented reality content and supervisor of end-to-end VR and AR projects. Mr. Ilya Simonov is an expert in development and integration of virtual and augmented reality solutions. A manager of integrated development projects based on immersive technologies (VR, AR, XR). Coordinates development team activities with 14 qualified engineers and project management teams. Responsible for their continuous professional development. Builds partnerships with leading developers and manufacturers of the industry. Under his leadership, the team of the Virtual Reality Center successfully implemented projects for the companies in GCC, including Saudi Aramco, STC, Sharjah Government, and for multiple industrial customers (including oil and gas, energy and petro chemistry industries) in Russia: Sibur Holding, Roskosmos, Gazprom Neft, Rosatom, Delaval, Mosoblgaz, Helicopters of Russia, Radio Plant named after AS Popov etc.

2:00 – 2:30 (Tuesday)
M Chairul Basrun Umanailo
Department of Agricultural and Forestry
University of Iqra Buru, Namlea, 97571, Indonesia

M Chairul Basrun Umanailo is a lecturer at the Faculty of Agriculture at Iqra Buru University with specifications of rural sociology and research methodology. It has an M.Sc degree in sociology Obtained from March University. In 2016 Began doctoral education at the University of Brawijaya. Currently still completing a dissertation on the issue of urbanization because of village development that is focused on the Central Java region

ID 326 Structure of Social Change in Industrial Society
M Chairul Basrun Umanailo, Department of Agricultural and Forestry, University of Iqra Buru, Namlea, 97571, Indonesia

2:30 – 3:00 (Tuesday)
Dr. Mahmoud Alhader
Asset Information Section Head
Al Ain Distribution Company, Al Ain, United Arab Emirates

Dr. Mahmoud Al-Hader has over 16 years of experience in the information technologies specially related to satellites applications, smart cities & civil engineering applications. He obtained his Bachelor of Science degree in Civil Engineering in 2003. Master of Science in Geomatics Engineering (Honor Degree) in 2007 and PhD in GIS and Geomatics Engineering (Honor Degree) in 2011. He used to work as a senior researcher in Bahrain Centre for Studies and Research in Bahrain for 4 years. In 2007, he joined the Geomatics Information Department as a head of the engineering section in Limitless, Dubai World. In 2009, he joined the Asset Management Directorate as an Asset Information Section Head in AADC and in parallel assigned as a chairman of the innovation & creativity council. Dr. Mahmoud Al-Hader has several national and international awards in R&D, registered four PATENTs, in US Patent office, and invented several engineering applications & tools in different engineering aspects and information technologies. He achieved the crown prince Medal in innovation 2018, achieved the innovation medal across the energy sector 2017, and achieved the innovation of sustainable energy award on the national level 2018. Published a book in 2015 for the smart cities monitoring technologies.

Industry Solutions II – Industry 4.0 – PLM & Digital Manufacturing – Room 3
3:30 – 5:00 pm, Tuesday, November 26, 2019
Session Chair: Ahmed Alghamdi, Director of Quality and Internal Audit & Program Manager, Riyadh, Saudi Arabia

3:30 – 4:00 (Tuesday)
Majed Alsubiei
Mechanical/Manufacturing Engineer

Majed Alsubiei is a Mechanical/Manufacturing Engineer. He earned B.S. in Manufacturing and B.S. in Mechanical Engineering from California State University, Los Angeles. Also, he earned M.S. in Mechanical Engineering from the same school. Engineer Majed has done research projects with General Motors (GM), 6D Helmets, California Adaptive Rowing Program (CARP), Invent for Humanity Organization, CSULA Forensic Anthropology Department and many more projects that varies in their technical maturity and scaled by Technology Readiness Level (TRL), which was developed by NASA, and also varies in their manufacturing maturity and scaled by Manufacturing Readiness Level (MRL), which was developed by United States Department of Defense. He is a member of American Society of Mechanical Engineers (ASME), and National Mechanical Engineering Honor Society (Pi Tau Sigma).
4:00 – 4:30 (Tuesday)

Ahmed Alghamdi
Director of Quality and Internal Audit & Program Manager
Riyadh, Saudi Arabia

4:30 – 5:00 (Tuesday)

Dr. Rahmat Nurcahyo
Industrial Engineering Department, Faculty of Engineering
Universitas Indonesia
Depok, 16424, Indonesia

Rahmat Nurcahyo is currently active as academic staff in Industrial Engineering Department, Universitas Indonesia. Mr. Rahmat was born in Jakarta, June 2nd 1969. He started his higher education in Mechanical Engineering, Universitas Indonesia and graduated in 1993. Then, he continued his study in University of New South Wales and earned his master degree (M.Eng.Sc.) in 1995 and doctoral degree in Faculty of Economics, Universitas Indonesia. Mr. Rahmat has taught several courses in Industrial Engineering UI, including Industrial Psychology, Industrial Economy, and Total Quality Management. Mr. Rahmat is International Register of Certificated QMS Auditors.

ID 102 Designing Quality Assurance System Using Gap Analysis Method on Automotive Spare Parts Company
Rahmat Nurcahyo, Maga Arsena, and Muhammad Habiburrahman, Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, 16424, Indonesia

8:30 – 10:00 am, Wednesday, November 27, 2019

Session Chair: Md. Abdullah Al Mahmud, Manarat International University, Dhaka, Bangladesh

8:30 – 9:00 (Wednesday)

Mr. Md. Abdullah Al Mahmud
Founder & CEO, Thriving Skills Limited Assistant Professor of MIS
Manarat International University
Dhaka, Bangladesh

Skills Focused Self-education for Industry 4.0

Mr. Md. Abdullah Al Mahmud is Assistant Professor of MIS at the Manarat International University, Dhaka. He served as Coordinator of MBA Program, Department of Business Administration, MIU. Mr. Mahmud received BBA and MBA degree from the University of Dhaka. He is the founder of the Thriving Skills Limited, skills focused self-education platform in Bangladesh. He is skilled in Analytical Skills, Lecturing, Decision-Making, Instructional Design, Data Science, Blockchain Technology, Digital Marketing and Public Speaking. Mr. Mahmud received numerous professional certifications from IBM, Google, LinkedIn Learning, Udemy and many more. Mr. Mahmud launched digital promotional platform of MIU and play vital role in bringing ERP in the organization. Mr. Mahmud has exposed his leadership capacity by organizing Seminars and Leadership Development Program. He has introduced and organized university’s first talent search competition “Scholar of MIU” and first presentation competition “MIU Master Presenter”. His recent research activities include Business Professionals’ Digital Competency in the Fourth Industrial Revolution Era, Digital Competency focused higher education for achieving SDG, Effects of Handheld devices on millennials reading habit, Challenges to implement Information Systems in the Business Organization, Perceptions of Blockchain Technology by Banking Professionals and many others. Mr. Mahmud served as a Humanitarian in Global Goodwill Ambassador. Mr. Mahmud demonstrated his research contribution in distinguished National Conferences in divergent Universities and International Conferences in India, Nepal, Bhutan and Malaysia.

9:00 – 9:30 (Wednesday)

Ali Akbar
Industrial Iot Expert
Siemens Malaysia Appointed Trainer for IIOT
IOT SATA PVT. LTD.
Subang Bestari, Shah Alam, Selangor, Malaysia

Mr. Akbar is a Co-Founder & CTO of IoT SATA PVT. LTD., with vast field & research experience in Electronics, Electrical Automation, IT Systems Power Plants Development, Project Management and Smart Factory Development. Akbar is fueled by his passion in industrial digitalization or Smart Manufacturing and he is fully geared up with the upcoming Industry 4.0 (I4.0) development. He holds a master’s degree in Mechatronics Engineering with focused research on I4.0 – Industrial IoT. He has successfully contributed the I4.0 contents in engineering curriculum and developed several Industrial IoT (IIoT) Training Systems for education sector. On the professional side, he is a Professional Trainer for Automation, IoT & Industrial IoT since 2014 and trained over 200 trainees internationally which includes Pakistan, UAE and Malaysia. He was involved in dozens of Industrial Projects and
9:30 – 10:00 (Wednesday)

**M Chairul Basrun Umanailo**
Department of Agricultural and Forestry
University of Iqra Buru
Namlea, 97571, Indonesia

M Chairul Basrun Umanailo is a lecturer at the Faculty of Agriculture at Iqra Buru University with specifications of rural sociology and research methodology. It has an M.Sc degree in sociology Obtained from the March University. In 2016 Began doctoral education at the University of Brawijaya. Currently still completing a dissertation on the issue of urbanization because of village development that is focused on the Central Java region.

**Rita Dwi Pratiwi**
Stikes Widya Dharma Husada
Tangerang, Indonesia

Rita Dwi Pratiwi is a lecturer at the Widya Dharma Husada College of Health Sciences at the Faculty of Nursing. She completed her Bachelor of Nursing Education at Gadjah Mada University and graduated from Nursing for Children Department in Akdeniz University, Turkey. She is currently studying a postgraduate degree in Public Health Department at Lincoln University, Malaysia. She is the head of a Research and Community Service Institute (LPPM) at Widya Dharma Husada Tangerang School of Health science.

**Fenita Purnama Sari Indah**
Stikes Kharisma Persada
Baruna, Indonesia

Fenita Purnama Sari Indah is a lecturer at the Kharisma Persada School of Health Science who teaches several subject in public health studies program. The author was born at Bandar Lampung, Lampung, Indonesia on June 12, 1991. The author received a Bachelor’s degree in 2013 and a master’s in Public Health study in 2015 at Diponegoro University, Semarang, Central Java, Indonesia. Interested in Statistic health, epidemiology, environmental health and others pattern about health. The author also actively writes in several accredited and non-accredited national scientific journals and has written international journals and books.

**ID 327  Negative Impact of Industry on Society Using Ralph Dahrendorf's Conflict Theory**
M Chairul Basrun Umanailo, Department of Agricultural and Forestry, University of Iqra Buru, Namlea, 97571, Indonesia
Rita Dwi Pratiwi, Stikes Widya Dharma Husada, Tangerang, Indonesia
Fenita Purnama Sari Indah, Stikes Kharisma Persada, Indonesia

10:15  Keynote: Dr. Mohammed Al-Majed, Senior Advisor to the Minister, Ministry of Industry and Mining, Saudi Arabia
11:00  Keynote: Eng. Suliman Almazroua, CEO at National Industrial Development & Logistics Program

1:00 – 2:30 pm, Wednesday, November 27, 2019

**Industry 4.0 / Industry Solutions IV – Room 3**

**1:00 – 1:20 (Wednesday)**

**Mohammed Khursheed Akhtar, Ph.D.**
Data Scientist at KAU-Web Observatory for Web Studies
King Abdulaziz University (KAU)
Jeddah, Saudi Arabia

Dr. Mohammed Khursheed Akhtar has more than 30 years’ experience in the field of Teaching, Research, Consulting and IT Business Development. He has 2 PhDs, one from Atlantic International University, Hawaii, USA in 2004-2007 in GIS and another from Singhania University Rajasthan, Indian in 2011-2015 in ERP. He has Master Degree in Applied Mathematics with Honors. He has diploma in Islamic Finance and Insurance. He attended several seminars and speaker of more than 10 conferences. Dr. Akhtar is currently working as an Assistant Professor/Senior Advisor at Research and Studies Unit of Strategic Center to Kingdom Vision Realization of King Abdulaziz University, Jeddah, Kingdom of Saudi Arabia. He worked as a Data Scientist at KAU Web Observatory for Web Studies from 2017 to 2019, as a Research Fellow at Strategic Department of KAU from 2013 to 2107, as a Deputy Project Manager at KAU-ERP Implementation Project from 2011 to 2012, as a Faculty Member from 2008 to 2011 at Faculty of Commuting and Information Technology and as a GIS Head at Projects and Proposal Department from 2005 to 2008 in King Abdulaziz University. His research interests are in application of Big Data, Machine Learning, Artificial Intelligence, Statistical Modelling., ERP (SAP) Architecture and Computer Component-Based Development (CBD). Software Development Methodologies, Risk Management. Geographical Information systems (GIS), Relational Database Development & Project Management. Author of 5 books (under publication), more than 25 published articles and co-author of more than 20 articles and conference publications.
Dr. Vijey Thayananthan
Associate Professor
Department of Computer Science
Faculty of Computing and Information Technology
King Abdul-Aziz University
Jeddah, Saudi Arabia

IoT for Industry 4.0 with Photonic Technology

Vijey Thayananthan is an Associate Professor at Computer Science Department in the King Abdulaziz University, Jeddah, KSA. He obtained his Ph.D. in Engineering (Digital communication engineering) from Department of Communication Systems, University of Lancaster, UK, in 1998. Further, he had worked as Postdoctoral research Fellow in Department of Computer Science, Glasgow/Sterling University and Communication division, Department of Electrical and Electronic Engineering, Strathclyde university, UK for 2 years. Since 2000, he had been working as a Research engineer and senior algorithm development engineer in Advantech Ltd, Southampton University Science Park, UK and Amfax Ltd, UK respectively. His research interests include wireless communication algorithm design with photonics technology, security management of communication network and big data, computer security, Internet of Things for Industry 4.0 and wireless sensor network. He has been a full-time member of the Institution of Engineering Technology (IET), UK since 2005.

Jalal Al-Muhtadi, PhD
Assistant Professor
College of Computer & Information Sciences,
Center of Excellence in Information Assurance (CoEIA), Director,
King Saud University, Riyadh, Saudi Arabia

Dr. Jalal Al-Muhtadi is the Director of the Center of Excellence in Information Assurance (CoEIA) and a cybersecurity consultant. He is also an Associate Professor at the Department of Computer Science at King Saud University. He received his PhD and MS degrees in Computer Science from the University of Illinois at Urbana-Champaign, USA. He has over 50 scientific publications in the areas of cybersecurity, information assurance, privacy and IoT security.

Eng. Ahmed Hafez
Systems Manager
alfanar
Saudi Arabia

Mr. Ahmed holds a B.Sc. in Production Engineering from Alexandria University, Egypt. He has 15 years of experience as an operational excellence professional within the manufacturing sector in several industries namely: FMCG, automotive, home appliances, glass and metal manufacturing. In addition to his experience in the manufacturing sector he has also worked in Business Process Improvement & Re-engineering within the sales and marketing operations (B2B and B2C). Mr. Ahmed is a certified Six Sigma Black Belt (CSSBB) from the American Society for quality, and a certified Lean practitioner in compliance with Toyota Production System (TPS) by Toyota Corporation in Japan, he is also a certified EFQM assessor by the European Foundation of Quality Management and a certified Project Management Professional (PMP) by the Project Management Institute as well as being a certified work measurement practitioner from The Harry Mitchel College in U.K. Along the past 15 years Mr. Ahmed successfully led a large number of improvement projects using Lean, Six Sigma, Industrial Engineering and Project Management approaches and techniques.

Olayan Alharbi, PhD
Assistant Professor
Majmaah University

Industry 4.0: the journey of AI and data analytics adoption

Olayan Alharbi is an assistant professor at Majmaah University and the data science team leader at ODS. He adopts design science to develop solutions for existing business and operation problems. He earned his PhD from Claremont Graduate University. He worked in local and international academic institutes such as Claremont graduate university, TVTC, Majmaah University. Also, he performed many research projects for private sectors such as Microsoft, ODS, ZID, and UtilityAPI.
Dr. Ahmed Aljabr  
Operational Excellence Department  
Saudi Aramco

Topics: Challenges and Opportunities for Business Excellence Performance: Lean Six Sigma Approach

Dr. Ahmed Aljabr is a Master Blackbelt Certified and his experience span industries in the areas of Lean Six Sigma, Continuous Improvement, Quality Management, Lean Manufacturing, and Process Optimization. He currently serves as operational excellence specialist at Operational Excellence Department Saudi Aramco where he is effectively engaged in deploying operational excellence across various departments of Aramco. Dr. Aljabr has a history of community services and Professional Organizations engagement, he is currently a president of IEOM-KSA Chapter, and he is a member of ASQ, PMI, IISE, and ASME. He received an Exemplary Leadership Award, Best leader of the year from Lawrence Technological University, and Outstanding Leadership Award from Saudi Arabian Cultural Mission, Saudi Embassy at Washington D.C. Dr. Aljabr obtained BS in Mechanical Engineering, MS in Manufacturing System Engineering, MS in Engineering Management, and he is PhD in Manufacturing System Engineering at Lawrence Technological University. He completed an Executive Strategy and Leadership Program at Harvard University and Post Degree at the Industrial Engineering Program at LTU.
Ahad Ali is an Associate Professor and Director of Industrial Engineering Program and Director of Smart Manufacturing and Lean Systems, A. Leon Linton Department of Mechanical Engineering at the Lawrence Technological University, Southfield, Michigan, USA. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and Ph.D. in Industrial Engineering from University of Wisconsin-Milwaukee. Dr. Ali was Assistant Professor in Industrial Engineering at the University of Puerto Rico – Mayaguez, Visiting Assistant Professor in Mechanical, Industrial and Manufacturing Engineering at the University of Toledo, and Lecturer in Mechanical Engineering at the Bangladesh Institute of Technology, Khulna. He received an Outstanding Professor Award of the Industrial Engineering Department, University of Puerto Rico -Mayaguez, (2006-2007). He has published 50 journal and 121 conference papers. Dr Ali has done research projects with Chrysler, Ford, DTE Energy, New Center Stamping, Whelan Co., Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. His research interests include manufacturing systems modeling, simulation and optimization, intelligent scheduling and planning, artificial intelligence, predictive maintenance, e-manufacturing, and lean manufacturing. He has successfully advised seven doctoral students. Dr. Ali has involved with many international conference committees. He has served as an Executive Director of IEOM Society International and Conference Co-Chair of the International Conference on Industrial Engineering and Operations Management and hold events in Dhaka, Kuala Lumpur, Istanbul, Bali, Dubai, Orlando, Detroit, Rabat, UK, Bogota, Paris, Washington, DC, Pretoria and Bangkok. Dr. Ali has visited 20 countries for professional events. He is a member of IEOM, INFORMS, SME and IEEE.

Mohammad Fakhruddin
Senior Manager
Dolf Technologies Co. Ltd.
Khobar, Saudi Arabia

AR, IoT, AI, ML Powered Learning Solutions for Digital Transformation and Industry 4.0

Mohammad Fakhruddin is Saudi Arabia-based senior e-learning and learning technology executive focused on strategy, innovation, effective execution, and team culture. Previously, he has been a goal-driven project manager and entrepreneur. Mohammad has been in Saudi Arabia for last 7 years working on digital transformation projects in the education and training space. Currently, he operates in a multi-faceted role consisting of elements of Business Analysis, Solution Architecture, Project Management, and Organizational Development. Mohammad is project director for Industry 4.0 service line at his organization and is driving the development of next generation of visualization, training, and interaction tools for Industry 4.0. He is passionate about emerging immersive and wearable technologies (AR, VR, IoT) and the corresponding learning interventions and process transformations, leading to Industry 4.0.

Eng. Mohammed I. Alobaid
Marine Offshore Operations and Logistics - Jubail, Ras Al Khair
Kanoo Shipping - A division of Yusuf Bin Ahmed Kanoo Co Ltd
Jubail, Saudi Arabia

Talk Title: Offshore Pipeline Operations and Engineering

Mohammed I. Alobaid is a technical engineer with a Bachelor of Science Degree in Mechanical and Manufacturing Engineering Technology from Lawrence Technological University, Southfield, Michigan. In addition, he has an Associate’s Degree in Computer Technology, Programming, from Alahsa College of Technology, Alahsa, Saudi Arabia. Mohammed works for Yusuf Bin Ahmed Kanoo Group, one of the largest companies in GCC. He is a member of the Marine and Offshore Operations Team of the Shipping Division in Jubail and Ras Alkhair, Saudi Arabia. Since he joined the company, he contributed to develop the marine and offshore projects management. Furthermore, he worked on several Aramco projects and teamed up with some marine principles such as: Snamprogetti (Saipem), National Petroleum Construction Company (NPCC), HUTA Marine Works LTD, McDermott, Allianz, Topaz Marine, Britoil, Algosabi Diving & Marine Services, etc. He is in charge of all needed services of the vessels once they reach the port including supervising the loading and discharging activities of all offshore materials such as: heavy coated pipes, scaffolding, giant reels, platforms generators, loose cement, engineering spare parts, supplying crafts, chemical and hazardous materials, Pipeline equipment, etc. Moreover, he is an author. He has three books. Two in English and one in Arabic. Plus, he wrote many stage-plays and short movies.
Dr. Kashif Saleem
Associate Professor
Center of Excellence in Information Assurance (CoEIA)
King Saud University, Riyadh, Saudi Arabia
Visiting Fellow at Macquarie University, Sydney, Australia

IoT Security Challenges and Recommendations

Dr. Kashif Saleem is an Associate Professor at the Center of Excellence in Information Assurance (CoEIA), King Saud University, Riyadh, Saudi Arabia and a Visiting Fellow at Macquarie University, Sydney, Australia. Dr. Saleem received his Master and PhD in Electrical Engineering from University Technology Malaysia in 2007 and 2011. Acquired his PGD in Computer Technology & Communication from GC University, Lahore, Pakistan back in 2004. Dr. Saleem took professional certifications from MIT (USA) in Cybersecurity, IBM in Security Intelligence Analyst, University of the Aegean in Information & Communication Security, Microsoft, Cisco. He has authored and coauthored over 100 scientific research papers in refereed international journals and conferences. He is the editorial member of high impact journals, and the committee member of numerous international conferences and workshops. Dr. Saleem secured several national and international research grants. His research interests are Bioinformatics, Ubiquitous Computing, Biological Inspired Optimization Algorithms, Computer Networks Security.

Abdulrahman Hamam
QHSE Manager (ISO, Lean, Six Sigma, Risk Management, CQM, TQM, Compliance)
Saudi Arabia

Quality & Excellence presentation & it’s relation with Industrial Engineering

Eng. Abdulrahman Hamam is quality expert who’s dedicate his all experience in quality. He earned B.S. in Industrial Engineering from King Khalid University (Abha Saudi Arabia). Eng. Hamam is classified as a Professional Industrial Engineer from Saudi Council of Engineers. He is a Certified IRCA Lead Auditor for ISO 9001:2015 and a Professional member in American Society for Quality (ASQ) and a Professional member for Saudi Society for Quality (SSQ). He is certified as Six Sigma Black belt. He certified as Quality Manager from ASQ. With (+12) years accredited experience in quality industry, this experience including:

- Full capability to create an organizational high level governance system.
- Review last revision of International Standards & Implement them.
- All Type of Lab testing & Inspections in piping & Plastic Manufacturing systems.
- ISO 9001, IATF 16949, ISO 14001, OHASA 18001, HACCP, ISO 2531, BS EN 545,

- BS EN 598, CE, BRC & FM Internal & External Audits (Expert).
- Review & approve Estimation and Manufacturing Drawings.
- Creating VDDL (Vendor drawings & Data List).
- Reducing customer Complaints & enhanced Customers Satisfaction.
- Suppliers Managements (Audits & Evaluate Vendors).
- Create ITP’s (Inspection Test Plans).

Dr. Fahad A Alfifi, (SMP, OMP, PMI, BSC, KPI) - Certified Trainer
Corporate Strategic and Business Planning Consultant
Saudi Railway Company

- Executive Director of the National statistical Strategic at General Authority for Statistics
- Director of Information Technology & Strategic Management Office at Gulf Cooperation Council Standardization Organization (GSO)
- PMO Director at King Abdullah Public Education Development Project – Director of Information Center at Riyadh Chamber of Commerce & Industry
- Doctor of Science (D.Sc.) in Information Systems and Communications, Robert Morris University, 2015.
- Master of Science in Information Systems (MSIS), Lawrence Tech University, 2009.
- Bachelor of Science in Information Systems, Virginia Commonwealth University, 2008.
IEOM Student and Professional Chapter Activities
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King Saud University, Riyadh, Saudi Arabia

IEOM Effat University Student Chapter
IEOM PSU Student Chapter

IEOM KAU-Rabigh Student Chapter
IEOM SQU Student Chapter

Facens Student Chapter, Sorocaba, Brazil
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 Michigan Chapter

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

IEOM Student Chapter at King Abdulaziz University (KAU), Jeddah, Saudi Arabia

### Faculty Advisor
Dr. Ammar Al-Qahtani, Department of Industrial Engineering

### Chapter Officers
- President: Linah Khalid Hussain
- Vice President: Rawan Hasan Baik
- Director of Administration: Walaa Othmani
- Director of Finance: Sara Yahya
- Director of Programs: Malak Mously
- Director of Webmaster and Social Media: Shahad Al Malki
- Director of Communications: Bushra Alkhaldi
- Director of Membership: Dania Memish

IEOM Student Chapter for College of Engineering at Princess Nourah University

### Faculty Advisors
Dr. Kaouther Mohamed Ghachem
Dr. Mariam Ali Alasmari

### Chapter Officers
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- Vice President: Hessa Alshunaybir
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- Treasurer: Nuha Aloud
- Director of Social Media: Reem Aseeri
- Director of Program/Activities: noura Alghurayr
- Director of Membership: Saja al-sultan
- Director of Communication: Reema Altuwaijri and Yara Alghamdi

IEOM Student Chapter at Taibah University, Medina, Saudi Arabia

### Faculty Advisor
Dr. Rayan Omar, Assistant Professor at Industrial Engineering Department

### Chapter Officers
- President: Abbod Sumaidea
- Vice President: Khaled Hejazy
- Secretary: Hamzah Amar
- Treasurer: Osamah Awamah
- Director of Program/Activities: Sufian Al- Muhammady
- Director of Membership: Muhammad Babukair
- Director of Communication: Mahmud Al-Basuny

IEOM Student Chapter at University of Science & Technology of Fujairah (USTF), Fujairah - United Arab Emirates (UAE)

### Faculty Advisor
Dr. Amir J. Majid, Associate Professor, College of Engineering

### Chapter Officers
- Vice President: Dr. Amir J. Majid
- Director of Social Media: Ahmed Sameer Issam Abdullatif
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First Central American Symposium on Industry 4.0, Logistics 4.0 and Manufacturing 4.0, San Jose, Costa Rica, June 12-13, 2019

Annual Production Engineering Week of Sorocaba (XI SEPS), May 22 - 23, 2019, Faculdade de Engenharia de Sorocaba (FACENS), The Sorocaba Engineering School, Sorocaba/SP, Brazil
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
<table>
<thead>
<tr>
<th>Country</th>
<th>University Name</th>
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<tr>
<td>Australia</td>
<td>Queensland University of Technology (QUT), Brisbane</td>
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<td>Canada</td>
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## Upcoming Events

### 10th IEOM International Conference

**Hyatt Regency, Dubai, United Arab Emirates (UAE)**  
**March 10-12, 2020**  
**Conference Website:** [www.ieomsociety.org/ieom2020/](http://www.ieomsociety.org/ieom2020/)

### 2nd South American Conference on Industrial Engineering & Operations Management

**São Paulo, Brazil, April 14-16, 2020**  
**Venue:** Maksoud Plaza Hotel, São Paulo  
**Conference Website:** [www.ieomsociety.org/brazil2020/](http://www.ieomsociety.org/brazil2020/)

### 4th IEOM European Conference

**Rome, Italy, July 22-24, 2020**  
**Venue:** The Faculty of Civil and Industrial Engineering of Sapienza - University of Rome, Italy  
**Conference Website:** [www.ieomsociety.org/rome2020/](http://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  
**Conference Website:** [www.ieomsociety.org/monterrey2020/](http://www.ieomsociety.org/monterrey2020/)