## Sponsors and Partners

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<th>AEDC</th>
<th>AEEA</th>
<th>AL AKBAYAN UNIVERSITY</th>
<th>Crystal Quality</th>
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<td>Arab Academy for Science, Technology &amp; Maritime Transport (AASST), Alexandria, Egypt</td>
<td>ATTA DAMOUNE S.A.O.C (Algeria)</td>
<td>Hitachi Solutions East Japan, Ltd.</td>
<td>ASQ Middle East Africa</td>
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<td>CITL</td>
<td>College Of International Transport &amp; Logistics</td>
<td>The Global Voice of Quality</td>
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<td>Télécoms d'Investissement</td>
<td>Ecole Mohammed d'Ingénieurs</td>
<td>Université Mohammed V de Rabat</td>
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<td>CIRP (German Society of Industrial Engineers)</td>
<td>IESEG School of Management</td>
<td>IIEF (Indian Institution of Engineers)</td>
<td>INFORMS</td>
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| PSIE                | SCQE               | Society of Cost and Quality Engineers | Université Lille Marne
| IFEES               | Lawrence Technological University | LINDO SYSTEMS INC. | Université Ibn Zohra |
| International Federation of Engineering Education Societies | UNB                |                       | Université Ibn Zohra |
| IEOM Society        |                    |                       |                 |

**IEOM Rabat Conference**  
April 11-13, 2017

**“Achieving and Sustaining Operational Excellence”**

www.ieom society.org
Welcome to Rabat, Morocco and the 2017 IEOM Conference

To All Conference Attendees:

On behalf of the IEOM Society, we would like to welcome you to the International Conference on Industrial Engineering and Operations Management in Rabat, Morocco. 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. Here we have an opportunity to collaborate and advance the theory and practice of major trends in Industrial Engineering and Operations Management. We will also have an excellent opportunity to network with the leading scholars and practitioners. After a thorough peer review process, about 450 papers/abstracts have been accepted from about 600 submissions representing more than 60 countries. The program includes many cutting edge topics of industrial engineering and operations management. Full papers will be indexed in Scopus subject to satisfying IEOM Quality Standards.

The challenge of continuous improvement will be significant in the 21st century and this conference will address the issue of continuous improvement for quality and service. Our keynote speakers will address some of these issues:

- Dr. Brian Denton, Professor, Industrial & Operations Engineering Department, University of Michigan, Ann Arbor, Michigan, USA and President of The Institute for Operations Research and the Management Sciences (INFORMS) – Opening Keynote
- Mr. Hakim Abdelmoumen, President, Association Marocaine pour l’Industrie et le Commerce Automobile (AMICA) / Moroccan Association for Automotive Industry and Trade, Casablanca, Morocco
- Dr. Joe E. Amadi-Echendu, Professor, Engineering and Technology Management, University of Pretoria, South Africa
- Dr. Othmane Bennoussaa, Consultant in Transportation, Logistics, Supply Chain Management, and Business Sustainability and Part-Time Faculty in Logistics and Supply Chain Management, Al Akhawayn University, Ifrane, Morocco
- Dr. Othmane Bouhali, Research Professor and Director of Research Computing, Texas A&M University at Qatar
- Mr. Bas van Dijk, Account Manager, Siemens PLM Software, Veldhoven, North Brabant Province, Netherlands
- Professor Mohamed Essaaidi, Consultant in Transportation, Logistics, Supply Chain Management, Al Akhawayn University, Ifrane, Morocco
- Dr. Suk-Hwan Suh, Professor and Director of Center for Ubiquitous Manufacturing, Founding Dean of Graduate School of Engineering Mastership, POSTECH: Pohang University of Science and Technology, Pohang, South Korea

We are pleased to announce the launch of the Women in Industry and Academia panel, chaired by Ms. Resh Plaha. Its aim is to promote global excellence in academic and business leadership as inspired by eminent women of cultural diversity. The IEOM Society celebrates the invaluable contribution by women on the global stage.

Industry Solutions Track will address industry needs to survive in the competitive environment. Distinguished practitioners share their experiences and journey to be successful and address industrial challenges and opportunities for continuous improvement and sustainability. Lean Six Sigma, Smart Manufacturing and Entrepreneurship workshops are arranged.

With the great success of Global Engineering Education Series of last IEOM conferences, IEOM 2017 Morocco Conference will have a dedicated session for the Global Engineering Education where distinguished speakers will discuss the readiness of engineering graduates for workforce around the world. Thirty six featured speakers will be from various part of the world to address engineering education challenges and opportunities. A panel session on Global Engineering Education, chaired by Dr. Abu Masud explores the meaning of global engineering and addressing its educational gap.

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

We would also like to thank the students who are participating in this event. Your Conference Planning Committee welcomes you to Rabat and wishes you an enjoyable learning experience at the conference and a safe and fun adventure exploring Morocco with its many outstanding attractions and sightseeing derived from its multiculturalism.

Enjoy the conference, and the Rabat/Morocco experience.
For the eighteenth year, Siemens has partnered with Advancing Minorities Interest in Engineering (AMIE) to foster diversity and inclusion in its Product Lifecycle Management business unit. We’re proud to continue such a valuable partnership, which has contributed greatly to cultivating an environment of inclusion, respect and diversity throughout our organization and among our customer community.

siemens.com/plm
Overall Conference Program

April 10, 2017 (Monday)
13:00 – 20:00 Registration
20:00 – 22:00 IEOM General Meeting and IEOM Global Council Meeting

April 11, 2017 (Tuesday)
07:00 – 17:00 Registration
08:00 – 09:15 Parallel Sessions
09:30 – 10:00 Welcome Speaker: Dr. Driss Ouaouicha, President of Al Akhawayn University, Ifrane, Morocco
10:00 – 11:00 Opening Keynote: Dr. Brian Denton, Professor, Industrial & Operations Engineering Department, University of Michigan, Ann Arbor, Michigan, USA and President of INFORMS (The Institute for Operations Research and the Management Sciences)
11:00 – 11:30 Networking Break at Exhibition Hall
11:30 – 12:45 Parallel Sessions
13:00 – 13:45 Industry Keynote: Dr. Othmane Benmoussa, Consultant in Transportation, Logistics, Supply Chain Management, and Business Sustainability and Part-Time Faculty in Logistics and Supply Chain Management, Al Akhawayn University, Ifrane, Morocco (Buffet Lunch Provided)
13:45 pm – 14:15 pm Lunch Keynote: Dr. Othmane Bouhali, Research Professor and Director of Research Computing, Texas A&M University at Qatar and Founder and Director of the Texas A&M Advanced Scientific Computing (TASC) Center
14:00 – 14:30 Break
14:30 – 15:45 Parallel Sessions
15:45 – 16:00 Break
16:00 – 17:15 Parallel Sessions
17:15 – 19:00 Poster Session and Student Chapter Mixer

April 12, 2017 (Wednesday)
07:00 – 17:00 Registration
08:00 – 17:00 Lean Six Sigma Green Belt (LSSGB) Workshop
08:00 – 09:30 Parallel Sessions
09:30 – 10:15 Morning Keynote: Mr. Bas van Dijk, Account Manager, Siemens PLM Software, Veldhoven, North Brabant Province, Netherlands
10:15 - 11:00 Morning Keynote: Dr. Joe E. Amadi-Echendu, Professor, Engineering and Technology Management University of Pretoria, South Africa and Director, Institute of Engineering Technology and Innovation Management, UNIPOORT
11:00 – 11:30 Networking Break at Exhibition Hall
11:30 – 12:45 Parallel Sessions
13:00 – 14:00 Lunch Keynote: Dr. Suk-Hwan Suh, Professor and Director of Center for Ubiquitous Manufacturing, Founding Dean of Graduate School of Engineering Mastership, POSTECH: Pohang University of Science and Technology, Pohang, South Korea (Buffet Lunch Provided)
14:00 – 14:30 Break
14:30 – 15:45 Parallel Sessions
15:45 – 16:00 Break
16:00 – 17:15 Parallel Sessions
19:00 – 22:00 CONFERENCE AWARD DINNER
Award Opening Speaker: Dr. Pr. Saaid Amzazi, President of Mohamed V University, Rabat, Morocco
Award Keynote: Mr. Hulas King. Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM

April 13, 2017 (Thursday)
07:00 – 17:00 Registration
08:00 – 17:00 Lean Six Sigma Green Belt (LSSGB) Workshop
08:00 – 09:30 Parallel Sessions
09:00 – 10:15 Morning Keynote: Prof. Dr.-Ing. Egon Müller, Director Institute of Industrial Sciences and Factory Systems, Chemnitz University of Technology, Chemnitz, Germany
10:15 - 11:00 Morning Keynote: Professor Mohamed Essaaidi, Director (Dean) - ENSIAS College of Engineering, Mohamed V University, Rabat, Morocco and IEEE Morocco Section Past Chair & Founder
11:00 – 11:30 Networking Break at Exhibition Hall
11:30 – 12:45 Parallel Sessions
13:00 – 14:00 Lunch Keynote: Mr. Hakim Abdelmoumen, President, Association Marocaine pour l’Industrie et le Commerce Automobile (AMICA) / Moroccan Association for Automotive Industry and Trade, Casablanca, Morocco - Buffet Lunch
14:00 – 14:30 Break
14:30 – 15:45 Parallel Sessions
15:45 – 16:00 Break
16:00 – 17:15 Parallel Sessions

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## Program Matrix

### Tuesday, April 11, 2017

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<tr>
<th>Time</th>
<th>Room 1</th>
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<td><strong>Global Engineering Education</strong></td>
<td>Industry Solutions</td>
<td>Quality</td>
<td>Undergraduate Student</td>
<td>Student Presentation</td>
<td>Competition</td>
<td>Doctoral Dissertation</td>
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<td>09:30</td>
<td><strong>Welcome Address:</strong> Dr. Driss Ouazoucha, President of Al Akhawayn University, Ifrane, Morocco</td>
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<td>10:00</td>
<td><strong>Opening Keynote:</strong> Dr. Brian Denton, Professor, Industrial &amp; Operations Engineering Department, University of Michigan, Ann Arbor, Michigan, USA and President-Elect of INFORMS - Ballroom</td>
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<td>11:30</td>
<td><strong>Global Engineering Education</strong></td>
<td>Industry Solutions</td>
<td>Quality</td>
<td>Undergraduate Student</td>
<td>Student Paper Competition</td>
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<td>1:00</td>
<td><strong>Lunch Keynote:</strong> Dr. Othmane Benmoses, Consultant in Transportation, Logistics, SCM, and Business Sustainability and Part-Time Faculty in Logistics and Supply Chain Management, Al Akhawayn University, Morocco - Ballroom (Buffet Lunch Provided)</td>
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<td>2:30</td>
<td><strong>Global Engineering Education</strong></td>
<td>Industry Solutions</td>
<td>Reliability and Maintenance</td>
<td>Supply Chain Management</td>
<td>Operations Research</td>
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<td>Engineering Education</td>
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<td>4:00</td>
<td><strong>GEE - PANEL SESSION</strong></td>
<td>Industry Solutions</td>
<td>Reliability and Maintenance</td>
<td>Supply Chain Management</td>
<td>Operations Research</td>
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<td>5:15</td>
<td><strong>Poster Session and Student Chapter Mixer</strong></td>
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### Wednesday, April 12, 2017

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<tr>
<td>08:00</td>
<td><strong>Global Engineering Education</strong></td>
<td>Industry Solutions</td>
<td>Reliability and Maintenance</td>
<td>Supply Chain Management</td>
<td>Operations Management</td>
<td>Modeling and Simulation</td>
<td>Human Factors and Ergonomics</td>
<td>Inventory Management</td>
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<td>09:30</td>
<td><strong>Keynote:</strong> Mr. Bas van Dijk, Account Manager, Siemens PLM Software, Veldhoven, North Brabant Province, Netherlands</td>
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<td>11:30</td>
<td><strong>Global Engineering Education</strong></td>
<td>Industry Solutions</td>
<td>Lean and Six Sigma</td>
<td>Supply Chain Management</td>
<td>Operations Management</td>
<td>Modeling and Simulation</td>
<td>Human Factors and Ergonomics</td>
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<td>1:00</td>
<td><strong>Lunch Keynote:</strong> Dr. Suk-Hwan Suh, Professor and Director of Center for Ubiquitous Manufacturing, Founding Dean of Graduate School of Engineering Mastership, POSTECH, Pohang, South Korea, Ballroom (Buffet Lunch Provided)</td>
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<td><strong>Global Engineering Education</strong></td>
<td>Panel Session WIA</td>
<td>Lean and Six Sigma</td>
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<td>Production Planning and Management</td>
<td>Automation and Control</td>
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<td><strong>Global Engineering Education</strong></td>
<td>Industry Solutions</td>
<td>Lean and Six Sigma</td>
<td>Logistics Management</td>
<td>Financial Engineering</td>
<td>Energy</td>
<td>Occupational Safety and Health (OSH)</td>
<td>Transportation and Traffic</td>
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<td>7:00</td>
<td><strong>IEOM Awards and Recognitions Dinner</strong> – Ballroom</td>
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<td>7:30</td>
<td><strong>Award Opening Speaker:</strong> Dr. Pr. Saaid Amzazi, President of Mohamed V University, Rabat, Morocco</td>
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### Thursday, April 13, 2017

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<td><strong>Global Engineering Education</strong></td>
<td>Lean Six Sigma Green Belt (LSSGB)</td>
<td>Manufacturing and Design</td>
<td>Decision Sciences</td>
<td>Facilities Planning and Management</td>
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<td>Total Quality Management</td>
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<td>10:15</td>
<td><strong>Keynote:</strong> Professor Mohamed Essaadi, Director (Dean) - ENSIAS College of Engineering, Mohamed 5 University, Rabat, Morocco and IEEE Morocco Section Past Chair &amp; Founder (2004) - Ballroom</td>
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<td>11:30</td>
<td><strong>Global Engineering Education</strong></td>
<td>Lean Six Sigma Green Belt (LSSGB)</td>
<td>Manufacturing and Design</td>
<td>Data Analytics / AI</td>
<td>Engineering Management</td>
<td>Energy</td>
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<td><strong>Global Engineering Education</strong></td>
<td>Lean Six Sigma Green Belt (LSSGB)</td>
<td>Construction Management</td>
<td>Case Studies</td>
<td>Engineering Management</td>
<td>E-Business and E-Commerce</td>
<td>Systems Engineering</td>
<td>Case Studies</td>
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<td>4:00</td>
<td><strong>Global Engineering Education</strong></td>
<td>Lean Six Sigma Green Belt (LSSGB)</td>
<td>Construction Management</td>
<td>Case Studies</td>
<td>Engineering Management</td>
<td>Automation and Control</td>
<td>IEOM in Asia, Africa and Europe</td>
<td>Presentations In FRENCH</td>
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Keynote Speakers

9:30 am (Tuesday, April 11) – Welcome Address

Dr. Driss Ouauicha, President of Al Akhawayn University, Ifrane, Morocco

10:00 am – 10:50 am (Tuesday, April 11) – Opening Keynote

Dr. Brian Denton
Professor
Industrial & Operations Engineering Department
University of Michigan, Ann Arbor, Michigan, USA
and
President of INFORMS (The Institute for Operations Research and the Management Sciences)

Brian Denton joined the faculty at University of Michigan in 2012. His primary research interests are in optimization under uncertainty with applications to medical decision making related to the detection, treatment, and prevention of chronic diseases. He is a member of the Institute for Healthcare Policy and Innovation at University of Michigan and he holds a fellowship appointment at the Cecil Sheps Health Services Research Center at University of North Carolina at Chapel Hill.

Previously he has been a Senior Associate Consultant at Mayo Clinic, and a Senior Engineer at IBM. In 2009 he received the National Science Foundation Career Award. He has also won the INFORMS Service Section Prize (2010), the INFORMS Daniel H. Wagner Prize (2005), the Institute of Industrial Engineers Outstanding Publication Award (2005), and the Canadian Operations Research Society Best Paper Award (2000). He has co-authored more than fifty journal articles and conference proceedings, and has twenty five patents granted by the U.S. Patent and Trademark Office. Currently he is serving as President-Elect of INFORMS.

1:00 pm – 1:45 pm (Tuesday, April 11) – Lunch Keynote

Othmane Benmoussa, Eng., M.Sc., SE, ACE, Ph.D.
Consultant in Transportation, Logistics, Supply Chain Management, and Business Sustainability
Part-Time Faculty in Logistics and Supply Chain Management
Al Akhawayn University, Ifrane, Morocco

Dr. Othmane Benmoussa joined Al Akhawayn University in August 2014 as a part-time faculty in logistics and supply chain management in parallel with his duty as an independent consultant in transportation, logistics, supply chain management, and business sustainability within several companies in Morocco and abroad. Dr. Benmoussa has over 15 years industry work experience. He has worked as an executive director in strategy, logistics, transportation, and purchasing for many organizations in real estate (Addoha Group), banking (CIH Bank), and transportation (M’dina Bus and “Groupe Métropolitain en Aménagement et Transport” – GMAT Canada). Within GMAT, he was in charge of organizational and strategic consultancy and economic studies linked to the development of large urban transportation systems as well as interurban ones, managing a portfolio of more than USD 1.5 billion.

Previously, Dr. Benmoussa worked for the Moroccan Airports Authority (ONDA) as the general manager’s chief of cabinet and later as the Mohammed V International Airport’s Director. In addition, he has led several consulting missions in Europe as the scientific collaborator of Ecole Polytechnique Fédérale de Lausanne in logistics. Dr. Benmoussa holds an advanced Certificate for Executives in Management, Innovation, and Technology from the MIT Sloan School of Management as well as a diploma in transportation economics and modeling from MIT (Cambridge – USA). He also earned an engineering degree (BSc. and MSc.) in civil engineering specialized in transportation and logistics from the Swiss Federal Institute of Technology at Lausanne (Ecole Polytechnique Fédérale de Lausanne / EPFL – Lausanne) as well as another engineering degree from Ecole Hassania des Travaux Publics (EHTP – Casablanca). Dr. Benmoussa holds a Ph.D in management of technology and entrepreneurship from EPFL Lausanne.

1:45 pm – 2:15 pm (Tuesday, April 11) – Lunch Keynote

Dr. Othmane Bouhali
Research Professor and Director of Research Computing
Texas A&M University at Qatar
Founder and Director of the Texas A&M Advanced Scientific computing (TASC) center

Othmane Bouhali is a research professor and director of research computing at Texas A&M University at Qatar. He is the founder and director of the Texas A&M Advanced Scientific computing (TASC) center. He was the head of the computing group at the High Energy Physics (HEP) institute of Brussels. He took important computing and simulation responsibilities in HEP experiments, mainly in the area of scientific grid computing. Since 1994 he is a member of the Compact Muon Solenoid (CMS) experiment at the Large Hadron Collider (LHC) at the European Organization for Nuclear Research (CERN). He was also a member of: the HERMES international collaboration at the Deutsche Electron Synchrotron (DESY) in Hamburg and the Amanda/CECUBE neutrino telescope at the South Pole. His research interests include: high performance computing, radiation detectors development, medical physics and 3D scientific visualization.
9:30 am – 10:15 am (Wednesday, April 12) - Morning Keynote

Mr. Bas van Dijk
Regional Channel Manager Africa
Siemens Industry Software B.V.
Digital Factory Division, Product Lifecycle Management
Global Sales, Marketing & Services
's-Hertogenbosch, Netherlands

Bas van Dijk is the Regional Channel Manager for Siemens PLM software in Africa. Siemens PLM Software is a leading global provider of product lifecycle management (PLM) and manufacturing operations management (MOM) software. Siemens helps manufacturers optimize their Digital Enterprise and realize innovation. He started his Siemens career in 2006, prior to this he worked as Interim manager for franchise startups and he ran business as self-employed in program management. Bas is working for more than 20 years in business development and sales. Throughout his career Bas received several achievement awards for outstanding performances in business development and sales growth. Since 2013 Bas is working in MEA territory, in this role he is contributing to growing the African business with a special focus on academic/educational programs and the development of the distributor community of Siemens PLM Software. Bas is also key account manager for a customer in the Aerospace and Defense industry.

When he is not travelling he lives together with his family in Veldhoven. He is very passionate about playing drums, music, travelling and meeting people.

10:15 – 11:00 am (Wednesday, April 12) – Morning Keynote

Dr. Joe E. Amadi-Echendu
Professor, Engineering and Technology Management
University of Pretoria, South Africa
Director, Institute of Engineering Technology and Innovation Management, UNIPOORT
Editor-in-Chief, Engineering Asset Management Review Series, Spring, UK

Joe Amadi-Echendu earned BS and MS degrees in Electrical and Electronic Engineering from University of Wyoming, USA, and DPhil in Control Engineering from University of Sussex, UK. Dr Joe currently serves as a Professor of Engineering and Technology Management at University of Pretoria, Republic of South Africa. He is the founding Director of the Institute of Engineering, Technology and Innovation Management at University of Port Harcourt in Nigeria.

Prof Amadi-Echendu commenced his career as an apprentice maintenance technician at a tyre manufacturing plant, and his expertise is underpinned by his doctoral research in digital signal processing, condition monitoring and diagnostic engineering management of physical plants and processes. He has over 12 years industry work experience, as well as 20+ years academic experience in USA, UK, Nigeria and South Africa. His extensive experience and interests cover the broad fields of engineering and technology management with particular emphasis on the management of intellectual assets, engineering technologies, plant, equipment and infrastructure assets. While working in industry, Dr Joe primarily implemented “operational readiness” programmes for green field capital development projects in petrochemical and mining sectors.

His current teaching and research activities are focused on engineering asset management and technology commercialisation, as well as supervision, mentoring and coaching to all grades of students and technology-based business start-ups. Prof Amadi-Echendu has published over 150 articles in journals and accredited international conference proceedings. Joe’s involvement in community development, professional and scholarly activities has been recognised through many local, national and international awards such as best paper, distinguished service, excellence, and leadership awards.

Joe is registered as a professional engineer in both the UK and South Africa. He continues to provide consulting advice and training to both private business and public sector organisations. In addition to external examination of master and doctoral degree dissertations at local and overseas institutions, and review of manuscripts for a number of journals, Prof Amadi-Echendu’s concurrent roles and scholarly activities include; (i) editor-in-chief for Springer’s Engineering Asset Management Review Series, (ii) founding fellow, board member and director of International Society of Engineering Asset Management (ISEAM), (iii) member of board of directors of the International Association for the Management of Technology in-chief for Springer’s Engineering Asset Management Review Series, ii) founding fellow, board member and director of International Society of institutions, and review of manuscripts for a number of journals, Prof Amadi-Echendu’s concurrent roles and scholarly activities include; (i) editor-

1:00 – 2:00 pm (Wednesday, April 12) – Lunch Keynote

Dr. Suk-Hwan Suh
Professor and Director of Center for Ubiquitous Manufacturing
Founding Dean of Graduate School of Engineering Mastership
POSTECH: Pohang University of Science and Technology
Pohang, South Korea

Professor Suh earned his Ph.D in the area of Robotics and Manufacturing Engineering at The Ohio State University in 1986. After Ph.D he joined University of Michigan as a research engineer in the Center for Robots and Integrated Manufacturing (CRIM). Since 1987 he joined POSTECH, and he is now full Professor of Graduate School of Engineering Mastership. His research interests include Smart Factory and Industry 4.0, Cyber Physical Systems (CPS), and Smart Systems Engineering, and. He authored 4 books including Theory and Design of CNC Systems published by Springer in 2008, and received Governor Medal for developing ISO Standards for Manufacturing Information Model (ISO 14649), Grand Prize in the 4th software competition in 2002. He has 15 best paper awards with publication over 250 papers in International Journal and International Conference, and 40 patents including 9 international patents.
Professor Suh established several education systems including: 1) Graduate School of Engineering Mastership (GEM) in 2011, 2) POSTECH Systems Engineering (PSE) Education Program in 2011, 3) Graduate School of Eco-design in 2009. He served as the president of Korean Society of Systems Engineering (KOSSE) in 2015, and Convener of ISO TC184/SC1 between 2004 and 2008. Since 2005 he is leading Center for Ubiquitous Systems Engineering (PSE) Education Program in 2011, 3) Graduate School of Eco-design in 2009. He served as the president of Korean Society

7:00 pm (Wednesday, April 12) – Award Opening Speaker

Dr. Pr. Saaid Amzazi, President of Mohamed V University, Rabat, Morocco

7:00 pm (Wednesday, April 12) – Award Keynote

**Hulas King**

**Director, Diversity, Professional Affiliations & Global Community Relations**

Siemens PLM Software

St. Louis, Missouri, USA

Hulas is responsible for the strategy and operational leadership of Siemens PLM Software Global Diversity Council. He also leads Professional Affiliations & Global Community Relations Teams, driving innovation and digitalization value for youth, displaced workers, strategic customers and business partners. Mr. King is a decorated Vietnam veteran, a Certified Manufacturing Engineer and a Certified NC Manager. He was inducted into the African-American Biographies Hall of Fame for outstanding contributions in Business and Engineering. He represents Siemens on several professional boards including the Institute of Industrial Engineers, the Society of Manufacturing Engineers, Advancing Minorities’ Interest in Engineering, the Stone Soup Foundation, the Accreditation Board for Engineering & Technology (ABET), the International Federation of Engineering Education Societies (IFiEES) and the Professional Business Leadership Council. He travels extensively within the Americas, Europe, the Middle East and Asia Pacific, speaking at various technical seminars in support of Global Opportunities in PLM.

Hulas managed the GO PLM (Global Opportunities in Product Lifecycle Management) program, nurturing strategic partnerships that provide significant added value for academic institutions, youth development programs and our global communities. These partnerships exemplify SIEMENS as the PLM Industry Leader and are successful in developing technology environments where underutilized citizens of the world can work together to improve their economic conditions and promote peace. He served as McDonnell-Douglas’ Program Manager for Enterprise Life-Cycle Processes for Team Columbus Engineering / Manufacturing in support of C-17 Production in Columbus, OH.

**Education:**

- Belleville Area College, 1970: AS, Data Processing
- Southern Illinois University, Edwardsville, 1972: BS, Management Science/Data Processing
- Southern Illinois University, Edwardsville, 1974: MBA, Marketing and Business Administration
- Southern Illinois University, Edwardsville, 1975: MS, Government/International Relations.
- Southern Illinois University, Edwardsville, 1978: MS, Management Science and Systems
- Southern Illinois University, Edwardsville, 1979: SPC, Health Care Management Systems
- University of Missouri – Columbia, 1983: MS, Industrial Engineering

9:30 – 10:15 am (Thursday, April 13) – Morning Keynote

**Prof. Dr.-Ing. Egon Müller**

**Director Institute of Industrial Sciences and Factory Systems**

Chemnitz University of Technology, Chemnitz, Germany

**e-Learning in Engineering Higher Education and the Learning Factory Concepts**

Egon Müller is the Director of the Institute of Industrial Sciences and Factory Systems at Chemnitz University of Technology, where he also serves as the Head of and a professor for the Department of Factory Planning and Factory Management. More than 30 years of experience, expertise and theoretical background (including academic) in the field of higher education as lecturer and scientist at different universities. He is also invited Professor at some Universities in Asia.

He and his team of 30 staff members work on the research and development of future production structures and new factory concepts in mechanical and plant engineering and for the automotive industry and its suppliers. The department offers extensive expertise in the field of Industrial Engineering, computer based factory planning, modeling and simulation as well as in planning and operation of energy efficient factories.

The Department of Factory Planning and Factory Management, is one of the five most leading institutes in Germany within the research field of ‘Industrie 4.0’ and he is the leader of the Experimental and Digital Factory (EDF) in Technische Universität Chemnitz, which is famous from the researches in the scope of ‘Industrie 4.0’.

He is actively involved in HAB (Scientific Society of Industrial Management Germany), the European Academy for Industrial Management (AIM), GSSE (Society for Systems Engineering), refereeing activities on Production and Industrial Engineering Research – (DFG – German Research Foundation / Austrian Research Association / Croatian Research Association) and VDI (Association of German Engineers) - Technical Division “Factory Planning”, as a Member of the EU Joint Research Centre Automotive Expert Team, invited expert for the Technical Working Group of the European Commission on the Best Environmental Management Practice for the Car Manufacturing Sector. He is also a reviewer for international journals, conferences, and serves as a member of several scientific advisory panels (Taylor & Francis, ICPFR, FAIME, CARV...). He is the author and co-author of a large number of scientific books, reviewed international publications and conference contributions.
In addition, Müller supervises a large number of PhD candidates in the different fields of Industrial Engineering and Management. He has experience in development and implementation of competitiveness improvements projects for regions, regional networks and clusters, companies and other institutions since 2002. His expertise in managing complex and intricate projects in SMEs and large scale enterprises, management of complex cooperation’s is relevant to successful regional and business development. Internationally proven skills in facilitation and innovation fostering techniques that can enhance the cooperation of all of the players involved in the development of a selected region and/or regional cluster.

A number of references and practices in all phases of technical assistance and other international projects, i.e. project development, preparation of relevant proposals and reports, implementation, expert selection, management and monitoring in a way that all required goals are achieved and procedures are followed. He was and is responsible as project leader for a large number of basic-, applied- and industrial research projects.


10:15 – 11:00 am (Thursday, April 13) – Morning Keynote

**Professor Mohamed Essaaidi**  
Director (Dean), ENSIAS College of Engineering  
Mohamed 5 University, Rabat, Morocco  
IEEE Morocco Section Past Chair & Founder (2004)

*Engineering Education Accreditation Initiative for Africa and Global Partnership*

Mohamed Essaaidi, Prof. Dr., IEEE Senior Member has been the Dean of ENSIAS College of Engineering of Mohammed V University, Rabat, Morocco since December 2011 and he was a Professor of Electrical & Computer Engineering at Abdelmalek Essaadi University, Morocco from 1993 till 2011. He is the founder and past Chairman of the IEEE Morocco Section (2005-2015), co-founder of IEEE Computer & Communication Societies Joint Moroccan Chapter, IEEE Antennas and Propagation Society and Microwave Theory and Techniques Society Moroccan Joint Chapter and IEEE Education Society Morocco Chapter. He has been also the founding Director of the Morocco Office of Arab Science and Technology Foundation, ASTF (2006-2009) and the Coordinator of ASTF RD&I Network of Electro-Technology since 2006. He has also founded several IEEE Student Branches in different Moroccan universities and engineering schools. Furthermore, he has been a nonvoting member of IEEE Global Committee on Accreditation activities since 2015.

He has authored and co-authored 5 books and more than 200 papers in international refereed journals and conferences in the field of Electrical and Information and Communication Technologies. He has been the Editor-in-Chief of International Journal on Information and Communication Technologies, Serial Publications, India (2007-2011). He is also an active member of the editorial boards of several IEEE and other indexed international journals in the field of information and communication technologies.


He holds 10 patents in the field of Information and Communication Technologies. He was also a member of the IEEE 802.16 Sponsor Ballot Pool of IEEE Standard Association that defined the technical specifications for WiMAX. Prof. Essaaidi supervised several Ph.D. and Masters Theses and has been the principal investigator and the project manager for several international research projects.

1:00 pm (Thursday, April 13) – Lunch Keynote

**Mr. Hakim Abdelmoumen**  
President  
Association Marocaine pour l’Industrie et le Commerce Automobile (AMICA)  
Moroccan Association for Automotive Industry and Trade  
Casablanca, Morocco
DISTINGUISHED SPEAKERS – Global Engineering Education
Tuesday (April 11, 2017)

Session I: Global Engineering Education
8:00 – 9:15 am (Tuesday) - Room 1
Session Chair: Edward Williams, University of Michigan – Dearborn, Michigan, USA

08:00 – 08:25 (Tuesday)
Professor Zazi Malika
Head of Electrical Engineering Department
L’Ecole Normale Supérieure de L’Enseignement Technique de Rabat (ENSET)
Mohammed V University
Rabat, Morocco

Professor Zazi Malika received the degree of engineer in automatics and industrial informatics in 1984 from School Mohammedia of Engineering, and the Ph.D. degree in electrical engineering in 2006 from Mohammadia School of engineering, University Mohammed V Rabat. She has specialized in the linear and nonlinear control systems. Presently, she is serving as professor and head of Electrical department at ENSET Rabat. She has over 30 years of teaching experience. She is guiding some doctorate students in Renewable Energy, Diagnostic, Robust Control and Electrical Engineering.

08:25 – 08:50 (Tuesday)
Professor Youssef Benadada
Head of Operational Research and Logistics (ROL)
Head of the Department of Informatics and Decision Support (IAD)
Coordinator of the e-Logistics Engineering (leL)
Ecole Nationale Supérieure d’Informatique et d’Analyse des Systèmes (ENSIAS)
Mohammed V University, Rabat, Morocco

Youssef BENADADA is a Professor and Head of the Department of Informatics and Decision Support (IAD) at the National Higher School of Computer Science and Systems Analysis (ENSIAS) Mohammed V University, Head of Operational Research and Logistics research team (ROL) and Coordinator of the e-Logistics Engineering (leL). His main research topics are petroleum products distribution, generalized fractional programming, combinatorial optimization, advanced optimization and reverse logistics.

08:50 – 09:15 (Tuesday)
Edward Williams
Educator at University of Michigan – Dearborn
Statistics/Simulation Consultant and Trainer
Production Modeling Corporation (PMC)
Detroit, Michigan, USA

Edward J. Williams holds bachelor’s and master’s degrees in mathematics (Michigan State University, 1967; University of Wisconsin, 1968). From 1969 to 1971, he did statistical programming and analysis of biomedical data at Walter Reed Army Hospital, Washington, D.C. He joined Ford Motor Company in 1972, where he worked until retirement in December 2001 as a computer software analyst supporting statistical and simulation software. After retirement from Ford, he joined PMC, Dearborn, Michigan, as a senior simulation analyst. Also, since 1980, he has taught classes at the University of Michigan, including both undergraduate and graduate simulation classes using GPSS/HÔ, SLAM IIÔ, SIMANÔ, ProModelÔ, SIMUL8Ô, Arena®, or Simio®. He is a member of the Institute of Industrial Engineers [IIE], the Society for Computer Simulation International [SCS], and the Michigan Simulation Users Group [MSUG]. He serves on the editorial board of the Journal of Computer Engineering. During the last several years, he has given invited plenary addresses on simulation and statistics at conferences in Monterrey, México; Istanbul, Turkey; Genova, Italy; Riga, Latvia; and Jyväskylä, Finland. He served as a co-editor of Proceedings of the International Workshop on Harbour, Maritime and Multimodal Logistics Modelling & Simulation 2003, a conference held in Riga, Latvia. Likewise, he served the Summer Computer Simulation Conferences of 2004, 2005, and 2006 as Proceedings co-editor. He was the Simulation Applications track coordinator for the 2011 Winter Simulation Conference. A paper he co-authored with three of his simulation students won “best paper in track” award at the Fifth International Conference on Industrial Engineering and Operations Management, held in Dubai, United Arab Emirates, in March 2015.

IEOM Society - ESD Affiliate Council Member

The IEOM Society has become an Affiliate Society Member of The Engineering Society of Detroit (ESD). This collaboration provides IEOM with an opportunity to expand its network of professions in the engineering discipline.
**Session II: Global Engineering Education**

11:30 am – 12:45 pm (Tuesday) - Room 1

Session Chair: Dr. Syed Ahmad Helmi Al Haddad, Universiti Teknologi Malaysia, Johor, Malaysia

11:30 – 11:55 (Tuesday)

**Dr. Virgilio Cruz-Machado**

Head of Department  
Department of Mechanical and Industrial Engineering  
New University of Lisbon, Portugal

President – Portuguese Institute of Industrial Engineering (IPEI)

*Reconfiguring Industrial Engineering Education in the Digital World*

V. Cruz-Machado holds a Ph.D. in Computer Integrated Manufacturing (Cranfield University, UK). He is a full professor of Industrial Engineering at Universidade Nova de Lisboa, Portugal. He is the director of the Industrial Engineering Doctoral Program and other post-graduate programs in industrial engineering, project management, lean & green sustainability and entrepreneurship. He teaches operations and production management and has published more than 300 papers in scientific journals and conferences, in addition to having supervised more than thirty Ph.D. students. His main scientific activities are directed to the design of lean and green supply chain management. He was the CEO of a large consultancy company; coordinator of a major National R&D program directed for SMEs, and; a consultant member of the commission responsible for the implementation of Horizon 2020 – the European framework program for research and innovation (2014-2020). He is the Head of the Department of Mechanical and Industrial Engineering at Universidade Nova de Lisboa, the CEO of UNIDEMI (http://unidemi.com/) and the president of the Portuguese Institute of Industrial Engineers.

11:55 – 12:20 (Tuesday)

**Dr. Basel Alsayyed Ahmad**

Associate Professor of Mechanical Engineering  
College of Engineering  
United Arab Emirates University  
Al-Ain, United Arab Emirates (UAE)

Dr. Basel Alsayyed is an assistant professor at the department of mechanical engineering in UAEU. With over 16 years of experience in academia, and 12 over years of industrial experience, most of which are in the American automotive industry, Dr. Alsayyed has a passion for education in general and teaching and training in particular. Teaching is an art, a trust, a valuable transformation of students using certain methods and tools, and it is holy, are all part of his belief. Dr. Alsayyed research interests are in the areas of advanced manufacturing, quality & reliability, renewable energy, engineering education and knowledge management. His education background:

- Ph.D., Doctor of Philosophy in Industrial Engineering, Wayne State University, 1998
- MSc in Manufacturing Engineering, Wayne State University, 1995
- Certificate in Maintenance, University of Twente, 1990
- MSc in Industrial Engineering, North Carolina A&T State University, 1987
- BSc in Industrial Engineering, North Carolina A&T State University, 1983

12:20 – 12:45 (Tuesday)

**Dr. Syed Ahmad Helmi Al Haddad**

Program Coordinator for MSc in Industrial Engineering  
Faculty of Mechanical Engineering  
Associate Fellow, Center for Engineering Education (CEE)  
Universiti Teknologi Malaysia  
Johor, Malaysia

*Problem Based Learning (PBL)*

Dr. Syed Ahmad Helmi is a senior lecturer in the Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), and is affiliated to the UTM Centre for Engineering Education. He is currently the Graduate Programme Coordinator for the Department of Material, Manufacturing and Industrial Engineering. He has a Bachelor of Science in Mechanical Engineering, Master in Mechanical Engineering, and a PhD in Engineering Education. Prior to joining UTM, he worked as industrial extension officer in Standard and Industrial Research Institute of Malaysia (SIRIM) and as an engineer in various industries, such as INTEL and SIME-DARBY. Syed Helmi was a visiting scholar in University of Waterloo, Canada, and one of a task force member in-charged of propagating active learning in UTM. Over the years, as a practitioner of Problem-Based Learning (PBL), he has conducted several workshops to train academics, especially those in Science, Technology, Engineering, and Mathematics (STEM) education areas, on Outcomes-Based Education (OBE) particularly in effective implementation of Student Centred Learning (SCL) throughout Malaysian higher institutions, and international institutions such as in China, India, Korea, Turkey, and Afghanistan. Dr. Syed Helmi was invited as speaker in several international conferences. He also had published numerous articles related to his area of interest. His recent works include SCL, change management, complex engineering problems, manufacturing systems and optimization, and modelling of complex industrial systems.

**Session III: Global Engineering Education**

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Dr. Funso Falade
Department of Civil & Environmental Engineering, University of Lagos, Akoka, Lagos, Nigeria
President, African Engineering Education Association

Falade Funso Alphonsus is a Nigerian and a Professor of civil engineering at University of Lagos, Nigeria. He earned Diploma in Quantity Surveying at Yaba College of Technology, Nigeria, in 1978. He completed his M.Sc (Civil Engineering) at the Moscow Institute of Civil Engineering in the USSR in 1984 and obtained PhD in Civil Engineering, from University of Lagos in 1998. Prof. Falade has authored over 70 articles on innovative construction materials and engineering education published in locally and internationally reputable journals as well as in proceedings of learned conferences. He has also made contributions to two (2) textbooks. In February, 2014, he made public presentation of a book titled ‘Strengthening of Distressed Buildings’. He has researched into the structural properties of bamboo and developed the technology for its successful incorporation as replacement of steel reinforcement in some structural elements. He has also researched extensively on Foamed Aerated Concrete. Prof. Falade has presented over 45 papers at workshops and seminars on such topics as Project Management, Quality Control, Maintenance of Facilities, and Contract Procurement Processes etc. Prof. Falade is a member of some professional bodies both locally and internationally, including Fellow, The Nigerian Academy of Engineering, Fellow, Nigerian Society of Engineers, Fellow, African Engineering Education Association, Registered Engineers, Council for the Regulation of Engineering in Nigeria etc. He is a promoter of engineering education. He was the initiator of African Regional Conference on Engineering Education and the Chairman, Organizing Committee and the Editor of the Proceedings of the 1st, 2nd and 5th African Regional Conference on Engineering Education that were held at University of Lagos in 23rd – 25th September, 2002; 20th – 22nd September, 2004 and 9th -12th September, 2013 respectively. He is the President of the African Engineering Education Association (AEEA) and former Vice-President, international Federation of Engineering Education Societies (2009-2012). He was appointed UNESCO Consultant in 2005.

Dr. Alfredo Soeiro
Associate Professor, University of Porto, Portugal
Past Pro-Rector of the University of Porto for Continuing Education
Past President – European Society of Engineering Education

Dr. Soeiro has been the representative of Universidade do Porto in Continuing Education and founder of EUCEN (European Universities Continuing Education Network) since November 1991. He was vice president of EUCEN for seven years, a member of the Management Committee and was also founder of RECLA (Latin American Continuing Education Network). Dr. Soeiro was founder of the Continuing Engineering Education office of the College of Engineering of the University of Porto in 1995; was Pro-Rector of Universidade do Porto in charge of Continuing Education between 1998 and 2003; was founder and President of AUPEC – Portuguese Association of Universities for Continuing Education between 2001 and 2005; from 2001 until 2004 was president of IACEE, International Association of Continuing Engineering Education, Washington DC, USA; between 2003 and 2005 was president of SEFI Societe Europenne pour la Formation des Ingenieurs; between 2004 and 2008. He was the academic director and vice-director of Civil Engineering of the University of Porto.

Dr. Soeiro has been a Fulbright scholar between 1985 until 1989 in the University of Florida to obtain his doctoral degree; between 1996 and 1999 was the President of the Scientific Commission of the Thematic Network THENUCE (Thematic Network on University Continuing Education); from 1999 and 2005 was a member of European ODL Liaison Committee, representing EUCEN; in 2000 was the co-chair of the conference of the Portuguese Presidency of the European Union, Higher Education and New Publics, Porto; from 2002 to 2013 he was member of the Municipal Education Council of the city of Porto, representing the University of Porto and the Higher Education sector; since 1997 until 2004 he has been an invited expert of the European Commission to evaluate projects in adult education and in thematic networks; was an invited expert of Group G of the European Commission within the framework of the Lisboa Objectives between 2002 and 2005. He was an invited speaker at the 800th Anniversary of the University of the Sorbonne in the closing session coordinated by the French minister of education, Claude Allègre, entitled the University without Walls, 1998.

Dr. Soeiro has published and edited the first ten editions of the newsletter of EUCEN between 1993 and 1997. He was a member of the editorial board of the Journal of Higher Education and Outreach between 2001 and 2006; has published and presented several articles in newspapers and magazines about lifelong learning, continuing education and quality of continuing education; has created and maintained the web pages of EUCEN (between 1994 and 1996) and of AUPEC since 2001; has led several lobbying activities at the European level, like the response to the Memorandum of Higher Education in 1994 and the Response to the European Quality Framework, and at the national level participating in the national meetings of AUPEC; has edited for AUPEC the management manual of centers of continuing education and the survey of industry needs of continuing education. Dr. Soeiro has coordinated, besides participating in others, several European projects sponsored by the European Commission in the areas of adult learning and continuing education and the most important ones are the Tempus project to create the continuing education center at Tallinn Technical University, the Grundtvig project to create individualized pathways Equipe and the project DAEVE to develop accreditation methods for continuing education. He was invited professor of Loughborough University, UK in 1997 and 1998, University of Barcelona, Spain in 1994, 1995 and 1996, Polytechnic University of Cataluna, Spain in 2001, Technical University of Vienna, Austria in 2006, 2007 and 2009 in Innovation in Elearning and Visiting Scholar at the Institute of Higher Education, University of Georgia, Athens, USA in 2006 for three months.

Dr. Soeiro has been vice-president and president of the European Society of Engineering Education; he is a member of the board of the European Journal of Engineering Education since 2001; he is one of the two guest editors of the joint edition of EJEE and the Journal of Engineering Education in 2007. Dr. Soeiro has helped the creation of the center of elearning in the University of Porto between 1999 and 2002 including the edition of continuing education courses in cooperation with other European universities; has coordinated and participated in several European projects in the areas of distance learning and elearning; has authored the second ebook in engineering of the University of Porto with the support of a portal; has authored and coordinated an ebook on construction safety that has been supported by the International Labour Organization. He is the representative of Ordem dos Engenheiros, vice-chair of the European Monitoring Committee of FÉANI and chair of the OMP. He was awarded the International Hall of Fame in Adult and Continuing Education title in 2006 and received the award of EDEN Fellow in 2008. Dr. Soeiro received the IACEE Fellow award in 2014. He coordinated some European funded projects Atelcoma (1998), Equipe (2004), Daete (2006), Virqual (2009) and TALOE. He is...
also member of the reviewers of Campbell Award (2010/2012/2014). He was also a partner in several European funded projects like DIALOGUE, Community Service Engineer and VMCOLAB.

3:20 – 3:45 (Tuesday)

**Dr. Mustapha Nour El Fath**  
Professor of Industrial Engineering, Department of Mechanical Engineering  
Laval University, Quebec City, Quebec, Canada

Mustapha Noureflah is a professor of Industrial Engineering at the Department of Mechanical Engineering of Laval University (Canada). He received his Ph.D. from the National Institute of Applied Science (INSA) of Lyon (France) in 1997. He is a member of CIRRELT (Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation). His specific topics of interest are operations research and artificial intelligence applications in supply chains, reliability, logistics and manufacturing. He is Associate Editor of INFOR: Information Systems and Operational Research (Area: Queueing Theory, Stochastic modelling and simulation), member of the Editorial Board of Reliability Engineering and Systems Safety, International Journal of Performability Engineering (System Analysis and Computational Intelligence), International Journal of Mathematical, Engineering and Management Sciences, Journal of Applied Mathematics, and Mathematical Problems in Engineering. Prof. Nourelfath has received several research grants and awards, including the Brockhouse Canada Prize for Interdisciplinary Research in Science and Engineering.

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### Session IV: Global Engineering Education: PANEL SESSION
4:00 – 5:15 pm (Tuesday) - Room 1

**Panel Chair:** Dr. Abu Masud, Wichita State University, Kansas, USA

#### Panelists

**Dr. Abu Masud, P.E.**  
Boeing Global Engineering Professor  
Professor of Industrial and Manufacturing Engineering  
Wichita State University, Kansas, USA

Dr. Abu Masud is a professor of industrial and manufacturing engineering at Wichita State University. He has been named the Boeing Global Engineering Professor at Wichita State University. In this new post, Dr. Masud is expected to advance the College of Engineering’s strategic alliances for global enrichment and experiential learning of students as well as international research collaborations and partnerships. He received Duane and Velma Wallace Outstanding Educator Award from WSU College of Engineering. Previously he was held various positions at Wichita State including associate dean, graduate school (2008-2013), coordinator, college ABET affairs (2006-2008), associate dean, college of engineering (2004-2005), chair, industrial and manufacturing engineering department (1994-2004) and graduate coordinator of IME (1991-94, 1996-98, 2001-2004). Dr. Masud has engaged with various companies and governmental research centers including NASA Langley Research Center, VA, NASA/ASEE Summer Faculty Fellow (1991 and 1992), Boeing, Consulting Analyst, and Kuwait Institute for Scientific Research. He is member of Accreditation Review Council (2011-2014). Dr. Masud published book, book chapters, and numerous journal and conference papers. He is registered Professional Engineer at Kansas State. Dr. Masud is an IIE fellow. He received Ph.D. and M.S. in Industrial Engineering from Kansas State University, and B.S. in Mechanical Engineering from Bangladesh University of Engineering & Technology.

**Dr. Hamid Parsaei, PE**  
Professor of Industrial and Systems Engineering, Texas A&M University (College Station)  
Professor of Mechanical Engineering and Director of Academic Outreach, Texas A&M Uni. Qatar

Hamid R. Parsaei is Professor of Industrial and Systems Engineering at Texas A&M University (College Station) and also Professor of Mechanical Engineering and Associate Dean for Academic Affairs at Texas A&M University at Qatar. He is a registered professional engineer (PE) in Texas, a Fellow of the Institute of Industrial Engineers (IIIE), and a Fellow of the American Society for Engineering Education (ASEE). He has published over 200 articles in peer-refereed archival journals and conference proceedings. He has also served as editor/co-editor in chief for four academic journals and five book series. His research, in excess of $22 million, has been funded by numerous government and private institutions.

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

Khaled S. El-Kilany is a professor of industrial engineering at the department of Industrial and Management Engineering (IME) at the Arab Academy for Science, Technology, and Maritime Transport (AASTMT), which is accredited by the Engineering Accreditation Commission of ABET since 2010. The department offers both B.Sc. and M.Sc. degrees in Industrial and Management Engineering. Prof. El-Kilany has previously been appointed as acting head of department of Industrial and Management Engineering for two years (February 2005 – February 2007) and is currently the head of department since February 2009. Prof. El-Kilany is a senior member of the IIESE and is a reviewer of several journal, conferences, and textbooks.

Prof. El-Kilany has received his Ph.D. in Mechanical and Manufacturing Engineering from Dublin City University, Ireland. Having Intel Ireland as the industry research partner, his research work included modelling and simulation of automated material handling system of Intel's wafer fabrication
Dr. Othmane Bouhali
Research Professor and Director of Research Computing, Texas A&M University at Qatar
Founder and Director of the Texas A&M Advanced Scientific computing (TASC) center

Othmane Bouhali is a research professor and director of research computing at Texas A&M University at Qatar. He is the founder and director of the Texas A&M Advanced Scientific computing (TASC) center. He was the head of the computing group at the High Energy Physics (HEP) institute of Brussels. He took important computing and simulation responsibilities in HEP experiments, mainly in the area of scientific grid computing. Since 1994 he is a member of the Compact Muon Solenoid (CMS) experiment at the Large Hadron Collider (LHC) at the European Organization for Nuclear Research (CERN). He was also a member of: the HERMES international collaboration at the Deutsche Electron Synchrotron (DESY) in Hamburg and the Amanda/ICECUBE neutrino telescope at the South Pole. His research interests include: high performance computing, radiation detectors development, medical physics and 3D scientific visualization.

Wednesday (April 12, 2017)

Session V: Global Engineering Education
8:00 – 9:15 am (Wednesday) - Room 1

Session Chair: Dr. Antonio Henriques de Araujo Junior, State University of Rio de Janeiro, Rio de Janeiro, Brazil

08:00 – 08:25 (Wednesday)

Ikboljon Kasimov, MBA
External Affairs Specialist, Erasmus+ Project Manager
International Relations Department
Department of Metrology, Standardization and Production Quality Management
Andijan Machine Building Institute, Andijan, Uzbekistan

Inter-Institutional Cooperation to Reduce the Readiness Gap of Engineering Graduates – Case of Uzbekistan

Mr. Ikboljon Kasimov is working at Andijan Machine – Building Institute, Uzbekistan, where over 3500 students are taught and in average 700 Engineering students graduate each year. He is currently involved in teaching and as well as research at the Institute. Mr. Kasimov also assists the International Relations Department in building ties with foreign institutions and enterprises. He finished his Associates in Automated Systems, Bachelor's in Industrial Management and MBA in International Business. Mr. Kasimov has recently wrote an article, “Wider Benefits of Ph.D. beyond pecuniary terms” and it is soon to be published. Besides, he has undertaken several research projects in different production management topics. At present time, the project development team is working on 4 distinguished Erasmus+ projects where he has hold key role as an external affairs specialist including Central Asian Engineering Graduates and the significance of Engineering Education in the region. Mr. Kasimov is well aware of the challenges that HEIs encounter while training engineering specialists.

08:25 – 08:50 (Wednesday)

Dr. Jinwoo Park
Professor, Department of Industrial Engineering
Seoul National University, South Korea

Prof. Park’s field of interest is in operations management with special interest in job design and the application of information and communication technology. More specifically he has been teaching and doing research in the field of Flexible Manufacturing Systems, Computer Integrated Manufacturing Systems, Enterprise Research Planning Systems, and Supply Chain Planning Systems. Recently he is also interested in the application of RFID and the productivity measurement and management of software development process. Prof. Park graduated Seoul National University in 1974, and KAIST in 1976. After then he had worked for 4 years as project engineer and production planner in Hyundai International, Inc., currently the Doosan Heavy Industries, Inc. He studied in the Department of IEOR, University of California at Berkeley during 1980-1985 and earned Doctoral degree (D.Eng.) there. Then beginning from 1985 he has been teaching in the Department of Industrial Engineering at the Seoul National University and is a former director and vice president of the Korea Institute of Industrial Engineers (www.kiie.org). and president of the Korea Operations Research and Management Science Society (www.korms.org) and the Korea Simulation Society (www.simulation.or.kr). He has taught, consulted and performed projects with such group of companies like Samsung, Hyundai and LG.

08:50 – 09:15 (Wednesday)
Session VI: Global Engineering Education
11:30 am – 12:45 pm (Wednesday) - Room 1
Session Chair: Dr. Chris Backhouse, Loughborough University, Leicestershire, UK

11:30 – 11:55 (Wednesday)

Dr. Mohammad T. Khasawneh
Professor and Department Chair, Department of Systems Science & Industrial Engineering
Director, Healthcare Systems Engineering Center
Graduate Program Director, Executive Master of Science in Health Systems
Thomas J. Watson School of Engineering & Applied Science
State University of New York at Binghamton, Binghamton, New York, USA

Dr. Mohammad Khasawneh is a Professor and Chair in the Department of Systems Science & Industrial Engineering (SSIE) at Binghamton University. He received his Ph.D. in Industrial Engineering from Clemson University, South Carolina, in August 2003, and his B.S. and M.S. in Mechanical Engineering from Jordan University of Science and Technology, Jordan, in 1998 and 2000, respectively.

Dr. Khasawneh joined Binghamton University (SUNY) in the Fall of 2003. His research areas of interest are in human factors/ergonomics and modeling of healthcare delivery systems. Before joining the SSIE department, he worked as a graduate teacher of record and research assistant in the Industrial Engineering Department at Clemson University. He also served as manager for the Advanced Technology Systems Laboratory (ATSL) where he was actively involved in various projects funded by the FAA and NASA, with significant focus on improving inspection quality on the hangar floor through the use of advance technology, such as virtual reality and computer-based simulations.

Dr. Khasawneh currently serves as Assistant Director for the Watson Institute for Systems Excellence (WISE), an institute for advanced studies at Binghamton University. He also directs research in the Human Factors and Ergonomics Laboratory (HFEL). In the healthcare delivery systems area, through WISE, he has been actively working on applied health systems research since 2003. Since then, he has been leading or co-leading a wide spectrum of projects with multiple U.S. hospital systems, at their site, that focus on applied research projects that can be broadly classified under (a) workflow and process re-design, (b) productivity assessment and capacity planning, (c) strategic planning and future-state analysis, and (d) digital human modeling for ergonomic assessment. Examples of his research include significant amount of work in optimizing the use of OR suites, outpatient scheduling, pre-admission testing, optimizing the deployment of mobile intensive care units, as well as ergonomic study and evaluation of patient handling activities/procedures. These efforts have been supported through partnerships with several U.S. hospitals systems, including United Health Services (Binghamton, NY), Upstate University Hospital (SUNY, Syracuse, NY), Virtua Health (Marlton, NJ), Montefiore Medical Center (Yonkers, NY), the Care Management Organization (Yonkers, NY), and the Mayo Clinic (Rochester, MN).

Dr. Khasawneh’s research activities thus far have led to over 25 scholastic publications in various refereed journals (with over 10 more in review), over 75 conference articles that have been presented at national and international conferences, and one patent application and two new invention disclosures. In addition, his sponsored research efforts thus far have resulted in about US$2,153,520 (external sources), US$375,692 (internal sources), and US$39,145,185 in in-kind software grants. His research group currently consists of 8 doctoral students, 5 MS students, and 1 undergraduate student. Dr. Khasawneh is a member of the Institute of Industrial Engineers (IIE) and the American Society for Quality (ASQ) professional societies, as well as Alpha Pi Mu and Alpha Epsilon Lambda honor societies. He is also currently the faculty advisor for the IIE Student Chapter at Binghamton University.

11:55 – 12:20 (Wednesday)

Dr. Chris Backhouse
Professor of Product Innovation and Associate Dean of Teaching
School of Mechanical and Manufacturing Engineering
Loughborough University, Leicestershire, UK

Dr. Chris Backhouse is Professor of Product Innovation at Loughborough University, UK with extensive knowledge and experience of Higher Education in the Middle East and South East Asia. He is a regular international presenter in his field of innovation and entrepreneurship with extensive links with Universities in Singapore, Hong Kong, Malaysia, Indonesia, China, and Egypt. He advises on research and enterprise strategy and on taught curriculum content. He is a mechanical engineer by background having obtained his PhD whilst employed by Unilever Plc. In 1990 he joined Loughborough University where he has held various senior positions including Dean of the Faculty of Engineering (150 Faculty, 5000 students) and as Director of Internationalization Strategy – responsible for the University’s strategic international partnerships. He has consulted widely in industry and academia, especially in the Asia Pacific region. His research activities have focused on the human aspects of motivation, innovation and entrepreneurship within an industrial context. He has published widely in the academic press and presented at numerous international conferences.
Dr. S. C. Naik
Professor, Former Head of Chemical Engineering and Dean
National Institute of Technology, Rourkela, Odisha, India
Past President, The Institution of Engineers
Past Vice-President, The Federation of Engineering Institutions in South & Central Asia

Professor S C Naik obtained his BTech, MS & PhD degrees—all in Chemical Engineering from the Universities of Madras, Ottawa and UK (Swansea, Wales) respectively. He taught at the National Institute of Technology, Odisha State, India where Dr. Naik was Head of the Department and Dean. He guided many Research Fellows, some medium scale Industries and helped in establishment of an Engineering College. Dr. Naik authored/co-authored some books, published many papers in International and National Journals and presented papers in several countries. He was a Keynote Speaker at the Technical Events in Sri Lanka, South Korea, some Gulf countries, Naples, Tokyo and San Francisco in 2006. Dr. Naik was a Consultant to a prestigious Journal. Dr. Naik was a President of The Indian Institution of Engineers, one of the largest professional bodies in the world, a Vice President of The Federation of Engineering Institutions of South & Central Asia and a Council Member of The Indian Institute of Chemical Engineers. He is a well-known writer in his own mother tongue, Odiya and has published several social novels, a book with one hundred poems and several articles for which he has been felicitated by his State Literature Academy and his name has found place in Central Literature Academy. Dr. Naik is associated with many Committees at the State and Central levels. Professor Naik has a deep involvement in social service for which he has been even appreciated by a world-based organization. For his achievements, he has been awarded and appreciated by Regional, State, Central and Global organizations.

Session VII: Global Engineering Education
2:30 – 3:45 pm (Wednesday) - Room 1
Session Chair: Dr. Rezg Nidhal, University of Lorraine, Metz, France

2:30 – 2:55 (Wednesday)
Dr. N. Vinod Chowdhary
Professor and Head, Department of Mechanical Engineering
SRK Institute of Technology, Vijayawada, Andhra Pradesh, India

Teaching, Learning and Accreditation
This article aims to show how a better understanding of teachers’ workplace learning might lead to increased recognition as a form of professional development and other professional bodies giving credit for such learning. Workplace learning is viewed as a component of overall development of teachers and students. The Article includes case study on how Teacher-Students learning in India in private institutions help the overall development of students. Dr. Vinod Chowdhary is a Professor and Head of Mechanical Engineering Department at SRK Institute of Technology, Vijayawada, Andhra Pradesh, India and Kruti Institute of Technology, Raipur, India. Dr. Chowdhary has 12 years industry experience. He has awarded FIE, LM-ISTE, ASME, and Chartered Engineer. His key achievements are:
- Development and substitution of Indian components with replacement of USA and Canadian parts.
- Improvement in the design to make the test rigs suitable for Ultrasonic inspection of Indian Products.
- Performed Automated Ultrasonic tube/pipe testing systems for customer like nuclear fuel complex, PSL Ltd, Mishra Dhatu Nigam Ltd, BHEL (R&D).
- Interacting with workshops of different industries for supply of the high quality materials in time. 200 /240 students in distinction and first division.
- Labs established. Civil Department started Consultancy and a part in designing civil work for college to a tune of 10 lakhs.
- Students increases from 900 to 1540. 5 courses started for ME, Diploma and increase in UG Mechanical intake.

2:55 – 3:20 (Wednesday)
Allen G. Greenwood, Ph.D., P.E.
Professor, Faculty of Engineering Management
Poznan University of Technology (PUT), Poznan, Poland
Professor Emeritus of Industrial & Systems Engineering
Mississippi State University, USA

Linking Academe and Industry via Simulation
Allen G. Greenwood, Ph.D., P.E. Allen is Professor Emeritus of Industrial and Systems Engineering at Mississippi State University (MSU) and is currently Professor of Engineering Management at Poznan University of Technology (PUT) in Poland. Allen teaches systems simulation, logistics systems design, enterprise systems engineering, and project management. His research interests/expertise include the design and analysis of production and project systems; simulation modeling, analysis, and optimization; and the design and application of decision-support systems. His professional experience spans a wide variety of domains — engineering design and development (military aircraft and aerospace), manufacturing and production systems (military aircraft, shipbuilding, automotive, textile fibers, healthcare, and electrical systems), and project management. His work has been funded by such organizations as the US Air Force Research Laboratory, Office of Naval Research, Naval Sea Systems Command, NASA, Northrop Grumman Ship Systems, Nissan North America, General Electric Aviation, and the Center for Advanced Vehicular Systems (MSU). He has authored or co-authored over 100 creative works, including journal and conference papers, technical reports, software programs, etc. He is co-author of Simulation Modeling and Analysis Using FlexSim.
Allen received his B.S.I.E, M.S.I.E, and Ph.D. (Management Science) degrees from North Carolina State University, University of Tennessee, and Virginia Tech, respectively. In addition to the faculty positions at MSU and PUT, he held positions at American Enka Company, General Dynamics Corporation, Virginia Tech, Northeastern University, the American University of Armenia, and Prince Sultan University.

3:20 – 3:45 (Wednesday)

**Dr. Rezg Nidhal**
Professor of University  
Director of LGIPM Laboratory (Laboratoire de Génie Industriel, de Production et de Maintenance)  
Director of Training and Research Unit (MIM)  
University of Lorraine, Metz, France

**Production and Maintenance Optimization Problem**

Nidhal Rezg is a Doctor of Industrial Automatic from the National Institute of Applied Sciences (INSA) in Lyon in 1996. Accreditation to supervise research at the University of Metz in 2003. he was Professor at the Faculty of Engineering of the University of Moncton, New Brunswick Canada from 1997 to 1999 and Associate professor at the University of Metz until 2004, and currently holds the position of Professor of University. He is director of LGIPM laboratory since October 2006 and scientific responsible of the INRIA CusTom team from 2007 to 2011. His research interests is the optimization of maintenance policies coupled to production, the optimal control SED. He is the author of sixty papers in international journals, directors of 12 theses and 4 Accreditation to supervise research. 

Keywords research are modeling, simulation and optimization of stochastic processes, reliability and maintenance and Petri nets.

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**Session VIII: Global Engineering Education**

**4:00 – 5:15 pm (Wednesday) - Room 1**

**Session Chair:** Dr. Adedeji B. Badiru, Air Force Institute of Technology, Wright-Patterson Air Force Base, Dayton, Ohio, USA

4:00 – 4:25 (Wednesday)

**Dr. Loubna BENABBOU**
Associate Professor of Industrial Engineering  
Ecole Mohammadia d'Ingénieurs (EMI)  
Mohamed V University  
Rabat, Morocco

Dr. Loubna BENABBOU is an Associate Professor of Industrial Engineering at Ecole Mohammadia d'Ingénieurs (EMI) at Mohamed V University. Her research work lie in the application of decision/ management sciences and machine learning techniques to transform data for making better decisions and improving operational processes. Dr Benabbou has been supervising several undergraduate and graduate students in projects for different Industries related to the areas of Decision sciences, Data valorisation and Operations Management. Several of her research paper related to these fields has been published in international scientific journals and conferences' proceedings. She was also a trader at Casablanca stock -exchange and financial analyst and risk manager at the Caisse Marocaine des retraites the Moroccan largest intuitional fund manager. She is member of INFORMS, IEEE and International society of MCDM. Dr Benabbou is an industrial engineer from EMI, she earned MBA and PhD in Management and Decision sciences from Laval University.

4:25 – 4:50 (Wednesday)

**Professor Christian Amaechi Bolu, FNSE, FAEng**
Dean, College of Engineering  
Covenant University, Ota, Nigeria

**Towards Proactive Agenda for (Mechatronics) Engineering Education in Africa**

Professor Christian Amaechi Bolu, graduated with B.Sc in Mechanical Engineering from University of Nigeria, Nsukka in 1976, M.Eng in Industrial Engineering from University of Toronto, Canada in 1979 and Ph.D in Industrial and Systems Engineering from University of Wales, Swansea , United Kingdom in 1982. Prof Bolu, a professor of Mechatronics Engineering, is a practicing engineer with engineering industry work experience spanning over 27 years. He ran several multi-national engineering companies in Nigeria, Ghana and Kenya at top technical and management levels. He was instrumental to setting up of the first CNC wire-cutting machine in Nigeria, in the late 1980s as well as the first automated powder coating plant in Nigeria. He was the developer of one of the early Enterprise Resource Planning solutions widely used in engineering manufacturing plants in Nigeria, Ghana and Kenya.

Prof Bolu, a Fellow of the Nigerian Academy of Engineering. Fellow of both the Nigerian Society of Engineers and Nigerian Institution of Industrial Engineers was a one-time Chairman of the Nigerian Society of Engineers (Lagos Branch), National Technical Secretary of the Nigeria Society of Engineers and President of the Nigerian Institution of Industrial Engineers. He is an SAP Certified Solution Consultant. His present special interest area is in Mechatronics System Design for community development, Internet of Things (IoT) and Rapid Prototyping. He is presently the Dean, College of Engineering, Covenant University, Ota, Nigeria, after serving as pioneer Dean, Faculty of Engineering, Federal University Oye-Ekiti, Nigeria from 2012-2015.
Adedeji B. Badiru, Ph.D., PE, PMP, FIIE
Dean, Graduate School of Engineering and Management
Professor of Systems Engineering
AFIT/EN, Air Force Institute of Technology
Wright-Patterson Air Force Base, Dayton, Ohio, USA

“Contributory Impact of Advanced Military Education to the Advancement of General Global Engineering Education: A World Systems Perspective”

Adedeji Badiru is SES-Equivalent Dean of the Graduate School of Engineering and Management at the Air Force Institute of Technology (AFIT) at Wright Patterson Air Force Base, Dayton, Ohio. He was previously Professor and Head of Systems Engineering at AFIT. He was also previously Professor and Head of Industrial & Information Engineering at the University of Tennessee, Knoxville. Prior to that, he was Professor of Industrial Engineering and Dean of University College at the University of Oklahoma, Norman. He is a registered professional engineer (PE), a certified Project Management Professional (PMP), a Fellow of the Institute of Industrial Engineers, and a Fellow of the Nigerian Academy of Engineering. He has BS in Industrial Engineering, MS in Mathematics, and MS in Industrial Engineering from Tennessee Technological University, and Ph.D. in Industrial Engineering from the University of Central Florida. His areas of interest include mathematical modeling, project modeling and analysis, economic analysis, and productivity analysis and improvement. He is the author of several books and technical journal articles. He is the editor of the Handbook of Industrial & Systems Engineering.

He is a member of several professional associations including Institute of Industrial Engineers (IIE), Institute for Electrical and Electronics Engineers (IEEE), Institute for Operations Research and Management Science (INFORMS), American Society for Engineering Education (ASEE), New York Academy of Science (NYAS), and Project Management Institute (PMI). He has served as a consultant to several organizations around the world including Russia, Mexico, Taiwan, Nigeria, and Ghana. He has conducted customized training workshops for numerous organizations including Sony, AT&T, Seagate Technology, U.S. Air Force, Oklahoma Gas & Electric, Oklahoma Asphalt Pavement Association, Hitachi, Nigeria National Petroleum Corporation, and ExxonMobil. He has won several awards for his teaching, research, publications, administration, and professional accomplishments. He holds a leadership certificate from the University Tennessee Leadership Institute. Prof. Badiru has served as a Technical Project Reviewer, curriculum reviewer, and proposal reviewer for several organizations including The Third-World Network of Scientific Organizations, Italy, National Science Foundation, National Research Council, and the American Council on Education. He is on the editorial and review boards of several technical journals and book publishers. Prof. Badiru has also served as an Industrial Development Consultant to the United Nations Development Program. He was the 2011 Federal Employee of the Year Award in the Managerial Category, International Public Management Association, Wright Patterson Air Force Base. He has also received other national and international awards and recognitions.

EDUCATION
1979 Bachelor of Science, Industrial Engineering, Tennessee Technological University
1981 Master of Science, Mathematics, Tennessee Technological University
1982 Master of Engineering, Industrial Engineering, Tennessee Technological University
1984 PhD, Industrial Engineering, University of Central Florida

Thursday (April 13, 2017)

Session IX: Global Engineering Education
Room 2, 8:00 – 9:15 am

Session Chair: Dr. Leslie Monplaisir, Wayne State University, Detroit, Michigan, USA

Dr. Leslie Monplaisir
Department Chair, Industrial and Systems Engineering
Wayne State University, Detroit, Michigan

Leslie Monplaisir, Associate Professor of Industrial and Systems Engineering, is Chair of the Department of Industrial and Manufacturing Engineering at Wayne State University (WSU). He is a Lead Researcher and Director of the Product Development and Systems Engineering Consortium (PDSEC) at WSU. His research interests include: Lean Product Development, Design for lean Systems and Services and Design reuse, Collaborative PD Decision Making, Product Architecture Optimization, Design for Supply Chain, Global Product Platform Optimization and Healthcare Technology System Design. He has authored over 100 publications in these areas with funded research from NSF, Ford, GM, Sun Microsystems, Tardec, VA and PTC.

Monplaisir joined the College of Engineering at Wayne State University in the Department of Industrial and Manufacturing Engineering in 1996 from Florida A & M University where he was a visiting assistant professor. He earned his PhD in Engineering Management from the Missouri University of Science and Technology (MUST), a master’s in Computer Integrated Manufacturing from the University of Birmingham in Great Britain, and bachelor’s in Mechanical Engineering from the University of the West Indies in Trinidad.
Dr. Hesham K. Alfares
Chairman and Professor
Systems Engineering (SE) Department
College of Computer Sciences & Engineering (CCSE)
King Fahd University of Petroleum & Minerals (KFUPM)
Dhahran, Saudi Arabia

Hesham K. Alfares is Chairman and Professor in the Systems Engineering Department at King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia. He obtained a BS in Electrical & Computer Engineering from the University of California, Santa Barbara, an MS in Industrial Engineering from the University of Pittsburgh, and a Ph.D. in Industrial Engineering from Arizona State University. His research interests include project and employee scheduling, production and inventory control, petrochemical industry modelling, and maintenance modelling and simulation. He has 95 publications in these and other areas, including 47 journal papers. He has been a member in the editorial boards of three international journals and in the program committees of 27 international conferences.

Session Chair: Dr. Abdelaziz Berrado, The Ecole Mohammadia d'Ingénieurs (EMI), Mohammed V University, Rabat, Morocco

Dr. P. Muredzi
Dean – School of Engineering & Technology
Harare Institute of Technology, Zimbabwe

Perkins Muredzi is currently the Executive Dean of the School of Industrial Sciences and Technology and School of Engineering and Technology at the Harare Institute of Technology, Harare, Zimbabwe and a 2015 Global CIMA Award winner in “education Leadership” conferred at the 2015 World Education Congress, Mumbai, India. He graduated with a BSc. MSc in Food Processing Engineering from Krasnodar Institute in the Russian Federation in 1991 and obtained a Master's degree in Intellectual Property from Africa University in 2009 before attainment of his PhD qualification. Dr Muredzi teaches Food Technology in undergraduate, certificate and diploma programmes and also teaches Intellectual Property in the Master of Intellectual Property degree programme being run jointly by Africa University, the World Intellectual Property Organisation (WIPO) and the African Intellectual Property Organisation (ARIPO) He has published 8 books , his first being one published by CBH publishers (USA) entitled “Emerging Non-Thermal Food Processing Technologies” and two of which are text books for “A” Level Food Science and a text book for postgraduate students studying Food Science and Technology. He is a member of ZEC (Zimbabwe Energy Council) IUFost, EFFoSST, IFT (USA) and sits in various national bodies like the Research Council of Zimbabwe grants committee, symposium organising committee, the Harare Polytechnic B Tech Programme Board of studies, NAMACO sectorial committee on Food Processing, ZIMCHE’s RIE-SET organising committee, Zimbabwe Intellectual Property Development Trust and various SAZ standards development technical committees among others. He is the current chairman of the research board and member of the editorial committee of the Journal of Science, Technology, and Technopreneurship (JSTTT) of the Harare Institute of Technology. Dr.Muredzi currently sits on Editorial Boards of the following Journals:

- Journal of Biological, Pharmaceutical and Chemical Research
- Journal of Leadership and Management Studies; Department of Management and Project Management; Cape Peninsula University of Technology
- American Journal of Nutrition and Food Science

Dr. J.S. Gnanasekaran, M.E., Ph.D., FIE
Principal & Professor of Mechanical Engineering
K.L.N. College of Information Technology
Pottapalayam, Madurai city, India

Dr. J.S. Gnanasekaran is the Professor of Mechanical and Industrial Engineering and Principal of K.L.N. College of Information Technology, affiliated to Anna University Chennai located in Madurai- Nedungulam Road near Madurai City in India. He holds B.E. Degree in Mechanical Engineering from Thiagarajar College of Engineering, Madurai under Madurai Kamaraj University and M.E Degree in Industrial Engineering from the same institution and University. He was awarded Doctorate Degree in Mechanical Engineering from Bharathiar University, Coimbatore, through Government College of Technology, Coimbatore, India.

He has taught engineering students at the undergraduate and the postgraduate levels for 25 years and has guided many students of B.E. and ME projects. He has also had some industrial experience in his career. Presently he is guiding many PhD scholars and having produced doctorate candidates. He is a research paper reviewer in many Journals and conferences at National and International levels. His research interests are Manufacturing Optimization, Concurrent Engineering, Logistics Engineering, Product Design, Mathematical Modeling and Algorithm Development. He has published 38 papers in Journals and conferences at National and International levels till date. He has received and associated in receiving research grants from recognized government funding agencies. He has received four awards so far. He is a recognized research supervisor for Anna University Madurai and Coimbatore regions. He is a Research Paper Reviewer and Session Chair in many reputed conferences and journals worldwide. He has written two books so far in the area of Manufacturing Technology and Production Planning optimization techniques.
Dr. Abdelaziz Berrado
Associate Professor of Industrial Engineering
The Ecole Mohammadia d’Ingénieurs (EMI)
Mohammed V University, Rabat, Morocco

Industrial Engineering Education in Morocco – Challenges and Opportunities

Bio: Dr. Abdelaziz BERRADO is an Associate Professor of Industrial Engineering at EMI School of Engineering at Mohammed V University. He earned MS/BS in Industrial Engineering from same institution, an MS in Industrial and Systems Engineering from San Jose State University, and a PhD in Decision Systems and Industrial Engineering from Arizona State University. His research interests are in the areas of Data Science, Industrial Statistics, Operations and Supply Chain Modelling, Planning and Control with application in different industries. His research work is about developing frameworks, methods and tools for systems’ diagnostics, optimization and control with the aim of operational excellence. He published several papers in international scientific journals and conferences’ proceedings. In addition to academic work, he is a consultant in the areas of Supply Chain Management, Data Mining and Quality Engineering for different Industries. He was also a senior engineer at Intel. He is member of INFORMS and IEEE.

Session XI: Global Engineering Education
2:30 – 3:45 pm (Thursday) – Room 1
Session Chair: Abebayehu Abdela, Ethiopia Institute of Technology-Mekelle, Mekelle, Ethiopia

2:30 – 2:55 (Thursday)

Engr. Prof. Adagbonyin Moses O. Obiazi
Dean, Faculty of Engineering and Technology
Ambrose Alli University, Nigeria

President, African Engineering Deans Council, AEDC

Engr. Prof. Adagbonyin Moses O. Obiazi was born at Agbor in Delta state. He attended the prestigious Ika Grammar School, Agbor from 1974 to 1979 obtaining the West African School Certificate with Distinction. He proceeded immediately to the University of Benin to study Electrical/Electronics Engineering, graduating in 1984 with 2nd Class Hons, Upper Division. He had his Masters Degree in Electrical Engineering from the University of Lagos in 1991 and capped it with a PhD in Electrical Power and Machines from Ambrose Alli University, Ekpoma, supervised by the renowned Engr. Prof. Philip Kuale.

Prof. Obiazi started his working career in the Federal Polytechnic University, Auchi in 1985 after his NYSC in Sokoto State. In the quest for higher levels of engagement, Engr. Obiazi joined the services of then Bendel State University, Ekpoma (now, Ambrose Alli University) in 1987 where he has risen through the ranks from Graduate Assistant to his current status as a Professor of Electrical Engineering and Dean of the Faculty of Engineering and Technology. He was the Head of Department of Electrical/Electronics Engineering [1997-1999], Sub-Dean of the Faculty of Engineering and Technology, Member of the University Senate and Member/Chairman of over 40 University committees/panels. He is currently serving as the Chairman of the Central Bank intervention Projects in Ambrose Alli University.

At the professional level, Engr Prof Obiazi was elected a corporate member of the Nigerian Society of Engineers [NSE] in 1993. As an active member of NSE, he was made Secretary, NSE, Ekpoma Branch from 1994-1997 and Chairman of the Branch for five years (1997-2002). During his Chairmanship, the branch won a national merit award as the Most Improved Branch in Nigeria. In 1999, he was made a life member of NSE. He has been a member of the National Executive Council of NSE from 1997 to 2002 and from 2012 to date. He has served in several committees of NSE at both national and local levels. NSE national committees such as Finance and General purpose Committee, Education and Training Committee, Awards and Endowment Committee, Conference Planning Committee, Codes and Standards Committee among others. As a registered Engineer with COREN (Council for the Regulation of Engineering in Nigeria), COREN in 2006 made him a member of Engineering Regulation and Monitoring (ERM) Committee. He has also served as a member of COREN accreditation team to some eight universities and two polytechnics. For eleven years (2001-2012), he was an External Examiner to the Petroleum Training Institute (PTI), Effurun, and since 2011, External Examiner to Delta State University, Abraka. In 1991, Engr. Obiazi was sponsored by UNESCO to Kumasi, Ghana to present a research paper at an International Engineering Conference, while in 2013, he was sponsored to the Conference of the Global Engineering Deans Council (GEDC) held in Chicago, USA. In 1994, the Delta State Government appointed him as a Member of the Delta State Public Utilities Board (PUB).

In May 2013, Engr. Prof OBIAZI was appointed the National Secretary of the Committee set up by COREN [Council for the Regulation of Engineering in Nigeria] to develop COREN Minimum Benchmarks for the training of Engineers in Nigerian Universities. In 2006, Shell Petroleum Development Company (SPDC) appointed Engr. Obiazi as a research advisor on sahbbatical to help with the construction and installation work on the new Afam VI power station in Rivers State. In March, 2010, the Edo State Government appointed Engr. Prof. Obiazi as a member of the Governing council of Edo State Institute of Technology and Management, Usen (a polytechnic),a position he held till Sept, 2012.

Engr. Prof. Obiazi has received several awards from students, staff, religious and professional bodies and groups for outstanding contributions to engineering, education, national development and socio-cultural advancement. Engr. Prof. Obiazi is well published in both local and foreign journals and has presented papers in several local and international conferences. In Sept, 2012 Eng. Prof Obiazi was elected the Chairman, Committee of Deans of Engineering and Technology of Nigerian Universities.
Abebayehu Abdela
Instructor and Researcher, School of Mechanical and Industrial Engineering
Ethiopia Institute of Technology-Mekelle, Mekelle, Ethiopia

Leanness Reading and Rapid Plant Assessment

Abebayehu Abdela is currently working as an instructor and researcher at Ethiopia Institute of Technology-Mekelle, under School of Mechanical and Industrial Engineering. He has mechanical Engineering background followed by postgraduate degree specialization in production and industrial systems engineering. He has been teaching different manufacturing engineering courses and researching in different areas of which Lean manufacturing philosophy, lean principles adaptation to different industries, leanness reading and rapid plant assessment to facilitate best lean principles adaptation are the main one. In line with this he has been transferring the research finding on how to read leanness level on continues basis and how to assess a given plant rapidly to identify critical area to focus on in the form of training and hand on practices. He has also been participating on diverse workshop and presented his work on different international and national conferences. Moreover, he has been conducting a research on different areas including, biomass and allied waste gasification system design and manufacturing, material characterization for different application, design and prototyping of intermediate mode of transportation, Kaizen philosophy. Also, He has been advising final year thesis for engineering students at both bachelor and masters level in different areas.

Mohammad A Rahman, Ph.D.
Manufacturing and Construction Management
Central Connecticut State University, New Britain, CT, USA

Role of Teams to Develop Quality Improvement Framework and Process Understanding

Dr. Mohammad Anwar Rahman is a faculty at the Central Connecticut State University in Manufacturing and Construction Management. He has published papers in referred journals and presented results in conferences. His research focuses on logistics, supply chain management, stochastic process and designing quality procedure. Dr. Rahman conducted several research projects with Mississippi Dept. of Education (MDE) and US Dept. of Transportation (USDOT). He has various certifications including Lean Six Sigma Green Belt (Purdue University), Lean Principles (Purdue University), Demonstrated Master Logistician (The International Society of Logistics), Malcolm Baldrige Quality Award Examiner (Louisiana Quality Foundation), and Certified Transportation & Logistics (American Society of Transport & Logistics). Dr. Rahman is affiliated with ISERC, DSI, AST&L and IEOM.

Session XII: Global Engineering Education
4:00 – 5:15 pm (Thursday) – Room 1

Session Chair: Dr. Kamran Ahmed Siddiqui, University of Dammam, Dammam, Saudi Arabia

Dr. Christoph Wunck
Professor, Business Information Systems, Industrial Engineering
College of Management, Information, Technology
Jade University, Wilhelmshaven, Germany

“Computer Science Education for Industrial Engineers – Meeting the Challenges of the Smart Factory Paradigm”

Prof. Dr. Christoph Wunck holds a full professorship for Business Information Systems at Jade University since 1999. He teaches courses on Distributed Applications, Software Engineering, Programming, Electronic Business Systems and Process Management. He holds a doctoral degree from the faculty of Mechanical Engineering and a Master’s degree (Diplom-Ingenieur) in Electrical Engineering, both from RWTH Aachen University. He is the current director of the Institute of Information Processing in Plastics Manufacturing at Jade University.

His professional experience covers project management and consulting services for a major European business consultancy and work as a consulting engineer for manufacturing and electronics industries. He has served Jade University for nine years in the position of Dean and Dean of Studies.

His research interest include:
– Application of IT and Business Information Systems in Industrial Engineering
– Distributed Manufacturing Execution Systems, Multi-Agent Systems, Data Science, Manufacturing Intelligence
– IT Governance and Security in Operations and Supply Chain Management

Prof. Dr. Wunck is well connected in his field. He serves in the management of conferences and is a reviewer for conference papers and books. He is a member of IEEE Industrial Electronics Society, IEOM, INFORMS, ISCA, ISACA and VDI.
Dr. Ho Hwi Chie, M.Sc.
Dean, Binus Aso School of Engineering
Bina Nusantara University (Binus)
Tangerang, Banten, Indonesia

Dr. Hwi Chie Ho is dean of BINUS ASO School of Engineering and an associate professor in Industrial Engineering at BINUS University. Her journal and conference publication are in the area of ergonomics, and industrial psychology. She is a member of the Institute of Industrial and Systems Engineering (IISE), Human Factors and Ergonomics Society (HFES), and American Psychology Association (APA); currently active as the faculty advisor of IISE BINUS University student chapter #716 since its first establishment in 2012. Under her guidance, the IISE BINUS University student chapter has continuously earned Gold Award ever since its establishment. Prior leading BINUS ASO School of Engineering, she was in charge for the College of Engineering in BINUS University and led the three engineering departments (Civil Engineering, Computer Engineering, and Industrial Engineering) achieved its international accreditation: ABET, and highest national accreditation.

Dr. Kamran Ahmed Siddiqui
Associate Professor and Director of Center for Innovation and Entrepreneurship
College of Business Administration
University of Dammam, Dammam, Saudi Arabia

Dr. Kamran Ahmad Siddiqui is an Associate Professor in Department of Marketing at College of Business Administration (CBA), University of Dammam, Saudi Arabia. He has earned Ph.D. in Business Administration from University of Manchester, Manchester, UK, MA in Marketing Practice from University of Bradford, Bradford, UK, MBA-MIS from Institute of Business Administration, Karachi, Pakistan and B.Sc. from University of Karachi, Karachi, Pakistan. Dr. Siddiqui has certifications in Microsoft Certified Systems Engineer (MCSE), Microsoft Certified Trainer (MCT), Certified Novell Engineer (CNE) and Certified Novell Administrator (CNA). He has worked as a faculty member at DHA Suffa University, Karachi, Pakistan, Institute of Business Administration, Karachi, Pakistan, Gift Business School, Gujranwala, Pakistan, University of Management & Technology, Lahore, Pakistan. He has numerical journal and conference publications.
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Dr. N. Amin Loke, Sime Darby Industrial Park, Malaysia

Don Reimer, Lawrence Technological University, Michigan, USA
## WOMAN IN INDUSTRY AND ACADEMIA COMMITTEE

**IEOM Rabat Conference COMMITTEE**  
**April 11-13, 2017**

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<tr>
<td>Reeha Plaha</td>
<td>Crystal Quality, UK</td>
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<tr>
<td>Dr. Chan Chee-Ming</td>
<td>Universiti Tun Hussein Onn Malaysia</td>
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<tr>
<td>Dr. Mey Goh</td>
<td>Loughborough University, UK</td>
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<td>Dr. Ilham Kissani</td>
<td>Al Akhawayn University, Morocco</td>
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<td>Dr. Stefanie Pillai</td>
<td>Dean and Associate Professor, Faculty of Languages &amp; Linguistics, University of Malaya, Kuala Lumpur, Malaysia</td>
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<tr>
<td>Dr. Funda Sivrikaya Şenfooğlu</td>
<td>Bilgi University, Istanbul, Turkey</td>
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<tr>
<td>Dr. Adilah Shub</td>
<td>Universiti Teknologi MARA (UiTM)</td>
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<td>Dr. Vanajah Siva</td>
<td>Chalmers University, Sweden</td>
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<td>Vanessa Victoire</td>
<td>University of Mauritius</td>
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<tr>
<td>Prof. Soumaya Yacout</td>
<td>École Polytechnique de Montréal, Canada</td>
</tr>
</tbody>
</table>

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**Artificial Intelligence**

Peiman Pazhooheshifar, Young Researchers and Elite Club, Arak Branch, Islamic Azad University, Arak, Iran

Dr. Mohd Helmy Abd Wahab, Universiti Tun Hussein Onn Malaysia

**Automation and Control**

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Dr. Javad Feizabadi, MIT Global SCALE Network in Asia- Malaysia Institute for Supply Chain Innovation  
Dr. Farzad Firooz Jahanligh, Department of Industrial Engineering, University of Sistan and Baluchestan, Iran

**Computers and Computing**

Dr. Jatinnderkumar R. Saini, Narmada College of Computer Application, Zadeshwar, Bharuch, Gujarat, India

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Dr. Ho Hwi Chie, Bina Nusantara University (Binus), Banten, Indonesia  
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Dr. Sandhya Makkar, Lal Bahadur Shastri Institute of Management, India

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Dr. Bernardo Villarreal, Universidad de Monterrey, Mexico  
Edly Ramly, Lean Six Sigma Master Black Belt, EFR Certification, Malaysia  
Abdullah Y Dhafer, Aramco, Saudi Arabia

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Dr. Erween Abdul Rahim, Universiti Tun Hussein Onn Malaysia

**Material Flow Cost Accounting (MFCA)**

Dr. Wichai Chathanawat, Chiang Mai University, Thailand

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Dr. Ali El Kamel, University of Waterloo, Canada

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Dr. Navid Mortezaei, Universiti Putra Malaysia  
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Dr. Ali Allahverdi, Kuwait University, Kuwait  
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Dr. Mohd Nizam Ab Rahman, Universiti Kebangsaan Malaysia

**Reliability and Maintenance**

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**Sensors and Sensing Systems**

Dr. Shahruil Kamaruddin, Universiti Teknologi Petronas, Malaysia

**Service Systems and Service Management**

Dr. Kannapha Amaruchkul, National Institute of Development Administration (NIDA), Bangkok, Thailand

**Software Testing and Quality Assurance**

Abdul Mannan, Adjunct Professor, Univ. of the District of Columbia, USA

**Statistics and Empirical Research**

Dr. Çağrı Bulut, Yaşar University, İzmir, Turkey  
Dr. Arjun K. Gupta, Bowling Green State Univ., Bowling Green, Ohio, USA

**Supply Chain Management**

Dr. Füsun Ülengin, Sabanci University, Turkey  
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Dr. Asela K. Kulatunga, University of Peradeniya, Sri Lanka

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**April 11-13, 2017**

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- Dr. Suhaiha Hanir Zainali,University Malaysia, Malaysia
- Dr. Linda L. Zhang, IESEG School of Management, Lille-Paris, France

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- Venkata Rajasekhari Gandavarapu, MSIE Student, Lawrence Technological University, Michigan, USA

### Submissions Received from Countries and Territories

<table>
<thead>
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<tr>
<td>Algeria</td>
<td>15. Finland</td>
<td>29. Kuwait</td>
<td>43. Saudi Arabia</td>
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<td>1. Austria</td>
<td>16. France</td>
<td>30. Libya</td>
<td>44. Singapore</td>
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<td>3. Australia</td>
<td>17. Germany</td>
<td>31. Malaysia</td>
<td>45. Spain</td>
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<td>7. Brazil</td>
<td>21. Indonesia</td>
<td>35. Namibia</td>
<td>49. Taiwan</td>
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<td>10. Canada</td>
<td>24. Italy</td>
<td>38. Oman</td>
<td>52. Tunisia</td>
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Manufacturing Engineering Chair
EIITME – Ethiopian Institute of Technology Mekelle
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- Director of Programs: Abraha Haile
- Director of Social Media: Zebenay Tamirat
TECHNCAL PROGRAM

April 11, 2017 (Tuesday)

Session: 8:00 – 9:15 am

08:00 – 09:15, TUESDAY  Global Engineering Education I  Room 1

Session Chair: Edward Williams, Educator at University of Michigan – Dearborn, USA

08:00 – 08:25 (Tuesday)

Professor Zazi Malika
Head of Electrical Engineering Department
L’Ecole Normale Supérieure de L’Enseignement Technique de Rabat (ENSET)
Mohammed V University, Rabat, Morocco

08:25 – 08:50 (Tuesday)

Professor Youssef Benadada
Head of Operational Research and Logistics (ROL)
Head of the Department of Informatics and Decision Support (IAD)
Coordinator of the e-Logistics Engineering (ieL)
Ecole Nationale Supérieure d’Informatique et d’Analyse des Systèmes (ENSIAS)
Mohammed V University, Rabat, Morocco

08:50 – 09:15 (Tuesday)

Edward Williams
Educator at University of Michigan – Dearborn and Statistics/Simulation Consultant and Trainer at Production Modeling Corporation (PMC)
Detroit, Michigan, USA

08:00 – 09:15, TUESDAY  Industry Solutions I  Room 2

Session Chair: Professor Ashok Pundir, National Institute of Industrial Engineering (NITIE), Mumbai, Maharashtra, India

08:00 – 09:15 (Tuesday)

Dr. Kottala Sri Yogi
Assistant Professor, Department of Industrial & Production Engineering
Institute of Technology Guru Ghasidas Vishwavidyalaya (A Central University)
Bilaspur 495009 (C.G) India

An investigation of process capability indices: A case of soft drinks processing unit

08:25 – 08:50 (Tuesday)

Professor Ashok Pundir
Dean, National Institute of Industrial Engineering (NITIE)
Mumbai, Maharashtra, India

08:50 – 09:15 (Tuesday)

ID 113 Intelligent Sortation Wave-Design to Optimize Transport Connections with Faster TAT in a Distribution Center
Sarvartha Kanchan, Director – Supply Chain Design, Flipkart Internet Pvt. Ltd., Bangalore, India

08:00 – 09:30, TUESDAY  Quality  Room 3

Session Chair: Sanchay Gupta, Delhi Technological University, New Delhi, India

ID 166 Achieving Organizational Excellence through Strategic Quality Leadership
Milton Krivokuca, Master Science in Quality Assurance Program, California State University Dominguez Hills, Carson, CA, USA
Milton Krivokuca & Associates, Wilmington, North Carolina, USA

ID 410 QFD Approach to Define CSR: Indian Perspective
Shekar Babu, AMRITA Vishwa Vidypapeetham University, Bangalore, India
U. Krishnakumar, AMRITA School of Arts and Sciences, Kochi, India
Ram Bishu, Department of Material and Mechanical Engineering, University of Nebraska-Lincoln, USA

ID 411 Bone Phosphate Lime Sampling Method
Wiam Aissaoui and Ilham Kissani, School of Science and Engineering, Al Akhawayn University of Ifrane, Ifrane, 48075, Morocco

ID 046 Experimental Analysis of Surface Roughness in CNC Taper Turning of Aluminum 6061 Using Taguchi Technique
Sanchay Gupta, Vimanyu Chadha, Vishal Sardana, Viplav Setia and Ranganath M Singari, Department of Mechanical, Production and Industrial Engineering, Delhi Technological University, New Delhi, 110058, India
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<td>Undergraduate Student Presentation Competition</td>
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<td>Dr. Abbas Mahmoudabadi, Mehrastan University, Astane Ashrafieh, Guilan, Iran</td>
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<tr>
<td>ID 002</td>
<td>Improving On-Time Delivery by Increasing Distribution Agility: A Case Study</td>
<td></td>
<td>Ilse-Valeria Benavides-Peña, Valeria Garza-Amaya, Cecilia Garza-Madero and Bernardo Villarreal, Departamento de Ingeniería, Universidad de Monterrey, San Pedro Garza García, NL 66238, Mexico</td>
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<tr>
<td>ID 014</td>
<td>Increasing On-Shelf Availability of a Mexican Convenience Store Network</td>
<td></td>
<td>Ana-Sofia Villarreal-Navarro, Karla-Veronica Vazquez-Preciat, Lilian Camacho-Alcala and Bernardo Villarreal, Departamento de Ingeniería, Universidad de Monterrey, San Pedro Garza García, NL 66238, Mexico</td>
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<td>ID 436</td>
<td>Dynamical Modeling of Fresh Vegetables while Considering Degradation Effect on Pricing</td>
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<td>Raghad O. Bahebshi and Abdulaziz T. Almaktoom, Department of Operations and Information Management, Effat University, Jeddah, KSA</td>
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<tr>
<td>ID 092</td>
<td>Hydraulic Fodder Baler Machine</td>
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<td>Radhika. J. Manolkar, Industrial and Production Engineering, KLS Gogte Institute of Technology, Karnataka, India</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Doctoral Dissertation Competition</td>
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<td>Dr. Abdelaziz Berrado, The Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University, Rabat, Morocco</td>
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<td>ID 354</td>
<td>Expanding Industrial Thinking by Formalizing the Industrial Engineering Identity for the Knowledge Era</td>
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<td>Hasan Danish, School of Industrial Engineering, North West University, Potchefstroom, North West Province, South Africa</td>
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<td>ID 524</td>
<td>Fuzzy Heuristic Approaches for Healthcare Staff Scheduling</td>
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<td>Michael Mutiini, Faculty of Engineering, Namibia University of Science and Technology, Windhoek, Namibia and Faculty of Engineering and the Built Environment, University of Johannesburg, Auckland Park Kingsway Campus, Johannesburg, South Africa</td>
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<td>ID 311</td>
<td>A Strategic Approach to Effectively Manage Supplier Quality within the Construction Industry</td>
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<td>Rufaidah AlMaian, Kuwait University, Kuwait</td>
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<td>ID 550</td>
<td>Topological Analysis of Project Risks Network: A Case of Rabat Tramway Project</td>
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<td>Younes Bourass, Mohammadia Engineering School, Morocco</td>
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<td>ID 055</td>
<td>An Empirical Investigation of Critical Success Factors for Continuous Improvement Projects in Hospitals</td>
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<td>Fernando Gonzalez Aleu, UNIVERSIDAD DE MONTERREY, Mexico</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Graduate Student Paper Competition</td>
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<td>Dr. Loubna Benabbou, The Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University, Rabat, Morocco</td>
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<td>ID 013</td>
<td>Bibliometric Analysis of Research in Continuous Improvement Projects in Hospitals</td>
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<td>Fernando Gonzalez Aleu, Department of Engineering, Universidad de Monterrey, San Pedro Garza García, NL 66238, Mexico Eileen M. Van Aken, Grado Department of Industrial and Systems Engineering, Virginia Tech, Blacksburg, VA, 24061, U.S.A. Heather Keathley-Herring, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, FL, U.S.A.</td>
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<td>ID 396</td>
<td>Analysis and Optimization of MAG Welding Parameters using Genetic Algorithm</td>
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<td>Hagazi Abraha, Ethiopian Institute of Technology –Mekelle (EIT-M), School of Mechanical and Industrial Engineering, Mekelle Univ. Mekelle, Ethiopia</td>
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<td>ID 561</td>
<td>Qualitative Assessment of Response, Reaction and Conversation Generate Through Viral Campaign on Twitter</td>
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<td>Praveen Praveen, Chandragupt Institute of Management, Patna, India</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>High School STEM Project Presentation</td>
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<td>Dr. Mohammed Anwar Rahman, Central Connecticut State University, USA</td>
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<tr>
<td>ID 098</td>
<td>Statistical JAVA Gaming Simulation</td>
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<td>Timothy Liu, Lynbrook High School, San Jose, CA, USA Mason Chen, Milpitas Christian School, San Jose, CA, USA Joseph Jang, Monta Vista High School, San Jose, CA, USA</td>
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<td>ID 099</td>
<td>Simulate Tesla Summon Auto-Pilot Parking</td>
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<td>Mason Chen, Milpitas Christian School, Morrill Learning Center, San Jose, CA, USA Katherine Lim, Fallon Middle School, Morrill Learning Center, San Jose, CA, USA</td>
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<td>ID 148</td>
<td>Use Robotics to Simulate Self-Driving Car on SUV Fields</td>
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<td>Mason Chen, Milpitas Christian School, Morrill Learning Center, San Jose, CA, USA</td>
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<td>ID 149</td>
<td>Predict Warriors’ 2015-2016 73 Win Season Record</td>
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<td>Mason Chen, Milpitas Christian School, Morrill Learning Center, San Jose, CA, USA Zonghuan (Jason) Li, San Mateo High School, Morrill Learning Center, San Mateo, CA, USA</td>
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08:00 – 09:15, TUESDAY  
**Sustainability and Green Systems**  
Room 8  

**ID 136**  
Sustainable Distribution Networks Adoption in Moroccan industry: barriers and instigators  
Hajar Deqqaq and Abdellah Abouabdellah, Laboratory Systems Engineering, Research team 'Modelling and Optimization of the Industrial and logistic Systems' MOSIL, National School of Applied sciences, Ibn Tofail university, Kenitra Morocco

**ID 583**  
On the Eectiveness of Supply Chain Coordination on Carbon Footprint  
Adel Elomri, Dept. of Mechanical & Industrial Engineering, College of Engineering, Qatar University, Doha, Qatar

**ID 145**  
A Theoretical Appraisal on a Greener Approach Towards Sustainability in the Construction Industry  
M Ndou and C O Aigbavboa, Department of Construction Management and Quantity Surveying, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg 2094, South Africa

**ID 334**  
Sustainable Supply Chain Management in Moroccan Automotive Sector: An Empirical Study  
Jalil BADDAOUI and Abdelhakim Nassimi, National School of Business and Management, Old Airport Road, BP 1255, Tanger, Morocco.  
Tarik Zouadi, BEAR Lab, Rabat Business School, International University of Rabat (UIR), Rabat, Morocco

**ID 346**  
Optimization of Recycling the Granulated Slag as Partial Substitute of Cement to Produce Sustainable Concretes  
Mohammed T. Hayajneh and Ahmad Ezzat, Industrial Engineering Department, Jordan University of Science and Technology, Irbid, Jordan

**ID 368**  
Would Saudis Drive Hybrid Vehicles? An application of Theory of Planned Behavior  
Khalid Alzahrani, Mechanical Engineering department, Alba University, Alba, Kingdom of Saudi Arabia

9:15 – 9:30 - Break

**Session – Tuesday (April 11): 9:30 – 11:00 am**

09:30 am – **Welcome Address**

**Dr. Driss Ouaouicha**, President of Al Akhawayn University, Ifrane, Morocco - Ballroom

10:00 am – **Opening Keynote**

**Dr. Brian Denton**

Professor, Industrial & Operations Engineering Department  
University of Michigan, Ann Arbor, Michigan, USA

President of INFORMS (The Institute for Operations Research and the Management Sciences) - Ballroom

11:00 – Networking Break at Exhibition Hall

**Session – Tuesday (April 11): 11:15 – 12:45 pm**

11:30 – 11:55 (Tuesday)  
**Dr. Virgilio Cruz-Machado**  
Head of Department at Department of Mechanical and Industrial Engineering  
New University of Lisbon, Portugal  
President – Portuguese Institute of Industrial Engineering (IPEI)

Reconfiguring Industrial Engineering Education in the Digital World

11:55 – 12:20 (Tuesday)  
**Dr. Basel Alsayyed Ahmad**  
Associate Professor of Mechanical Engineering, College of Engineering  
United Arab Emirates University, Al-Ain, United Arab Emirates (UAE)

Problem Based Learning (PBL)

12:20 – 12:45 (Tuesday)  
**Dr. Syed Ahmad Helmi Al Haddad**  
Program Coordinator for MSc in Industrial Engineering, Faculty of Mechanical Engineering  
Associate Fellow, Center for Engineering Education (CEE)  
Universiti Teknologi Malaysia, Johor, Malaysia
11:30 – 12:45, TUESDAY  
**Industry Solutions II**  
Session Chair: Prof. Shekar Babu, Founding Head, AMRITA School of Business, Bangalore, India

11:30 – 11:55 (Tuesday)  
**Mehran Doulat, B.Sc., MEM, MQM, EFQM, Ph.D.**  
Mehran Doulat Abadi  
Senior Research Fellow, Genichi Taguchi Center for Quality and Sustainability  
Razak School of Engineering and Advanced Technology  
UTM Kuala Lumpur, Malaysia

11:55 – 12:20 (Tuesday)  
**Edly Ferdin Ramly**  
Certification Director  
EFR Certification, Johor Bahru, Malaysia

12:20 – 12:45 (Tuesday)  
**Prof. Shekar Babu**  
Founding Head, AMRITA School of Business, Bangalore  
Adjunct Faculty, SUNY, Buffalo, USA  
AMRITA University, Bangalore, India

11:30 – 12:45, TUESDAY  
**Quality**  
Room 3

Session Chair: Michael Mutungi, Namibia University of Science & Technology, Windhoek, Namibia

**ID 428 A Health Care Framework for Improving Quality in the Private Hospitals in Kuwait**  
Majid M. Aldaihani and Mohammad J. Alkhedher, Industrial and Management Systems Engineering Department, College of Engineering and Petroleum, Kuwait University, Kuwait  
Ahmad K. Elshennawy, Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

**ID 457 The Role of Strategy Quality Planning in Continuous Improvement Efforts (CI) – Case of a Short-Term Insurance Company in South Africa**  
Sambil Charles Mukwakungu and Charles Mbohwa, Department of Quality and Operations Management, University of Johannesburg, South Africa

**ID 601 State-of-the-Art Lean Six Sigma Practices**  
Abdulaziz Almutairi, Department of Manufacturing, Cranfield University, United Kingdom

**ID 536 Using FMEA Analysis for Assessing Air Conditioners Remanufacturing Processes**  
Bashir Salah and Mohammed Alkahtani, King Saud University, KSU, Industrial Engineering Department, College of Engineering, Riyadh, KSA  
Aiman Ziout, Department of Mechanical Engineering, College of Engineering, UAE University, Al-Ain, United Arab Emirates

**ID 567 Critical Success Factors for Quality Management Practices for SMEs: A Case of Namibia**  
M. Mutungi1,2 and C. Mbohwa2  
1Faculty of Engineering, Namibia University of Science & Technology, Windhoek, Namibia  
2Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

11:30 – 12:45, TUESDAY  
**Undergraduate Student Paper Competition**  
Room 4

Session Chair: Dr. Abbas Mahmoudabadi, Mehrastan University, Astane Ashrafieh, Guilan, Iran

**ID 036 Improving On-Time Delivery Eliminating Routing Waste: A Case Study**  
Ilse-Valeria Benavides-Peña, Valeria Garza-Amaya, Cecilia Garza-Madero and Bernardo Villarreal, Departamento de Ingeniería, Universidad de Monterrey, San Pedro Garza Garcia, NL 66238, Mexico

**ID 126 A Continuous Improvement Project to Increase Fulfillment Level in a Wire Company**  
Mitzary Elizabeth Chavero Hidalgo, Yaneth Alejandra Santos Muñiz, Alan Javier Corral De León, Fernando González Aleu, Jesus Vazquez, Teresa Verduzco-Garza and Jose A. Lozano, Department of Engineering, Universidad de Monterrey, Nuevo León, México

**ID 516 Applied Back Propagation Neural Network and Machine Vision for Modelling and Controlling Turmeric (Curcuma domestica Val.) Drying Process**  
Eka Tiyas Anggraeni, Muchhammad Zakaria, Naily Ulya, and Yusuf Hendrawan, Agricultural Engineering Dept., Brawijaya University, East Java, Indonesia

**ID 546 Developing a Mobile Health Application "I.Diabetic" for Type 1 Diabetic Kids**  
Rawan Al-Shatti and Suat Kasap, Industrial Engineering Department, American University of the Middle East – AUM, Egaila, Kuwait

11:30 – 12:45, TUESDAY  
**Operations Research**  
Room 5

Session Chair: Mustafa Yılmaz, Industrial Engineering, Atatürk University, Erzurum, TURKEY

**ID 111 Volume Loss Minimization in Slitting Operation: Case of a Packaging Company**  
Anupam Tripathi1 A. Subash Babu2  
1Analyst, Flipkart Internet Pvt. Ltd., Indian Institute of Technology, Bombay, India  
2Professor, Mechanical Engineering Department, Indian Institute of Technology, Bombay, India
ID 114  A Meta-Heuristic Clustering Model to Optimize City-Logistics Resource Requirements considering First Mile and Last Mile Value Stream Map  
Sarvartha Kanchan, Director – Supply Chain Design, Flipkart Internet Pvt. Ltd., Bangalore, India

ID 558  Enumeration of Particular Paths  
Fadila Hocini, Université A. Mira, Algeria

ID 614 A Polynomial Time Tour Algorithm for Order Picking Operations in Warehouses and New Aisle Designs  
Ömer Öztürkoğlu, Department of Business Administration, Yasar University, Izmir Turkey  
Deniz Hoşer, Department of Industrial Engineering, Yasar University, Izmir Turkey

ID 116 Rural Postman Problem Approach for Waste Collection Operations in the City of Erzurum in Turkey  
Mustafa Yılmaz and Merve Kayacı Çodur, Industrial Engineering, Atatürk University, Erzurum, TURKEY

11:30 – 12:45, TUESDAY  Undergraduate Research Competition  Room 6  
Session Chair: Dr. Loubna Benabbou, The Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University, Rabat, Morocco

ID 379  Bone Phosphate Lime - Sampling Method  
Wiam Aissaoui, School of Science and Engineering, Al Akhawayn University of Ifrane, Ifrane, 48075, Morocco

ID 029  Fundamental Solution of 3D Isotropic Elastic Bonded Joint  
Md. Zahidul Islam, Md. Mazharul Islam, Mahesh Kumar Sah, Khulna University of Engineering & Technology, Khulna-9203, Bangladesh

ID 580: Superiority of Sanskrit Language in Tele Communication & Computing  
Shashank Mani Tripathi, Institute of Engineering & Technology, Bundelkhand University Jhansi, Uttar Pradesh, India

Simulation and PLM Competition
ID 551 Ergonomic Weightlifting” Competition by using JACK  
Ali Al Ramadhan, Abdulrahman Ahmad, Saoud Alotaibi and Suat Kasap, Industrial Engineering Dept., American University of the Middle East, Kuwait

11:30 – 12:45, TUESDAY  High School STEM Project Presentation  Room 7  
Session Chair: Dr. Mohammed Anwar Rahman, Central Connecticut State University, USA

ID 150  An Analysis of Powerball and Condition Leading to January Largest Powerball in History  
Mason Chen, Milpitas Christian School, Morrill Learning Center, San Jose, CA, USA  
Zonghuan (Jason) Li, San Mateo High School, Morrill Learning Center, San Mateo, CA, USA

ID 454  Modeling and Simulating Flow Phenomenon using Navier-Stokes Equation  
Hyunjun Min, Jiho Shin, Jaeho Choi, and Hohyun Lee, Data Science Lab, Paul Math School, Goesan County, Korea

ID 479  Rio Olympic Triathlon Road Closure Control  
Mason Chen, Milpitas Christian School, San Jose, CA, USA  
Zonghuan (Jason) Li, San Mateo High School, Morrill Learning Center, San Mateo, CA, USA

ID 498  Predict 2017 NBA MVP Winner  
Mason Chen, Milpitas Christian School, San Jose, CA, USA

11:30 – 12:45, TUESDAY  Sustainability and Green Systems  Room 8  
Session Chair: Mehmoood Khan, Abu Dhabi University, Abu Dhabi, UAE

ID 381  Literature Review of the Integrated Approach Lean Green  
Chaimae KHAISSIDI, Laila EL ABBADI and Abdellah ABOUABDELLAH, Laboratory Systems Engineering, ENSA, University Campus. B.P 241, IbnTofail University. Kenitra, Morocco

ID 474  Barriers for Social Sustainability in Healthcare Industry in the UAE  
Mehmood Khan and Hanan Abdullah Mohammed, Abu Dhabi University, United Arab Emirates

ID 475  Conceptualizing Social Sustainability in the Business Operations  
Mian Ajmal, Abu Dhabi University, United Arab Emirates

ID 059  Managing Changeover Waste in Manufacturing Plants When Using Single Minute Exchange of Dies  
Rushil Madhav, Annlize Marnewick and Hannelie Nel, Postgraduate School of Eng. Management, University of Johannesburg, South Africa

ID 376  Impact of Reforestation Work on Vegetation Cover in Semi-Arid Region: The Case of EL Green Dam to Bayad (Naama Wilaya)  
Kaddour El HEIT, Université Mouloud MAMMERI, Tizi ouzou, Algeria  
Abderrahmane MELLAK, Hydrocarbons and Chemicals Faculty - LGHP – University of Boumerdes – Algeria

ID 487  Social Sustainability in Healthcare Supply Chains  
Matloub Hussain, Mian Ajmal and Mehmoood Khan, College of Business Administration, Abu Dhabi University, Abu Dhabi, UAE

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12:45 – 1:00 pm – Networking Break at Exhibition Hall

1:00 pm – Tuesday Lunch Keynote

**Dr. Othmane Benmoussa**  
Consultant in Transportation, Logistics, Supply Chain Management, and Business Sustainability  
Part-Time Faculty in Logistics and Supply Chain Management, Al Akhawayn University, Morocco  
Ballroom (Lunch Buffet Provided)

1:45 pm – Tuesday Lunch Keynote

**Dr. Othmane Bouhali**  
Research Professor and Director of Research Computing, Texas A&M University at Qatar  
Founder and Director of the Texas A&M Advanced Scientific Computing (TASC) Center

2:15 – 2:30 pm – Networking Break at Exhibition Hall

### Session – Tuesday (April 11): 2:30 – 3:45 pm

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<td>2:30 – 2:55</td>
<td><strong>Dr. Funso Falade</strong></td>
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<td>2:55 – 3:20</td>
<td><strong>Dr. Alfredo Soeiro</strong></td>
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<tr>
<td>3:20 – 3:45</td>
<td><strong>Dr. Mustapha Nour El Fath</strong></td>
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Session Chair: Dr. Mustapha Nour El Fath, Laval University, Quebec City, Quebec, Canada

2:30 – 2:55 (Tuesday)  
**Dr. Funso Falade**  
Department of Civil & Environmental Engineering  
University of Lagos, Akoka, Lagos, Nigeria  
President, African Engineering Education Association

2:55 – 3:20 (Tuesday)  
**Dr. Alfredo Soeiro**  
Associate Professor, University of Porto, Portugal  
Past Academic Director in Civil Engineering  
Past Pro-Rector of the University of Porto for Continuing Education  
Past President – European Society of Engineering Education

3:20 – 3:45 (Tuesday)  
**Dr. Mustapha Nour El Fath**  
Professor of Industrial Engineering, Department of Mechanical Engineering  
Laval University, Quebec City, Quebec, Canada

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<td>2:55 – 3:20</td>
<td><strong>Dr. Abdul Talib Bon</strong></td>
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Session Chair: Dr. Abdul Talib Bon, Universiti Tun Hussein Onn Malaysia

2:30 – 2:55 (Tuesday)  
**Dr. Abdul Talib Bon**  
Professor of Technology Management, Department of Production and Operations Management  
Faculty of Technology Management and Business  
Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

**Industrial Engineering Solution in the Industry: Artificial Neural Network Forecasting Approach [ID 555]**

2:55 – 3:20 (Tuesday)  
**Babar Bilal**  
Chief Excellence Officer  
Bilal Consultancy (Pvt) Ltd., Multan, Pakistan

3:20 – 3:45 (Tuesday)  
**ID 590 Sortation in Ecommerce Logistics in India: Design Principles for Scalability & Flexibility**  
Sachin Raja and Swadesh Srivastava, Flipkart Internet Private Ltd., Bangalore, Karnataka 560034, India

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Session Chair: Yasser Shaban, Faculty of Engineering, Helwan University, Egypt

**ID 001 Application of the Turnaround Maintenance (TAM) Model to Oil and Gas Plants in Case Study for Heat Exchangers**  
A.Elwerfalli, M. K. Khan and J. E. Munive, School of Engineering and Informatics, University of Bradford, BD7 1DP UK
ID 121  A Review on Intelligent Fault Diagnosis and Prognosis for Industrial Equipment  
Yasser Shaban, Faculty of Engineering, Helwan University, Egypt

ID 122  An Optimal Integrated Maintenance Strategy for a Multi-Machines System  
Tarek Askri, Zied Hajej and Nidhal Rezg, Lab. of Industrial Engineering, Production and Maintenance LGIPM, Université de Lorraine, Metz, France

Japheth Ombogo, East African Portland Cement, Kenya

ID 124  Belt Fault Detection using Artificial Intelligence  
Yasser Shaban, Faculty of Engineering, Helwan University, Egypt

2:30 – 3:45, TUESDAY  
Supply Chain Management  
Room 4

Session Chair: Abdellah Abouabdellah, ENSA, IbnTofail University, Kenitra, Morocco

ID 019  Formulating and Implementing Supply Chain Strategy: Extension of Organization Strategy Framework  
Dhan Singh, Department of Industrial and Management Engineering, Indian Institute of Technology Kanpur, Kanpur, India  
Vignaesh Muthukummar, Department of Material Science and Engineering, Indian Institute of Technology Kanpur, Kanpur, India  
R.R.K. Sharma, Department of Industrial and Management Engineering, Indian Institute of Technology Kanpur, Kanpur, India and Visiting Professor, Chaoyang University of Technology, Taichung, Taiwan  
K.K. Lai, Chaoyang University of Technology, Taichung, Taiwan

ID 030  Performance Evaluation & Warehousing Problems Third Party Logistics  
Muhammad Ajazuddin, Dept. of Industrial Engineering and Management, Mehran University of Engineering and Technology, Jamshoro, Pakistan

ID 037  Lean Supply Chain: Empirical Research on Practices and Performance  
Guilherme Luz Tortorella, Rogério Feroldi Miorando and Carlos Ermanni Fries, Department of Production and Systems Engineering, Federal University of Santa Catarina, Campus Trindade, Florianópolis, SC 88040-900, Brazil  
Giuliano Almeida Marodin, Moore School of Business, University of South Carolina, Columbia, SC, USA

ID 085  Evaluating Risks Associated with Agility in Corporate Enterprises  
Anirban Ganguly, O. P. Jindal Global University, Haryana, India  
Debdeep Chatterjee, Schneider Electric, Bengaluru, India

ID 088  Optimal Pricing Strategy for Multi-generations Durable Products with a Trade-in Program  
Hui-Ching Lo and Yi-Feng Gao, Department of Business Administration, Tamkang University, New Taipei City, 25137, Taiwan

ID 104  Proposition of a Methodology to Model and Analysis with the Introduction of Secondary Market in the Global Supply Chain  
Faycal Mimouni and Pr. Abdellah ABOUABDELLAH, Laboratory systems engineering, MOSIL, ENSA, IbnTofail University, Kenitra, Morocco

2:30 – 3:45, TUESDAY  
Operations Research  
Room 5

Session Chair: Victor John M. CANTOR, National University of Singapore

ID 123  Résolution d’un Problème de Programmation Quadratique à Variables Bornées Avec une M-matrice  
Katia HASSAINI and Mohand Ouamer BIBI, Unité de Recherche LaMOS, University of Bejaia 06000, Algerie, Algeria

ID 128  Solution to the Problem of Intervention to Refugee Boats in Seas through Mixed Integer Mathematical Model  
Ukbe Uşame ÜÇAR, Industrial Engineering Department, Firat University, ELAZIĞ, TURKEY  
Selçuk Kürşat İŞLEYEN, Moore School of Engineering Department, Gazi University, ANKARA, TURKEY

ID 303  Relaxations and Algorithms for the Traveling Salesman Problem with Time-Dependent Service Times  
Paolo Toth, Valentina Cacciani and Carlos Conreras Bolton, Department of Electrical, Electronic and Information Engineering/Guglielmo Marconi", University of Bologna, Italy

ID 586  On Adaptive Method for Solving a Convex Quadratic Programming  
Nacera Ikheneche and M.O.Bibi, LAMOS Laboratory, University of Bejaia, Bejaia, Algeria

ID 318  A Modified SBM-NDEA Approach Considering Non-homogeneity of Sub Processes  
Victor John M. CANTOR and Kim Leng POH, Department of Industrial and Systems Engineering, National University of Singapore, Singapore

2:30 – 3:45, TUESDAY  
Engineering Education  
Room 6

Session Chair: Natalia V. Daneikina, Tomsk Polytechnic University, Russia

ID 040  Visuospatial Abilities Development of Secondary Vocational School Students  
Peter Toth, Trefort Agoston Centre for Engineering Education, Obuda University, Nepszinhaz u. 8, H-1081 Budapest, Hungary

ID 045  Mentoring Role in Engineering Students’ Soft Skills Development  
Dyah Hening, Ohio University, United States
ID 100 Operations and Supply Chain Mini Simulator Development as a Teaching Aid to Enhance Student’s Learning Experience
Jawahir Che Mustapha, Universiti Kuala Lumpur, Malaysia

Ahmed M. El-Sherbeeny, Fawaz M. Abdullah and Mohammed S. Alkahtani, Industrial Engineering Department, King Saud University, Riyadh, KSA

ID 611 Implementation of Problem-Based Learning (PBL) in Chemical Thermodynamics Course at the Yanbu Industrial College, Saudi Arabia
Ibrahim Mustafa, Department of Chemical Engineering Technology, Yanbu Industrial College, Royal Commission for Jubail and Yanbu, Saudi Arabia

ID 139 Interactive Methods of Teaching Physics on MOODLE Platform in Educational Process
Nadezhda S. Kravchenko, Elena V. Lisichko, Ekaterina I. Postnikova and Natalia V. Daneikina, Tomsk Polytechnic University, Tomsk, Russia

2:30 – 3:45, TUESDAY Healthcare Systems Room 7
Session Chair: Frank Chen, City University of Hong Kong, China

ID 020 A Conceptual Model for a Hybrid Knowledge-Based System for Quality Management at Healthcare Environment
Yousuf Nasser Al Khamisi, Medical and Healthcare Technology Department, University of Bradford, Bradford, UK
M. Khurshid Khan and Eduardo Munive Hernandez, Manufacturing Engineering Department, University of Bradford, Bradford, UK

ID 582 Performance Evaluation of a Chemotherapy Treatment unit through Simulation
Maryam Bernatchou and Adil Bellabdaoui, Information Technology and Business Management Team, National School of Computer Science and Systems Analysis, Mohammed V University, Rabat, Morocco
Fatima Ouzayd, Logistics and Operational Research Team, National School of Computer Science and Systems Analysis, Mohammed V University, Rabat, Morocco

ID 090 Using Ontology as a Decision Support System for Manage Risks in Medicines Supply Chain: Case of Public Hospitals in Morocco
Touria Benazzouz, Abdeelahed Echchtabi and Abdelkabir Charkaoui, University Hassan 1st, Laboratory of Mechanics, Industrial Management and Innovation, FST Settat, Morocco

Sanee Jabbar1 and Nissrine Souissi1, 2
1Mohammed V University in Rabat, Siweb team, EMI, Rabat, Morocco
2Computer Science Department, Mines- Rabat School, Rabat, Morocco

ID 559 Price Discrimination in a Regulated Healthcare Market: Role of Government Subsidy and Price Cap
Frank Chen1, Jianpei Wen2, Jie Song2 and Houmin Yan1
1College of Business, City University of Hong Kong, China
2College of Engineering, Peking University, China

2:30 – 3:45, TUESDAY Sustainable Manufacturing Room 8
Session Chair: Murat Kucukvar, Istanbul Sehir University, Uskudar, Istanbul, TURKEY

ID 087 An Environmental Friendly Optimizer For Landscape Design (ENVO- LAND)
Ossama Hosny, American University in Cairo (AUC), Egypt

ID 357 Utilizing AHP in Design Choices for Products Undergoing Regulatory Changes
Mohammad Saoud, Kuwait University, Kuwait

ID 414 Industry 4.0: Strategy for More Sustainable Industrial Development in SMEs
Mohammed Bakkar and Abdellah Khatary, Laboratory of Production Engineering, Energy & Sustainable Development (LPESD), Faculty of Science and Technology of Fez, BP 2427 Route d’Imouzzer 30000, Sidi Mohamed Ben Abellah University, Fez, Morocco

ID 426 Effect of Feed Rate and Depth of Cut on Cutting Forces and Surface Roughness in End Milling of Mild Steel with NOVIANO Cutting Tool
M. Rasidi Ibrahim, A. Affif Latif, E. A. Rahim and A. Zahid Amran, Precision Machining Research Centre (PREMACH), Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia
C. Prakash Edward Peter, Tool Test Centre, HFMT Industries SDN BHD, Shah Alam, Selangor Darul Ehsan, Malaysia

ID 051 Global Carbon Accounting Tool (GCAT) for Manufacturing Supply Chains: The World Model
Murat Kucukvar and Nuri Cihat Onat, Department of Industrial Engineering, Istanbul Sehir University, Uskudar, Istanbul 34662, TURKEY

3:45 – 4:00: Break
Session – Tuesday (April 11): 4:00 – 5:15 pm

4:00 – 5:15, TUESDAY  Global Engineering Education IV: PANEL SESSION  Room 1
Session Chair: Dr. Abu Masud, Wichita State University, Wichita, Kansas, USA

Panelists

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<thead>
<tr>
<th>Dr. Abu Masud, P.E.</th>
<th>Dr. Hamid Parsaei, PE</th>
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<tbody>
<tr>
<td>Boeing Global Engineering Professor</td>
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<td>Professor of Industrial and Manufacturing Engineering</td>
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<td>Wichita State University, Kansas, USA</td>
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<td>Professor, Industrial and Systems Engineering, Texas A&amp;M University (College Station)</td>
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<td>Professor of Mechanical Engineering and Director of Academic Outreach</td>
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<td>Texas A&amp;M University Qatar</td>
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<th>Dr. Othmane Bouhali</th>
<th>Khaled S. El-Kilany, Ph.D.</th>
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<tr>
<td>Research Professor and Director of Research Computing</td>
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<td>Texas A&amp;M University at Qatar</td>
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<td>Professor of Industrial Engineering</td>
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<td>Head of Department, Department of Industrial and Management Engineering</td>
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<td>College of Engineering and Technology</td>
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<td>Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt</td>
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4:00 – 5:15, TUESDAY  Industry Solutions VI  Room 2
Session Chair: Dr. Franz-Josef Kahlen, Owner and MD, Kahlen GPS, Cape Town, South Africa

4:00 – 4:25 (Tuesday)
Mr. Abdul Mannan
Adjunct Professor, Department of Computer Science and Information Technology (CSIT)
The University of the District of Columbia, Washington, DC, USA

Progress and Obstacles in Software Development Process

4:25 – 4:50 (Tuesday)
Ghizlane ELBOK
Division Head, Business Reengineering and Project Management Office (PMO), Toyota du Maroc S.A.R.L
Researcher, AMIPS Research Team, Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University, Rabat, Morocco

PMP (Project Manager Professional) and ITIL (Information Technology Infrastructure Library) Certified

4:50 – 5:15 (Tuesday)
Dr. Franz-Josef Kahlen, AFAIAA, AIAA SciTech14 GEPC Tech Chair
Owner and MD, Kahlen GPS, Cape Town, South Africa
Associate Professor, Department of Mechanical Engineering
University of Cape Town, Upper Campus, Rondebosch, South Africa

4:00 – 5:15, TUESDAY  Reliability and Maintenance  Room 3
Session Chair: BELAIDE Karima, University of A/Mira Bejaia, Algeria

ID 174  Contribution to the Performance Evaluation of Maintenance Function
Lalla Samira TOUHAMI and Daoud AIT-KADI, A. Pouliot Department of Mechanical Industrial Engineering, Laval University, Québec, Canada

ID 391  Analysis of TPM Barriers using ISM-MICMAC Approach
Anita Sharmaa, Rajesh P. Mishrab, Ayon Chakraborty2, Gajanand Gupta3
1Department of Mechanical Engineering, Manipal University Jaipur, Jaipur 303007, India
2Mechanical Engineering Department, Birla Institute of Technology and Sciences, Pilani 333031, India
3Indian Institute of Management Tiruchirappalli, NIT campus, Thuvakudi, 574421, India

ID 392  MCDM Analysis for Maintenance Strategy Selection
Gajanand Gupta, Rajesh P. Mishra and Harshal Shah, Birla Institute of Technology and Science, Pilani, Rajasthan, India

ID 418  Fault Diagnosis of Rotating Machinery Using Vibration Measurement: Application of the Wavelet Transform
Bouchra Abou El Anouar1,2, Mostafa Elamrani1, Bachir Elikhef2 and Fabienne Delaunois3
1Laboratory of Electronics and System, Faculty of Sciences University Mohammed I, Oujda, Morocco
2Laboratory of Industrial Engineering, Maintenance and Mechanical Production, ENSAO, Oujda, Morocco
3Laboratory of Metallurgy, University of Mons, Metallurgy Department, Mons, Belgium

ID 565  Mapping Associated Risks in Oil and Gas Supply Chains: Evidence from UAE
Fauzia Jabeen, Abu Dhabi University, United Arab Emirates
Mohd Nishat Faisal, Qatar University, Doha, Qatar

ID 553  Exponential Inequalities in Functional Nonparametrics Regression for Mixing Process
BELAIDE Karima, Department of Mathematic, University of A/Mira Bejaia, Algeria

4:00 – 5:15, TUESDAY  Supply Chain Management  Room 4

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Session Chair: Apichat Sopadang, Chiang Mai University, Thailand

ID 129 **Design of Seller Implant Operations in an E-commerce Marketplace**
Suryansh Shrivastava and Sarvartha Kanchan, Supply Chain Design, Flipkart India Pvt. Ltd., Bangalore, India

ID 135 **Study of Sustainability of a Paper Recycling Supply Chain Based On Profit Optimization**
Nouran Ibrahim, Amin K. El-Kharbotly and Yomna M. Sadek, Department of Design and Vocational Education, Sultan Idris Education University, Perak, Malaysia

ID 141 **Supply Chain Design for e-Commerce Marketplace Same/Next Day delivery**
Megha Bhardwaj, Assistant Manager, Flipkart India Pvt Ltd., Ashford Park View, Koramangala, Bangalore, India

ID 161 **Comparative Study of Procurement System between Industrialised Building System (IBS) and Conventional Construction in Malaysia**
Natasha Dzulkalnine and Khuan Wai Bing, Faculty of Management and Economics, Sultan Idris Education University, Perak, Malaysia

ID 199 **RFID in Ecommerce Supply Chain Management**
Nikhil Vartak and Swadesh Srivastava, Flipkart Internet Private Ltd., Bangalore, Karnataka 560034, India

ID 459 **Flight Arrival Simulation**
Ali Reza Afshari, Department of Industrial Engineering, Buein Zahra Technical University, Iran

ID 599 **NFC Aided Sortation System for E-Commerce Warehouses**
A Krishna Karthik, Ranjith J N and Siddharth Shankar Ravichandran, MotherHub Design, Flipkart Internet Pvt. Ltd., Bangalore, Karnataka, India

Session Chair: Youssef Benadada, ENSIAS, Rabat, Morocco

ID 327 **Hydride Algorithms for Assignment Problem of Reusable Containers in Closed Loop Supply Chain**
Mohammed Rida Ech-Charrat and Khalid AMECHNOUE, Lab. of Innovative Technologies, National School of Applied Sciences, Tangier, Morocco

ID 459 **New Exact Method to Solve Multi-Capacitated Location Problem Using Set Partitioning Formulation**
Mohammed EL AMRANI and Youssef BENADADA, Team ROL, Ecole Nationale Supérieure d'Informatique et d'Analyse des Systèmes - ENSIAS - Mohammed V University in Rabat, Madinat Al Ifrane, BP 713, Agdal Rabat, MOROCCO

ID 459 **Strategic Inventory Positioning for MTO Production with Stochastic Processing Times**
Suk-Chul Rim, Jing-Jing Jiang, Department of Industrial Engineering, Ajou University, Suwon 16499, South Korea

ID 310 **A Preliminary Research to Improve the Creativity of Engineering Education**
Rufaidah Y. AlMaian, Industrial and Management Systems Engineering, Kuwait University, Kuwait

ID 325 **Clarification of a Problem Abstraction Process for TRIZ Technical Contradiction Model in Preliminary Design**
Khadija Hmina, Mohammed Sallaou, Abdelaziz Arbaoui and Larbi Lasri, Department M2I, Higher National School of Arts and Crafts, University Moulay Ismail, Meknès, Morocco

ID 347 **Gamifying the Industrial Engineering Profession**
Hasan Darwish, School of Industrial Engineering, North West University, Potchefstroom, North West Province, South Africa

ID 394 **Structured Assessment of Student Outcomes “a” and “e” in Mathematics for Engineering Students**

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### April 11, 2017 (Tuesday)

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<td>Healthcare Systems</td>
<td>Room 7</td>
<td>Seifedine Kadry and Chad Zammar, American University of the Middle East, KUWAIT</td>
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<td>ID 398  What Skills and Content are Needed among Industrial Engineering Students?</td>
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<td>Akhajam Saad Eddine, Faculty of Arts and Humanities Sais, Sidi Mohamed Ben Abdellah Fes, Fes, Morocco</td>
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<td>4:00 – 5:15, TUESDAY</td>
<td>Systems Engineering</td>
<td>Room 8</td>
<td>Mohamed Tkiouat, Mohammadia School of Engineering, Mohamed V University of Rabat, Morocco</td>
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<td>ID 039  Analysis of Water Security using Causal Loop Diagram</td>
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<td>Majid Baseer, University of Technology Sydney, Australia and Sarhad University of Science and Information Technology, Peshawar KPK, Pakistan</td>
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<td>ID 305  Evaluation of PDCA Approach for the Improvement of Complex Information Systems</td>
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<td>Ikram AKKIYAT(^1) and Nissrine SOUISSI(^2)</td>
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<td>ID 403  Evolution of the Von Mises Stress of a Cracked Plate</td>
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<td>Abdelghafour Bourdim</td>
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<td>ID 557  Assessing the Performance of Lending Process in Moroccan MFIs: AHP-Fuzzy Comprehensive Evaluation Approach</td>
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<td>Lamrani Alaoui Youssef and Mohamed Tkouat, IFELAB-LERMA Laboratory, Mohammadia School of Engineering, Mohamed V Univ., Rabat, Morocco</td>
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### April 12, 2017 (Wednesday)

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<td>08:00 – 09:15, WEDNESDAY</td>
<td>Global Engineering Education V</td>
<td>Room 1</td>
<td>Dr. Antonio Henriques de Araujo Junior, State University of Rio de Janeiro, Rio de Janeiro, Brazil</td>
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<td>08:00 – 08:25 (Wednesday)</td>
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<td>Ikboljon Kasimov, MBA</td>
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<td>Inter-Institutional Cooperation to Reduce the Readiness Gap of Engineering Graduates – Case of Uzbekistan</td>
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<td>08:25 – 08:50 (Wednesday)</td>
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<td>Dr. Jinwoo Park</td>
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<td>Professor, Department of Industrial Engineering</td>
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<td>Seoul National University, South Korea</td>
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08:50 – 09:15 (Wednesday)
Dr. Antonio Henriques de Araujo Junior
Professor, Department of Production Engineering, College of Technology
State University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil

08:00 – 09:15, WEDNESDAY Industry Solutions V Room 2
Session Chair: Dr. Andrea Chiarin, University of Ferrara and Chiarini & Associates, Italy

8:00 – 8:25 (Wednesday)
Hisham A. Raheem
Head, Streaming and Transformation, Technology and Innovation Organization
TASNEE (National Industrialization Company), Al-Jubail Industrial City, Saudi Arabia

8:25 – 8:50 (Wednesday)
Mohamed Salaheldin
Quality Assurance Sector Manager
Sidpec, Alexandria, Egypt

Culture of Improvement Influences Management System Development – A Case Study about ISO 50001 implementation & ISO 9001:2015 Transition

8:50 – 9:15 (Wednesday)
Andrea Chiarini, MEng, CEng, PGDipl BA, MA, Ph.D.
Visiting Professor, University of Ferrara, Italy
Managing Director, Chiarini & Associates, Bologna, Italy

How ISO/TS 16949 certification can improve performance results through Lean Six Sigma tools and principles: A case study from Italy (ID 178)
Andrea Chiarini, University of Ferrara, Italy and Cherrafi Anass, Cadi Ayyad University, Morocco

08:00 – 09:15, WEDNESDAY Reliability and Maintenance Room 3
Session Chair: Seong-Jun Kim, Gangneung-Wonju National University, Korea

ID 429  Modeling of the Onset of Delamination and its Propagation in a Laminate Composite
Fatima Khathryri and Bachi Elkhiel, ENSAO, Laboratoire Génie Industriel, Maintenance et Production Mécanique, Oujda, Morocco
Fabienne. Delaunois, Laboratoire Métallurgie, Université de Mons, Service de Métallurgie, Mons, Belgium

ID 431  Problem of Maintenance Strategy and Production Planning for a Multiple-Product Manufacturing System
Zied Hajef and Sofiene Delliagi, Laboratory of Industrial Engineering and Mechanical Production – LGIPM, University of Lorraine, Metz, France
Ilias Majdouline, Laboratory of Innovation and applied research – LIDRA, Polytechnic School of Agadir, Agadir, Morocco

ID 483  Preventive Maintenance and Failure Analysis of Safety-Critical Assets in Railway Rolling Stock
Mamood Shafiee, Cranfield University, United Kingdom

ID 545  Using FMEA Analysis for Assessing Air Conditioners Remanufacturing Processes
Bashir Salah and Mohammed Alkahtani, Industrial Engineering Department, College of Engineering, King Saud University, KSU, P.O. Box 800, Riyadh, 11421, Kingdom of Saudi Arabia
Aiman Ziout, Department of Mechanical Engineering, College of Engineering, UAE University, Al-Ain, United Arab Emirates

ID 434  A Model-based Approach to Reliability Assessment of Corroded Pipelines
Seong-Jun Kim, Department of Industrial Engineering and Management Science, Gangneung-Wonju National University, Wonju, Korea
Byung Hak Choe, Department of Advanced Materials and Metal Engineering, Gangneung-Wonju National University, Gangneung, Korea

08:00 – 09:15, WEDNESDAY Supply Chain Management Room 4
Session Chair: Zied Hajef, LGIPM - Université de Lorraine, Metz, France

ID 355  Risk Management in Procurement of Oil Materials
Mohamed Laradi and Abdussalam Shibani, Faculty of Engineering and Computing, Priory Street Coventry CV1 5FB Coventry University (UK)
Abdessamad Douraid and Khalid El Had, Institut Supérieur d’Etudes Maritimes (ISEM), Casablanca Morocco

ID 371  Key Success Factors of Drug Supply Chain Performance
Mahdieh Sheikhti, International Marketing Dept., Faculty of Business Administration, Qeshm International Branch, Islamic Azad University, Iran
Maryam Goodarzi, Technology Management Department, Islamic Azad University, Tehran Iran
Mohammad Mehdi Shabani, CICECO-Aveiro Institute of Materials, Materials and Ceramic Engineering Dept. (DEMaC), Univ. of Aveiro, Aveiro, Portugal

ID 372  E-Kanban the New Generation of Traditional Kanban System, and the Impact of its Implementation in the Enterprise
Mariam Houli, Laila El Abbadi and Abdellah ABOUABDELLAH, Systems Engineering Laboratory, National School of Applied Sciences Kenitra Ibn Tolui University, Kenitra, Morocco

ID 455  Heuristic for the Capacitated p-Median Problem under a CVRP Approach
Santiago Omar Caballero Morales, Postgraduate Department of Logistics and Supply Chain Management, Universidad Popular Autonoma del Estado de Puebla A.C., Puebla, Mexico
08:00 – 09:15, WEDNESDAY  Operations Management  Room 5
Session Chair: Somen Dey, Indian Institute of Technology Kanpur, Kanpur, India

ID 026  Relating Strategy of the Organizations to its Pursued Manufacturing Flexibility Strategy
R. Anjaneya Sharma, School of Electrical Engineering, Vellore Institute of Technology, Vellore, India
R.R.K. Sharma, Somen Dey and Manpreet Singh, Dept. of Industrial and Management Eng., Indian Institute of Technology Kanpur, Kanpur, India
S. P. Singh, Department of Management Studies, Indian Institute of Technology Delhi, Delhi, India

ID 091  Effective Integration of Manufacturing Strategy
Adam Ali, Ivan Arokiam, Richard Anderson and Keith Popplewell, School of Mechanical, Aerospace and Automotive Engineering, Faculty of Engineering and Computing, Coventry University, UK
Jean-Marc Vasinier, Ecole d'ingénieurs El.Cesi, Boulevard de l'Université - Gavy Océanis, 44603 Saint-Nazaire, France

ID 093  Optimal Tool Allocation on Tool Magazines using a Short Indexing Algorithm - SIA
Jatuporn Jaideumrong, Department of Industrial Engineering, Rajamangala University of Technology Siva Jaya, Songkhla, THAILAND

ID 336  Preplanned Truck Optimization Using Cargowiz
Brijesh Krishna R.P. and Mridula Sahay, Amrita School of Business, Amrita Vishwa Vidyapeetham, Coimbatore, T.N. India

ID 386  The Effects of Location, Capacity, Technology and Integration on Operational Flexibility: A Service Industry Perspective
Fazli Idris, UKM-Graduate School of Business, Universiti Kebangsaan Malaysia, 43600 UKM, Selangor, Malaysia
M Suhaimi Ahmad, Faculty of Economics and Management, Universiti Kebangsaan Malaysia, 43600 UKM, Selangor, Malaysia
Jihad Muhammad, International Business School, Universiti Teknologi Malaysia

08:00 – 09:30, WEDNESDAY  Modeling and Simulation  Room 6
Session Chair: Hafida BOULOIZ, Ibn Zohr University, National School of Applied Sciences, ENSA, Agadir, Morocco

ID 033  Variance Reduction of the Mean Number of Customers in the Orbit of M/M/1 Retrial Queues Using Sampling Methods
Megdouda OURBIH, Centre Universitaire Morsli Abdellah de Tipaza, Algeria

ID 140  The Effect of Tube Replacement on the Operation of Primary Reformer in Ammonia Plant
Muhamad Fariz Failaka and Fildzah Hanifati, Department of Process and Energy Management, PT Pupuk Kalimantan Timur, Bontang, Indonesia
Ali Elkamel, Department of Chemical Engineering, University of Waterloo, Waterloo, ON N2L 3G1, Canada

ID 156  Accurate Modeling and Simulation of the Thermal Effects on the Mechanical Properties of Silicon, Germanium, and Silicon-Germanium Materials Used In Nanotransistors and Solar Cells
Abderrazaz El Boukili, School of Science and Engineering, Al Akhawayn University, Ifrane, 53000, Morocco

ID 179  Risk Assessment in LPG Loading Operations by Simulation
Maryam Gailib and Mohamed Tkouat, LERMA, Engineers' Mohammadia School, Mohammed V-Rabat University, Rabat, Morocco
Hafida Bouloiz, Industrial Engineering Department, LG2I, National School of Applied Sciences, Ibn Zohr University, Agadir, Morocco
Emmanuel Garbolino, Crisis and Risk Research Centre (CRC), Mines Paris Tech, PSL University, Sophia Antipolis, France

ID 326  Firm Performance Modeling with Resilience Approach
Hafida BOULOIZ, Industrial Engineering Department, Laboratory of Industrial and Computer Engineering (LG2I), National School of Applied Sciences ENSA, Ibn Zohr University, Agadir. Morocco

08:00 – 09:30, WEDNESDAY  Human Factors and Ergonomics  Room 7
Session Chair: Hwi Chie Ho, Bina Nusantara University, Jakarta, Indonesia

ID 038  Employee’s Clustering based on the Big Five Model in a Fitness Franchising
Anderson Bertarello Fernandes and Michel José Anzanello, Department of Production Engineering and Transportation, Federal University of Rio Grande do Sul, Porto Alegre, RS 90035-190 Brazil
Guilherme Luz Tortorella and Carlos Ernani Fries, Department of Production and Systems Engineering, Federal University of Santa Catarina, Campus Trindade, Florianópolis, SC 88040-900, Brazil

ID 097  Wudu’ (Ablution) Workstation Design Analysis for Wheelchair User in Malaysia
Siti Zawiah Md Dawal, Department of Mechanical Engineering, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia
Nurul Izzah Abd Rahman, Department of Mechanical Engineering, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia
Atikah Aman, Department of Mechanical Engineering, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia

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ID 349  Cyber Safety Awareness for First Time Wi-Fi Users in Urban Communities
Suné von Solms and Hannelie Nel, Faculty of Engineering and the Built Environment, Department of Electrical Engineering Science, University of Johannesburg, Auckland Park, South Africa

ID 117  The Impact of Norms, Traffic Regulatory Fit, Job Satisfaction, as Antecedences of Driving Behavior to Promote Motorcyclist Wellbeing in Jakarta, Indonesia
Hwi Chie Ho, Industrial Engineering Department, Bina Nusantara University, Jakarta Barat, Jakarta 11480, Indonesia

08:00 – 09:30, WEDNESDAY    Inventory Management
Room 8
Session Chair: Loubna Benabbou, Ecole Mohammadia d’Ingénieurs, Mohammed V University in Rabat, Morocco

ID 073  The Loss-averse Newsvendor Solutions via Conditional Value-at-Risk Measure
Chan, Felix T. S., Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong
Xu, Xinsheng, Department of Mathematics, Binzhou University, Binzhou, China
Wang, Xuping, Faculty of Management and Economics, Dalian University of Technology, Dalian, China
Ruan, Junhu, College of Economics and Management, Northwest A & F University, Yangling, China

ID 420  Inventory Management Optimization using Lean Six-Sigma Case of Spare Parts Moroccan Company
Zoubida Benmamoun, Hanaa Hachimi and Aouatif Amine, BOSS team, GS laboratory, ENSA, University campus PO Box 242, Kenitra 14000 Morocco

ID 437  Assortment Planning of Vertically Differentiated Products for Heterogeneous Customers
Krishanu Rakshit, Indian Institute of Management, Calcutta, India

ID 502  Proposal for a Multidimensional Approach to the Performance Measurement of the Sustainable Procurement-Supply Function (With a Case Study)
Oussama EL MARIOULI and Abdellah ABOUABDELLAH, Laboratory Systems Engineering, MOSIL, ENSA, University Ibn TOFAIL Kenitra, Morocco

ID 540  Guidelines to Choose Operational Excellence Techniques/Tools for Inventory Management: The Case of Pharmaceuticals Supply Chain
Malak Mouaky, Equipe MOAD-SCM, Ecole Mohammadia d’Ingénieurs, Mohammed V University in Rabat, Morocco
Abdelaziz Berrado, AMIPS, Ecole Mohammadia d’Ingénieurs, Mohammed V University in Rabat, Morocco
Loubna Benabbou, Equipe MOAD-SCM, Ecole Mohammadia d’Ingénieurs, Mohammed V University in Rabat, Morocco

8:00 – 9:15, WEDNESDAY    Lean Six Sigma Green Belt (LSSGB) Workshop
Room
LSSGB COACH: Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia

9:15 – 9:30: Break

9:30 – 10:15 am: Wednesday Morning Keynote I:

Mr. Bas van Dijk
Account Manager, Siemens PLM Software
Veldhoven, North Brabant Province, Netherlands

10:15 – 11:00 am: Wednesday Morning Keynote II:

Dr. Joe E. Amadi-Echendu
Professor, Engineering and Technology Management, University of Pretoria, South Africa
Director, Institute of Engineering Technology and Innovation Management, UNIPORT
Editor-in-Chief, Engineering Asset Management Review Series, Spring, UK

“Developments in Managing Engineered Assets: Before and Beyond ISO 5500x (ID 604)”

11:00 – 11:30 – Networking Break - Exhibition Hall
Session – Wednesday (April 12): 11:30 am – 12:45 pm

11:30 – 12:45, WEDNESDAY    Global Engineering Education VI
Room 1

Session Chair: Dr. Chris Backhouse, Loughborough University, Leicestershire, UK

11:30 – 11:55 (Wednesday)
Dr. Mohammad T. Khasawneh
Professor and Department Chair, Department of Systems Science & Industrial Engineering
Director, Healthcare Systems Engineering Center
Graduate Program Director, Executive Master of Science in Health Systems
Thomas J. Watson School of Engineering & Applied Science
State University of New York at Binghamton, Binghamton, New York, USA

11:55 – 12:20 (Wednesday)
Dr. Chris Backhouse
Professor of Product Innovation and Associate Dean of Teaching
School of Mechanical and Manufacturing Engineering
Loughborough University, Leicestershire, UK

12:20 – 12:45 (Wednesday)
Dr. S. C. Naik
Professor, Former Head of Chem Engg and Dean
National Institute of Technology, Rourkela, Odisha, India
Past President, The Institution of Engineers
Past Vice-President, The Federation of Engineering Institutions in South & Central Asia

“Vision 2025-Global Engineering Education”

11:30 – 12:45, WEDNESDAY    Industry Solutions VI
Room 2

Session Chair: Paul Liu, Director, Automotive Architecture, Renovo Motors, Sunnyvale, California, USA

11:30 – 11:55 (Wednesday)
Mouna Al Ibrahimi
Supply Chain, OE & Commercialization Manager, MENA
The Coca-Cola Company, Morocco

The Operational Excellence Model in the Coca-Cola System

11:55 – 12:20 (Wednesday)
Mr. Arnold Jang
Vice President, Inventec Ventures
Inventec Corporation, Santa Clara, CA, USA

Human Computer Interactions (HCI)

12:20 – 12:45 (Wednesday)
Paul Liu
Director, Automotive Architecture
Renovo Motors, Sunnyvale, CA, USA

Safety and Reliability of Autonomous Driving Products
11:30 – 12:45, WEDNESDAY  Lean and Six Sigma  Room 3

Session Chair: Elfezazi Said, Cadi Ayyad University, Marrakech, Morocco

ID 021  Waste Reduction in a Toast Production Line Using Six Sigma Methodology
Estefani Acosta Álvarez, José Peña Lozano and Ernesto Sampayo Oliveros, Industrial Engineering Dept., Univ. de Los Andes, Bogotá, Colombia

ID 574  Application of a Neural Network to Classify the Out-Of-Control Signal That Gives the T2 Multivariate Graph of Hotelling Using Data Obtained in the Industry
Gerardo Avendano, Faculty of Business Administration, EAN University, Bogota, Colombia
Gustavo Andrés Campos-Avendano, Faculty of Mathematics and Engineering, Fundación Universitaria Konrad Lorenz, Bogotá, Colombia

ID 022  Stabilization of the Plan Percent Complete Indicator in Masonry by the Application of Lean Construction - Six Sigma Techniques
Ernesto Fabian Sampayo Oliveros, Department of Industrial Engineering, Institución Universitaria Politécnico Grancolombiano, Bogota, Colombia
Juan Sebastian Cuervo Sanchez, Department of Industrial Engineering, Institución Universitaria Politécnico Grancolombiano, Bogota, Colombia

ID 564  Lean and Green: Recycling Materials for a More Sustainable Environment
Ashraf Mohamed Fathi and Ahmed Fouad El-Tohamy, Arab Academy for Science & Technology & Maritime Transport, College of International Transport & Logistics (Cairo), Egypt

ID 027  Development of a Methodology to Assist Manufacturing SMEs in the Selection of Appropriate Green Lean Six Sigma Tools
Cherrafi Anass¹, Elfezazi Said², Andrea Chiarinib, Benhida Khalida³ and Mokhlis Ahmeda
¹Cadi Ayyad University, Marrakech, Morocco
²University of Ferrara, Ferrara, Italy

11:30 – 12:45, WEDNESDAY  Supply Chain Management  Room 4

Session Chair: Noha Mostafaf, Egypt-Japan University of Science and Technology, New Borg El Arab, Alexandria, Egypt

ID 488  A Hybrid Approach for a Strategic Planning Problem Represented by a Three-Echelon Logistics Network
Yahya HAMADA, PhD Student at ENSIAS, Cedoc ST2I – Operational Research and Logistics (ROL), Mohammed V University in Rabat, Morocco
Youssef BENADADA, Operational Research and Logistics (ROL), Department of Informatics and Decision Support (IAD), Ecole Nationale Supérieure d’Informatique et d’Analyse des Systèmes (ENSIAS), Mohammed V University in Rabat, Morocco
Bernard GENDRON, CIRRELT, University of Montréal, C.P. 6128, Succursale Centre-Ville, Montréal, Québec, Canada

ID 507  Proposed Performance Evaluation Framework for Assessing and providing Approximate Dimensioning of Supply Chains: Case Study of Public Pharmaceutical Products Supply Chain
Zoubida Chorfi1, Loubna Benabbou2, Abdelaziz Berrado1
1Equipe AMIPS
2Equipe MOAD-SCM, Ecole Mohammadia d’Ingénieurs, Mohammed V University of Rabat, Morocco

ID 532  Managing Product Life Cycle for Effective Supply Chain Strategies - Case of Pharmaceutical Industry in Morocco
Sophia Youssar and Abdelaziz Berrado, AMIPS Research Team, Ecole Mohammadia d’Ingénieurs, Mohammed V University, Rabat, Morocco

ID 543  Multi-Period Supply Chain Design under Uncertainty
Amir Azaron, Department of Industrial Engineering, Istanbul Sehir University, Istanbul, Turkey

ID 519  Solving the Heterogeneous Capacitated Vehicle Routing Problem using K-Means Clustering and Valid Inequalities
Noha Mostafa and Amr Eltawil, Department of Industrial Engineering and Systems Management, Egypt-Japan University of Science and Technology, New Borg El Arab, Alexandria 21934, Egypt

11:30 – 12:45, WEDNESDAY  Operations Management  Room 5

Session Chair: Khaled S. El-Kilany, Arab Academy for Science, Technology, and Maritime Transport, Alexandria, Egypt

ID 401  New Product Development Strategy of Stem Cell-related Products in Indonesia Biopharmaceutical Industry
Evo Sampetua Hariandja, Business School Universitas Pelita Harapan, Jl.MH Thamrin Boulevard, Lippo Karawaci, Tangerang 15811, Indonesia
Luna Chirindry Pratomob, Research Assistant MBA Program, School of Business and Management ITB, Jl. Ganesha 10, Bandung 40132, Indonesia

ID 419  Short Term Insurance Company’s Perspective of Information Management and Its Influence on Continuous Improvement (CI) To Improve Customer Satisfaction
Sambil Charles Mukwakungu, Department of Quality and Operations Management, University of Johannesburg, South Africa
Charles Mbohwa, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 446  Human Resources (HR) Utilization at a Short-Term Insurance Organisation in a Continuous Improvement (CI) Effort to Increase Customer Satisfaction
Sambil Charles Mukwakungu and Charles Mbohwa, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 494  Determination of Optimal Smoothing Constants for Exponential Smoothing Method & Holt’s Method
M. Babul Hasan and Md. Nayan Dhali, Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh

ID 535  Energy-Based Aggregate Production Planning For Porcelain Tableware Manufacturer in Egypt
**IEOM Rabat Conference**

**TECHNICAL PROGRAM**

**April 11 - 13, 2017**

**11:30 – 12:45, WEDNESDAY**

**Modeling and Simulation**

**Room 6**

Session Chair: Sara Abed, University of Gabes, Tunisia

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<td>Muzaffer Balaban, Turkish Statistical Institute &amp; Department of Industrial Engineering, Başkent University, Ankara, Turkey Berna Dengiz, Department of Industrial Engineering, Başkent University, Ankara, Turkey</td>
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<td>Saria Abed and Tahar Khir, Applied Thermodynamic Research Unit (99/UR/11-21), National School of Engineers of Gabes (ENIG), University of Gabes, Gabes, Tunisia</td>
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<td>C. Taghzaoui, A. Abouloifa, A. Hamdoun, A. Elallali, and Y. Michaour, LTI Lab, Faculté des Sciences Ben Msik, Hassan II Univ. of Casablanca, Morocco I. Lachkar, LISER Lab, ENSEM Casablanca, HASSAN II University of Casablanca, Casablanca, Morocco</td>
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**11:30 – 12:45, WEDNESDAY**

**Human Factors and Ergonomics**

**Room 7**

Session Chair: Allouch Mohamed, Faculty of Science and Techniques of Tangier, University ABDELMALEK ESSAADI, Morocco

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<td>Guilherme L. Tortorella, Diego C. Fettermann, Lizandra G. L. Vergara and Carlos Emanni Fries Department of Production and Systems Engineering, Federal University of Santa Catarina, Campus Trindade, Florianópolis, SC, Brazil</td>
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<td>El Bouti Mohamed Younes and Allouch Mohamed, Department of Chemical Engineering, Faculty of Science and Techniques of Tangier, University ABDELMALEK ESSAADI, Morocco</td>
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<td>Lawrence Al-Fandi, Ahmad Yassim, Mazen Abdulaziz, Department of Industrial Engineering, American University of the Middle East, Eqaila, Kuwait</td>
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| 566 | Anthropometric Analysis for Ergonomic Design: Empirical Studies in Namibia | N. M. Namate\(^1\), M. Mutungi\(^1\), L. Aku–Akai\(^2\), C. Mbohwa\(^2\)  
\(^1\)Faculty of Engineering, Namibia University of Science & Technology, Windhoek, Namibia  
\(^2\)Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa |

**11:30 – 12:45, WEDNESDAY**

**Information Technology**

**Room 8**

Session Chair: Mahmood Al Kindi, Sultan Qaboos University, Oman

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<td>Using Combination of MAPE-K and DSPL to Secure Smart Camera Networks</td>
<td>Mohamed AMOUD, Ounsa ROUDIES, SWiWeb Team - Ecole Mohammadia d’Ingenieurs (EMI), Mohammed V University in Rabat, Morocco</td>
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<td>592</td>
<td>Mobility Technologies for Activity Assistance in E-commerce Supply Chain</td>
<td>Deepak Pawan, Paras Arora and Swadesh Srivastava, Flipkart Internet Private Ltd., Bangalore, Karnataka 560034, India</td>
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| 538 | Towards an Information Technology Governance Framework Selection: Criteria Determination | Hakim Bouayad\(^1\), Loubna Benabbou\(^2\) and Abdelaziz Berrado\(^1\)  
\(^1\)AMIPS Team (System and Process Analysis, Modeling and Integration)  
\(^2\)MOAD-SCM Team (Modeling and Decision Aid - Supply Chain Management) Ecole Mohammadia d’Ingenieurs (EMI), Mohammed V University, Agdal, Rabat, Morocco |
| 366 | Getting Model of MVVM Pattern from UML Models                       | Mouad El Omari and Mohammed Erramadani, MATSI Laboratory, Department of Computer Science, Mohammed First University, Oujda, Morocco  
Saïda Filali, MATSI Laboratory, Department of Management, Mohammed First University, Oujda, 60000, Morocco |
| 593 | Evolution of Unitization in E-commerce Supply Chain                  | Paras Arora, Charumanti Singh, Panikhuri, Darpan Malkan and Rohit Sanjay Pitale, Flipkart Internet Pvt. Limited, Bangalore, India |

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### IEOM Rabat Conference  
**TECHNICAL PROGRAM**  
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<td>Lean Six Sigma Green Belt (LSSGB) Workshop</td>
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<td>LSSGB COACH: Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia</td>
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<td>12:45 – 1:00 pm</td>
<td>Networking Break at Exhibition Hall</td>
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| 1:00 pm | **WEDNESDAY LUNCH KEYNOTE:**  
**Dr. Suk-Hwan Suh**  
Professor and Director of Center for Ubiquitous Manufacturing  
Founding Dean of Graduate School of Engineering Mastership  
POSTECH: Pohang University of Science and Technology, Pohang, South Korea  
Ballroom (Lunch Buffet Provided) | |
| 2:00 – 2:30 pm | Networking Break at Exhibition Hall | |
| **Session – Wednesday (April 12): 2:30 – 3:45 pm** | | |
| 2:30 – 3:45, WEDNESDAY | Global Engineering Education VII | Room 1 |
| Session Chair: Dr. Rezg Nidhal, University of Lorraine, Metz, France | | |
| 2:30 – 2:55 (Wednesday) | Dr. N. Vinod Chowdhary  
Professor and Head, Department of Mechanical Engineering  
SRK Institute of Technology, Vijayawada, Andhra Pradesh, India | |
| 2:55 – 3:20 (Wednesday) | Dr. Rezg Nidhal  
Professor of University  
Director of LGIPM Laboratory (Laboratoire de Génie Industriel, de Production et de Maintenance)  
Director of Training and Research Unit (MIM)  
University of Lorraine, Metz, France | |
| 3:20 – 3:45 (Wednesday) | Allen G. Greenwood, Ph.D., P.E.  
Professor, Faculty of Engineering Management  
Poznan University of Technology (PUT), Pozhan, Poland  
Professor Emeritus of Industrial & Systems Engineering, Mississippi State University, USA | |
| Session Chair: Ms. Resh Plaha, Crystal Quality UK Ltd | | |
| Panel Speakers | | |
| Dr. Tagwa Ahmed Musa  
Associate Professor  
Dean – College of Petroleum Engineering and Technology  
Sudan University of Science and Technology, Khartoum, Sudan | Dr. Ilham Kissani  
Assistant Professor of Engineering & Management Science  
School of Science & Engineering  
Al Akhawayn University  
Ifrane, Morocco |
| Dr. Noha Mostafa  
Assistant Professor  
Department of Industrial Engineering  
Zagazig University, Egypt | | |
| 2:30 – 3:45, WEDNESDAY | Lean and Six Sigma | Room 3 |
| Session Chair: Ernesto Fabian Sampayo Oliveros, Institución Universitaria Politécnico Grancolombiano, Bogota, Colombia | | |
| ID 095 | Extended Classification of Waste in the Hospital System | |
| Younes Tiamaz\(^1\) and Nissrine Souissi\(^2\)  
\(^1\) Mohammed V University in Rabat, EMI – SIWEB Team, Rabat, Morocco  
\(^2\) Computer Science Department, Ecole Nationale Supérieure des Mines de Rabat, Rabat, Morocco | |
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ID 133  Optimize Lean Supply Chain Design under Uncertainties by Hybrid Meta-Heuristics
Thi Hong Dang Nguyen and Thierny My Dao, Mechanical/Manufacturing Engineering Department, École de technologie supérieure (ÉTS), Université de Québec, Montréal, Canada

ID 167  LEAN Six Sigma Application in Sugar Industry
Babar Bilal, Bilal Consultancy Private Limited, Multan, Pakistan

ID 610  Performance Evaluation and Comparing of Big Data Platforms on Implementing K-Nearest Neighbors (K-NN) Algorithm
Mohammad Ahmadi and Amir Jahangard Rafsanjani, Computer Engineering Department, Faculty of Engineering, Yazd University, Yazd, Iran
Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran

ID 044  Decrease of the Rates of Rupture, in a Brick Company, during the Transport of the Product to the Client, by using Lean Six Sigma Methodologies
Camilo José Otoya Cabrera, Department of Industrial Engineering, Universidad de los Andes, Bogotá, Colombia
Ernesto Fabian Sampayo Oliveros, Department of Industrial Engineering, Institución Universitaria Politécnico Grancolombiano, Bogota, Colombia

2:30 – 3:45, WEDNESDAY  Logistics Management  Room 4
Session Chair: Naoufal SEFIANI, Faculty of Sciences and Technologies of Tangier, Morocco

ID 119  An optimal Integrated Maintenance for Laundry Facility in Hospital Supply Chain
Dounnaar Fadila, Hajej Zied and Rezg Nidhal, LGIPM UFR-MIM, Metz, France

ID 155  Location Routing Problem with Transportation Mode Options
Junko Hosoda and Miho Kobayashi, Research & Development Group, Hitachi Ltd., Kanagawa, Japan
Takahiro Nishikawa and Takaharu Sakurada, Logistics Solution Business Development Headquarters, Hitachi Transport System Ltd., Tokyo, Japan

ID 162  Simulation Analyzes Material Handling Requirements for a Major Automotive Supplier
Gabriel Carreño, Dinesh Patlolla, and Edward J. Williams, Department of Simulation Analysis, PMC, Dearborn, MI 48126, USA

ID 307  Redesigning the hospital supply chain for enhanced performance using a Lean methodology
KHLIE Khoulia and ABOUABDELLAH Abdellah, Industrial engineering Laboratory, MOSIL, ENSA, Ibn Tofail University, Kenitra, Morocco

ID 589  Using Automation Technology and IOT Based Data Capturing to Ensure High Quality Last Mile Logistics
Paras Arora, Swadesh Srivastava and Snigdha Majumder, Flipkart Internet Private Ltd., Bangalore, Karnataka 560034, India

ID 348  An Overview on Various Criteria Used to Select an Optimal Location of a Logistic Hub
Fatima Zahraa GRINE and Oulaid KAMACH, Laboratory of Innovative Technologies, National School of Applied Sciences of Tangier, Morocco
Naoufal SEFIANI, Research Team on Engineering, Innovation and Industrial Systems Management, Faculty of Sci. and Tech. of Tangier, Morocco

2:30 – 3:45, WEDNESDAY  Production Planning and Management  Room 5
Session Chair: Yahaya Yusuf, Lancashire Business School, University of Central Lancashire, Preston, United Kingdom

ID 120  Manufacturing/Remanufacturing Optimization Problem under Carbon Tax
Bousilkhane Salim, Hajjied Zied and Rezg Nidhal, LGIPM UFR-MIM, Metz, France

ID 137  Optimization of Energy Production
I. El Kafazi, R. Bannari, A. Abouabdellah, Systems Engineering Laboratory, Research team 'Modelling and Optimization of Industrial Systems and Logistics', National School of Applied Sciences Ibn Tofail University-Kenitra-Morocco

ID 172  Multi-manned Assembly Line Balancing Problem: Resource Constrained Case
Hamid Yilmaz, Department of Industrial Engineering, Bayburt University, Bayburt, TURKEY
Mustafa Yilmaz, Industrial Engineering Department, Ataturk University, Erzurum, TURKEY

ID 605  Study of Responsible Purchasing Practice Awareness in Manufacturing Companies in the City of Johannesburg, South Africa
T Chingono and C Mbohwa, FEBE, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 548  The Role of Technology in Outsourcing practices in Nigerian Oil and Gas Industry
Ogbuke Nnamdi Johnson and Yahaya Yusuf, Lancashire Business School, University of Central Lancashire, Preston, United Kingdom

2:30 – 3:45, WEDNESDAY  Automation and Control  Room 6
Session Chair: Bachir Elkihel, École Nationale des Sciences Appliquées, UMP, Oujda, MOROCCO

ID 094  Design Concept of Day Minus 1 Production Model Using Systems Modeling Language: a Case Study of Hospital Beds Production
Susanto Sudiro, Magister Teknik Mesin, Universitas Pancasila Jakarta, JI Borobudur No 07 Menteng, Jakarta Pusat 10320, Indonesia

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ID 159  PLC Based Fly Ash Evacuation System in Thermal power Plant
Umesh S. Deo, BTPS, MSPGCL, India

ID 603  An Overview of Electron Beam Melting research with Bibliometric Indicators
Saqib Anwar, Fawaz M. Abdullah, Bashir Salah, Shafig Ahmad and Abdulrahman M. Al-Ahmari, Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, KSA

ID 315  Nonlinear Control Based on a Combination between Sliding Mode and Backstepping of Grid Connected Photovoltaic System
Dammah Hajar and Lachkar Ittisam and Lissane Elhaq Saad
Engineering Research Laboratory (LRI), Optimization of Production System & Energy Team, University Hassan II, Superior National School of Electricity and Mechanics ENSEM, Casablanca, Morocco

ID 607  Online Energy information System: a survey of Web-based resources.
T Chingono and C Mbohwa, FEBE, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 333  Non-destructive Testing of Adhesion Defects in Ni-WC Coating by Focused Ultrasound using Phased-Array Probe and Active Infrared Thermography Methods
Rachida Rachidi and Bachir Elkihel, Equipe de Génie Industriel, Maintenance et Production Mécanique, Ecole Nationale des Sciences Appliquées, UMP, Oujda, MOROCCO
Fabienne DELAUNOIS and Veronique VITRY, Service de Métallurgie, Faculté Polytechnique, UMONS, Mons, Belgique

2:30 – 3:45, WEDNESDAY  Human Factors and Ergonomics  Room 7
Session Chair: Eui H. Park, North Carolina A&T State University, Greensboro, NC, USA

ID 382  The Partial Cartoon Central Vision Compensation Technique: Subjective Evaluation
Ahmed M. El-Sherbeeny and Mohammed Alkahtani, Industrial Engineering Department, King Saud University, Riyadh, Kingdom of Saudi Arabia
James V. Odom, Dept. of Ophthalmology and of Physiology and Pharmacology, West Virginia Univ. Eye Institute, Morgantown, West Virginia, USA
James E. Smith, Mechanical and Aerospace Engineering Department, West Virginia University, Morgantown, West Virginia, United States of America

ID 399  Accidental Poisoning Prevention: An Anthropometric Study for Saudi Arabian Children
Abdalla Alrashan, Alfaisal University, Saudi Arabia

ID 400  Anthropometric Measurement of Saudi Arabia Male Workers
Abdalla Alrashan, Alfaisal University, Saudi Arabia

ID 408  Multi-objective Annualized Hours Manpower Planning Models Incorporating Human Factors
Gulzar Hasan, Department of Statistics and Operations Research AMU, Aligarh, India

ID 440  Cultural Differences in Risk Perception of Trust and Bias in Cyberspace
Khaled Alyami, Eui H. Park, and Emeka Idoye, Dept. of Industrial and System Engineering, North Carolina A&T State Univ., Greensboro, NC, USA

2:30 – 3:45, WEDNESDAY  Entrepreneurship and Innovation  Room 8
Session Chair: Abdelaziz BERRADO, Ecole Mohammadia d’Ingénieurs, Mohamed V University, Rabat, Morocco

ID 521  An Economical Approach for Using Solar Water Heaters in Mashhad, Iran
Seyed-Ali Hoseini and Ali Mostafaepour, Industrial Engineering Department, Yazd University, Yazd, Iran
Hamid Reza Arabnia, Computer Science Department, University of Georgia, Athens, Georgia, USA
Omid Alavi, Department of Electrical Engineering, K.N. Toosi University of Technology, Tehran, Iran
Saeed Shahmir, Industrial Engineering Department, Iran University of Science and Technology, Tehran, Iran

ID 132  Accelerators Envision the Future
Ana Clara Carvalho, Departamento de Engenharia Mecânica e Industrial, Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa, Caparica, Portugal
António Grilo, Departamento de Engenharia Mecânica e Industrial and UNIDEMI, Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa, Caparica, Portugal
Joaquim P. Pina, Departamento de Ciências Sociais Aplicadas and CEFAGE-FCT/UNL, Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa, Caparica, Portugal
Aneesh Zutshi, Departamento de Engenharia Mecânica e Industrial and UNIDEMI, Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa, Caparica, Portugal

ID 606  Enterprise development in the waste management sector: a review
SC Thaba, T Chingono and C Mbohwa, FEBE, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 618  Impact of Entrepreneurial Education and Training Programs on the Success of Small Business Entrepreneurs

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Session – Wednesday (April 12): 4:00 – 5:15 pm

4:00 – 5:15, WEDNESDAY     Global Engineering Education VIII     Room 1
Session Chair: Dr. Adedeji B. Badiru, Air Force Institute of Technology, Wright-Patterson Air Force Base, Dayton, Ohio, USA

4:00 – 4:25 (Wednesday)
Dr. Loubna BENABBOU
Associate Professor of Industrial Engineering
Ecole Mohammadia d’Ingénieurs (EMI), Mohamed V University, Rabat, Morocco

4:25 – 4:50 (Wednesday)
Adedeji B. Badiru, Ph.D., PE, PMP, FIIE
Dean, Graduate School of Engineering and Management
Professor of Systems Engineering
AFIT/EN, Air Force Institute of Technology, Wright-Patterson Air Force Base, Dayton, Ohio, USA

“Contributory Impact of Advanced Military Education to the Advancement of General Global Engineering Education: A World Systems Perspective”

4:50 – 5:15 (Wednesday)
Professor Christian Amaechi Bolu, FNSE, FAEng
Dean, College of Engineering
Covenant University, Ota, Nigeria

4:00 – 5:15, WEDNESDAY     Industry Solutions VIII     Room 2
Session Chair: Dr. Norzima Zulkifli, Universiti Putra Malaysia (UPM), Malaysia

4:00 – 4:25 (Wednesday)
Dr. Trinath Sahoo
Deputy General Manager, Indian Oil Corporation Ltd, India

4:25 – 4:50 (Wednesday)
Professor Donald M. Reimer
Adjunct faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA

4:50 – 5:15 (Wednesday)
Dr. Daw Alwerfalli and Ahmed Al Jabr
Professor and Director - Master of Engineering Management, A. Leon Linton Department of Mechanical Engineering Department
Lawrence Technological University, Southfield, Michigan, USA

Total Productive Maintenance (TPM) as a Lean Quality Tool for Enhancing the Overall Equipment Effectiveness [ID 617]

4:00 – 5:15, WEDNESDAY     Lean and Six Sigma     Room 3
Session Chair: ABOUABDELLAH Abdellah, ENSA, Ibn Tofail University, Kenitra, Morocco

ID 308    Lean Deployment in SMEs, Performance Improvement and Success Factors: A Case Study
Amine Belhadi, Fatima Ezzahr Touriki and Said El Iezazi, Industrial Engineering Research Team, Higher School of Technology, Safi, Cadi Ayyad University, Marrakech, Morocco

ID 317    What Drives a Successful Kaizen Implementation - An Insight from Malaysian Automotive Manufacturers
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<td>406</td>
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<td>Hewan Taye Beyene, School of Mechanical and Industrial Engineering, Ethiopian Institute of Technology-Mekelle, Mekelle University, Ethiopia</td>
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<td>Sk.Riad Bin Ashraf, Zlikad Hossain, and Dr. A.R.M. Harunur Rashid, Department of Mechanical and Chemical Engineering, Islamic University of Technology (IUT), Board Bazar, Gazipur 1704, Dhaka, Bangladesh.</td>
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<td>Examining the Impact of Lean Manufacturing on Soft TQM Practices and Sustainable Performance: Evidence from Malaysian Industries</td>
<td>Amjad Khalili, Md Yusof Ismail, A.N.M. Karim, and Mohd Radzi Che Daud, Department of Manufacturing and Material Engineering, International Islamic University Malaysia (IIUM), Gombak, Kuala Lumpur 53100, Malaysia</td>
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**4:00 – 5:15, WEDNESDAY**

**Logistics Management**

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<th>Session Chair: Mohamed REGHIOUI, ENSATE, University of Abdelmalek Essaadi, Tetouan, Morocco</th>
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<tr>
<td>ID 350 Formulations for the Multiple Traveling Repairmen Problem: Computational Analysis and Some Extensions</td>
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<td>ID 353 Resolution of the vehicle routing problem with cross docking</td>
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<td>ID 446 Leverage the Relationships between Materials Management and Operational Excellence (TQM); To Unlock the Inspired Potential</td>
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<td>ID 490 Optimization of Vehicle Routing Problem in the Context of Reverse Logistics of Handling Containers in Closed Loop</td>
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**4:00 – 5:30, WEDNESDAY**

**Financial Engineering**

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<td>ID 384 Stock Prediction and Prediction Accuracy Improvement using Sentiment Analysis and Machine Learning based on Online News</td>
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<td>ID 385 Analysis of the Correlation between the Stock Prices Trend and the Financial Distress Risk Assessment</td>
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<td>ID 388 Huristically Long-Term Money Exchange Rates Forecasting for Low Technological in Progress Developing Countries</td>
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<td>ID 541 Assessment of Investment Project Profitability in Uncertain Environment: A Real Options Approach</td>
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<td>ID 547 Developing a Probabilistic Economic Model for Cost-Benefit Analysis on Installation Rural Advertising Signs (Case Study: Yazd-Mehriz Road, Yazd, Iran)</td>
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<td>ID 182 A Unified Approach to Pricing Equity and Credit Derivatives within a General Framework</td>
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<td><strong>4:00 – 5:15, WEDNESDAY</strong></td>
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</table>
|     | **ID 306** Study the Factors That Influence Employees Performance in SS Factory, Saudi Arabia | Hassan Hijry a, Asif Haleem b  
  a Mechanical and Industrial Engineering Department, Lawrence Technological University, Southfield, USA  
  b Mechanical and Industrial Engineering Department, Jazan University, Jazan, KSA |
|     | **ID 563** The Nurse Rerostering Problem: An Explorative Study                         | M. Mutingi1,2, C. Mbohwa  
  1Faculty of Engineering, Namibia University of Science & Technology, Windhoek, Namibia  
  2Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa |
| **4:00 – 5:15, WEDNESDAY** | Transportation and Traffic                                                           | Room 8                                                                                             |
|     | **ID 302** Improving Distribution Efficiency to Increase Agility: An Application to a Mexican Company | Jawab Fouad, Sidi Mohamed Ben Abdellah University, Fez, Morocco                                      |
|     | **ID 438** Usage of Non-Linear Regression for Modeling the Behavior of Motor Vehicle Crash Fatality (MVF) Rate | Galal M. Abdella and Wael Alhajyaseen, Qatar Transportation and Traffic Safety Center (QTTSC), Qatar University, Doha – Qatar  
  Khalifa N. Al-Khalifa and Abdel Magid Hamouda, Qatar Transportation and Traffic Safety Center (QTTSC), Qatar University, Doha – Qatar |
|     | **ID 463** The Impact of Horizontal Collaboration in Road Transportation on Greenhouse Gas Emissions | Hanan Ouhader and Malika El Kyal, Laboratory of Industrial and Computing Engineering, National School of Applied Sciences, Ibn Zohr University Agadir, MOROCCO |
|     | **ID 471** Management Mode and Urban Transit Performance: A Literature Review          | Zehmed Karim, EST-Fès, Research Laboratory in International Management, Decision Making and Logistics (IMDLOG), Fès, Morocco  
  Fouad Jawab, EST-Fès, MIDLOG Laboratory, Mohamed Ben Abdellah University- High school of Technology at Fez, Morocco |
| **4:00 – 5:15, WEDNESDAY** | Lean Six Sigma Green Belt (LSSGB) Workshop                                            | Room                                                                                               |
|     | **LSSGB COACH:** Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia |                                                                                                     |

7:00 – 10:00 pm (Wednesday)  
CONFERENCE AWARD DINNER
Ballroom

Awards and Recognition Opening Speaker

Dr. Pr. Saaid Amzazi
President, Mohamed V University
Rabat, Morocco

Award Keynote:

Hulas King
Director, Diversity, Professional Affiliations & Global Community Relations
SIEMENS PLM Software, St. Louis, Missouri, USA

April 13, 2017 (Thursday)

Session: 8:00 – 9:15 pm

08:00 – 09:15, THURSDAY   Global Engineering Education IX
Room 1
Session Chair: Dr. Leslie Monplaisir, Wayne State University, Detroit, Michigan, USA

08:00 – 08:25 (Thursday)
Dr. Leslie Monplaisir
Department Chair, Industrial and Systems Engineering
Wayne State University, Detroit, Michigan, USA

08:25 – 08:50 (Thursday)
Dr. Hesham K. Alfares
Chairman and Professor, Systems Engineering (SE) Department
College of Computer Sciences & Engineering (CCSE)
King Fahd University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia

08:00 – 09:15, THURSDAY   Lean Six Sigma Green Belt (LSSGB) Workshop
Room 2
LSSGB COACH: Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia

08:00 – 09:15, THURSDAY   Manufacturing and Design
Room 3
Session Chair: Md. Atikul Islam, Walton Micro-Tech Corporation, Chandra, Kaliakoir, Gazipur, Bangladesh

ID 186 Designing Product-Service Systems: A Review towards a Unified Approach
Nicolas Haber and Mario Fargnoli, Department of Mechanical and Aerospace Engineering, Sapienza University of Rome, Rome, Italy

ID 190 A Morphological Approach for Designing Product-Service Systems Concepts
Nicolas Haber, Department of Civil and Industrial Engineering, Università degli studi di Roma, La Sapienza, Via Eudossiana, Rome, Italy

ID 365 Aluminum Metal Casting with High Speed Die Casting Machine and its Powder Coating Process: A Case Study
Jiku Das Gupta, Md. Atikul Islam and Md. Sunny Ul Islam, Deputy Director, Walton Micro-Tech Corp., Chandra, Kaliakoir, Gazipur, Bangladesh

ID 423 Design of an Electrically Powered Bending Machine: Case of Zimbabwe
Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, Johannesburg, South Africa
Definite Shumba, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

ID 424 Design of a Rice Transplanter for Zimbabwean Farmers
Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, Johannesburg, South Africa
Brighton Gutsa, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

08:00 – 09:15, THURSDAY   Decision Sciences
Room 4
Session Chair: Abdellah Abouabdellah, National School of Applied Sciences Kenitra, Ibn Tofail University, Kenitra, Morocco

ID 056 Promethee Use in Personnel Selection

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<td>Developing Seller Experience at Online Marketplaces through Structured Data Driven Feedback Management Systems</td>
<td>Sudipto Dasgupta and Sarvartha Kanchan, Supply Chain Design, Flipkart Internet Pvt. Ltd., Bangalore, India</td>
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<td>171</td>
<td>Priority Determination for Reintegration of Disaster Victims into Society after Disaster using Fuzzy AHP and Stochastic MOORA Approaches</td>
<td>Sinan ÖZTAŞ and Gökay AKKAYA, Industrial Engineering Department, Engineering Faculty, Atatürk University, Turkey</td>
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<td>184</td>
<td>Technology Value Creation in Higher Education Examination</td>
<td>Nouha Taifi, Industrial Engineering Department, Ecole Mohammadia d’Ingénieurs, Université Mohammed V, Rabat, Morocco</td>
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<td>In the Framework of The Corporate Social Responsibility: Proposal of a Methodology of Selection of Performance Indicators</td>
<td>Samah Elrhanimi, Laila El abbadi and Abdellah Abouabdellah, Systems Engineering Laboratory, National School of Applied Sciences Kenitra, Ibn Tofail University, Kenitra, Morocco</td>
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<td>Normalized Goal Program to determine a Hemo-Dialysis patients’ nutrition</td>
<td>Jridi Ichraf and Hichem Kamoun, Faculty of Economics and Management of Sfax, The University of Sfax, Tunisia</td>
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**08:00 – 09:15, THURSDAY**  
**Facilities Planning and Management**  
**Room 5**  
**Session Chair:** Ali Mostafaeipour, Yazd University, Yazd, Iran

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<td>The Flexibility of Manufacturing Systems versus Optimality</td>
<td>Adnan M. Mukattash, Department of Industrial Management, Emirates College of Technology, Abu Dhabi, UAE</td>
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<td>Systematic Planning Layout and Line Balancing for Improvement in an Armoured Vehicle Manufacturing Plant</td>
<td>Norzima Zukifil, Ahmad Shah Hizam bin Md Yasir, Faieza Abd. Aziz, Department of Mechanical &amp; Manufacturing Engineering, Faculty of Engineering, University Putra Malaysia, Serdang, Malaysia</td>
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<td>Heuristic Algorithms Development for Layout Planning of Unequal-Sized Facilities with Input/Output Points</td>
<td>Hyungjune Park and Yoonho Seo, Department of Industrial Management Engineering, Korea University, Seoul, South Korea</td>
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<td>Bill of Material Optimization: Case of a Packaging Company</td>
<td>Anupam Tripathi, Flipkart Internet Pvt. Ltd., Indian Institute of Technology, Bombay, India, A. Subash Babu, Mechanical Engineering Department, Indian Institute of Technology, Bombay, India</td>
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<td>511</td>
<td>Location Planning of Bioethanol Plants from Agricultural Crop Residues for Fuel Cells using DEA</td>
<td>Ali Mostafaeipour, Saeede Sarikhani, Industrial Engineering Department, Yazd University, Yazd, Iran, Ahmad Sedaghat, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan 84156-83111, Iran, Hamid Reza Arbania, Computer Science Department, University of Georgia, Athens, Georgia, USA</td>
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**08:00 – 09:15, THURSDAY**  
**Energy**  
**Room 6**  
**Session Chair:** Mellak Abderrahmane, University of Boumerdes – Algeria

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<td>Design And Performance of the Water-Based Drilling Mud in the Second Phase, the Oil Fields of Hassi Messaoud.</td>
<td>MELLAK Abderrahmane and Khaled Benyounes, Hydrocarbons and Chemicals Faculty - LGHP – University of Boumerdes – Algeria</td>
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<td>397</td>
<td>Towards Spatially Uniform Radiation Distribution of a Halogen Light Solar Simulator by Optimizing Lamps Arrangement and Spacing</td>
<td>Hazim Moria, Department of Mechanical Engineering Technology, Yanbu Industrial College, Yanbu Al-Sinaiyah 41912, Saudi Arabia</td>
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<td>409</td>
<td>Parallel Active Filter for Harmonics Reduction in a Solar Conversion Chain Connected to the Electrical Network with Nonlinear Loads</td>
<td>CHTOUKI Ihssane and ZAZI Malika, Department of Electrical Engineering, Mohammed V University in Rabat, Morocco</td>
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<td>427</td>
<td>An Overview of Power Plants CCS and CO2-EOR Projects</td>
<td>Hosen E. Bader, General Electricity Company of Libya (GECOL), Power project generation department, Tripoli, Libya, Saber Kh. Elmarbouk and Walid Mohamed Mahmoud, Petroleum Engineering Department, Faculty of Engineering, University of Tripoli, Tripoli, Libya</td>
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**08:00 – 09:15, THURSDAY**  
**Project Management**  
**Room 7**  
**Session Chair:** Fikri Dweiri, University of Sharjah, Sharjah, UAE
ID 101 Megaprojects and Uncertainty: Opportunities for the Future
Mauro Mancini and Roya Derakhshanavijeh, Department of Management, Economics and Industrial Engineering, Politecnico di Milano, Via Raffaele Lambuschini, 4/B, 20156 Milan, Italy

ID 164 Implementation of Project Management Control Tools with International Standardization
Sean Regan, Association Advancement Cost Engineering International, Russia

ID 339 Decision Support Tool for Project Time-Cost Trade-off
Fikri Dweiri, Industrial Engineering and Engineering Management Department, University of Sharjah, Sharjah, UAE

ID 375 Project Manager Competency Model based on ANP Method in Construction Projects
Ali Maaleki, M.Sc Social & Economical engineering, Amirkabir University, Tehran, Iran
Kaveh Mohammad Cyrus, Assistant Professor Amirkabir University, Amirkabir University, Tehran, Iran

ID 407 Challenges of Executing Projects in Select African Countries
Girish Kelkar, Ashok Pundir and L Ganapathy, NITIE, Mumbai, India

08:00 – 09:15, THURSDAY Total Quality Management Room 8
Session Chair: André M. Carvalho, University of Minho, Guimarães, Portugal

ID 447 Sustaining Organizational Performance through TQM and Self Assessment Approach
Muhammad Tasleem, Nawar Khan and Muhammad Saleem, Department of Engineering Management, National University of Sciences and Technology, Islamabad 44000, Pakistan
Asim Nisar, Centres of Excellence in Science and Applied Technologies, Islamabad, 44000, Pakistan

ID 338 Minimizing Lead Time of Junction Box (Die Cast Enclosure) Assembly Line using Industrial Engineering Techniques
Ravina Gupta, Ashok K Pundir and L Ganapathy, National Institute of Industrial Engineering, Mumbai, India
Bhaskar M Bhandarkar, Indian Institution of Industrial Engineering, Mumbai, India

ID 323 Benchmarking for the Design of a Lessons Learned System in Project Quality Management
Hannelie Nel and Jan-Harm C. Pretorius, Postgraduate School of Engineering Management, University of Johannesburg, South Africa

ID 503 Effect of Temperature on Kinetics of Leaching Polymetallic Sulphide Concentrates from Koni Mansur Ideposit
Gaybullaeva Z. H., Nasymov G. T., Asrorov B.I., Tajik Technical University, Dushanbe, Tajikistan

ID 613 Review of Benchmarking for Auto Cluster Located at NCR, India
Anoop Pandey, ABES Engineering College, Ghaziabad, Uttar Pradesh, India

ID 441 Building an agile Culture of Excellence to Address the Unstable Business Environments of the XXI Century
André M. Carvalho and Paulo Sampaio, Department of Production and Systems Engineering, University of Minho, Guimarães, Portugal
Eric Rebentisch, MIT Consortium for Engineering Program Excellence, Massachusetts Institute of Technology, Cambridge, MA, USA

Session – Thursday (April 13): 9:30 – 11:00 am

9:30 – 10:15 am - Thursday Morning Keynote I:

Prof. Dr.-Ing. Egon Müller
Director Institute of Industrial Sciences and Factory Systems
Chernitz University of Technology, Chernitz, Germany

"e-Learning in Engineering Higher Education and the Learning Factory Concepts"

10:15 – 11:00 am - Thursday Morning Keynote II:

Professor Mohamed Essaaidi
Director (Dean) - ENIAS College of Engineering, Mohamed V University, Rabat, Morocco
IEEE Morocco Section Past Chair & Founder (2004)

"Engineering Education Accreditation Initiative for Africa and Global Partnership"

Session – Thursday (April 13): 11:30 am – 12:45 pm
Session Chair: Dr. Abdelaziz Berrado, The Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University, Rabat, Morocco

11:30 – 11:55 (Thursday)
**Dr. Perkins Muredzi**
Dean – School of Engineering & Technology
Harare Institute of Technology, Zimbabwe

11:55 – 12:20 (Thursday)
**Dr. J.S. Gnanasekaran, M.E., Ph.D., FIE**
Principal and Professor of Mechanical Engineering, K.L.N. College of Information Technology, Pottapalayam, Madurai City, India

12:20 – 12:45 (Thursday)
**Dr. Abdelaziz Berrado**
Associate Professor of Industrial Engineering
The Ecole Mohammadia d’Ingénieurs (EMI), Mohammed V University, Rabat, Morocco

**Industrial Engineering Education in Morocco – Challenges and Opportunities**

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<td><strong>Lean Six Sigma Green Belt (LSSGB) Workshop</strong></td>
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<td>LSSGB COACH: Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia</td>
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<td>11:30 – 12:45, THURSDAY</td>
<td><strong>Manufacturing and Design</strong></td>
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<td>Session Chair: Ahm Shamsuzzoha, Sultan Qaboos University, Muscat, Oman</td>
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<td><strong>Data Analytics / Artificial Intelligence</strong></td>
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<td>Session Chair: Ouazraoui Nouara, University of Batna 2, Algeria</td>
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<td>Session Chair: Hood Atan, Exergy Management Consultant, Malaysia</td>
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**ID 425 Design of a Sawdust Pelleting Machine**
Tawanda Mushiri, Department of Mechanical Engineering, University of Johannesburg, Johannesburg, South Africa
Peterson Mugodo, Department of Mechanical Engineering, University of Zimbabwe, Mt Pleasant, Harare, Zimbabwe
Charles Mbohwa, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

**ID 460 Application of Product Modularity in Industry: A Case Study**
Ahm Shamsuzzoha, Mahmood Al-Kindi, and Nasr Al-Hinai, Dept. of Mech. and Industrial Engineering, Sultan Qaboos University, Muscat, Oman

**ID 472 Remote Laser Welding on the Hybrid Materials**
Alessio Pasquale Mirarchi and Andrea Girgenti, Department of Innovation Engineering and Information, Guglielmo Marconi University, Rome, Italy

**ID 493 Ergonomic Study of Commuters’ Bus Cabin**
S.J. Ojolo, A. Ostondare, Mechanical Engineering Department, University of Lagos, Akoka-Yaba, Lagos, Nigeria

**ID 497 A Comparative Study between Lean Design and Eco Design in Product Development**
Noureddine DAHMANI1,2, Khalid BENHIDA1, Said ELFEZAZI1, Anass CHERRAFI1
1EST de Safi, Université Cadi Ayyad, Maroc
2CED: Sciences de l’ingénieur, UCAM, Marrakech, Maroc

**ID 499 Efficient Least-Loss Algorithm for a Bi-Objective Trim-Loss Problem**
Hesham K. Alfares and Omar G. Alsawafy, Systems Engineering Dept., King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

**ID 193 A New Statistical System for Recognition of Segmented Numerals**
Soukaina Benchaou, M’Barek Nasri, Ouafae El Melhaoui
MATSI Laboratory, Superior School of Technology, Mohammed First University, Oujda, Morocco

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ID 003  Criteria of Selection of Electrical Motors for Industrial Application  
Akhilendu Patra, Tata Steel, India

ID 134  Proposition of Conceptual Model of Integration Management Systems based on Five Step of DMAIC approach  
Mariyam MOUMEN, Lab. LASTIMI, Industrial Engineering Dept., High School of Technology, Rabat, Morocco, CED- Mohammadia School of Engineer  
Houda ELAOUFIR, Research Professor, Laboratory LASTIMI, Industrial Engineering Department, High School of Technology, Rabat, Morocco, CED- Mohammadia School of Engineer

ID 314  Optimal Cost Driver Selection in Activity-Based Costing Using Shuffled Frog Leaping Algorithm  
Rungchat Chompu-inwai and Trasapong Thaiupathump, Dept. of Computer Engineering, Faculty of Engineering, Chiang Mai University, Thailand

ID 330  Evaluating the Performance of a Production line by the Overall Equipment Effectiveness: An Approach based on Best Manufacturing Practices  
Jamal Fattah, Latifa Ezzine, and Abdeslam Lachhab, Research Team: Modeling, Control Systems and Telecommunications, Faculty of Sciences, Moulay Ismail University, Zitoune, Meknes, Morocco  
Zineb Aman, Research Team - Mechanics & Integrated Engineering, Faculty of Sciences, Moulay Ismail University, Zitoune, Meknes, Morocco

ID 572  A Review of Existing Operational Risk Management Decision Support Tool  
Hood Atan, Exergy Management Consultant, Malaysia  
Edly Ferdin Ramly, Musli Mohammad and Mohd Shahir Yahya, Universiti Tun Hussein Onn Malaysia, Malaysia

11:30 – 12:45, THURSDAY  
Session Chair: Alaaeddin A. Elhammeli, Memorial University of Newfoundland, St. John’s, NF, Canada  

ID 468  Producing Water in a Buried Pipe Using Solar Air Dryer  
Alaaeddin A. Elhammeli, Mechanical Engineering, Faculty of Eng. and Applied Sci., Memorial University of Newfoundland, St. John’s, NF, Canada  
Mohamed. A. Muntasser, Mechanical and Industrial Engineering, Faculty of Engineering, Tripoli, University, Tripoli, Libya

ID 526  Producing Water by Condensation of Humid Air in Buried Pipe  
Alaaeddin A. Elhammeli, Mechanical Engineering, Faculty of Engineering and Applied Sci., Memorial Univ of Newfoundland, St. John’s, NF Canada  
Mohamed. A. Muntasser, Mechanical and Industrial Engineering, Faculty of Engineering, Tripoli University, Tripoli, Libya  
Jenny Lindblom, Soil Mechanics, Mining and Geotechnical Engineering, Department of Civil, Environmental and Natural Resources Engineering, Luleå University of Technology, SE-97187 Luleå, Sweden  
Bo Nordell, Architecture and Water, Department of Civil, Environmental and Natural Resources Engineering, Luleå University of Technology, Sweden

ID 528  A thorough Evaluation of Implementing Geothermal Energy for Producing Hydrogen in Iran using Data Envelopment Analysis (DEA)  
Ali Mostafaiepour and Mohammad-Ebrahim Ramazankhani, Industrial Engineering Department, Yazd University, Yazd, Iran  
Hamid Reza Arabnia, Computer Science Department, University of Georgia, Athens, Georgia, USA  
Ahmad Sedaghat, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran

ID 530  Using Factor Analysis to Identify Effective Factors to Implement Solar Dryers: A Case Study  
Ali Mostafaiepour, Mojgan Zarezade and Hossein Rezaei, Industrial Engineering Department, Yazd University, Yazd, Iran  
Hamid Reza Arabnia, Computer Science Department, University of Georgia, Athens, Georgia, USA  
Ahmad Sedaghat, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, 84156-83111, Iran

ID 531  Evaluating Wind Energy Potentials for Four Cities of Fars Province, Iran  
Ali Mostafaiepour, Industrial Engineering Department, Yazd University, Yazd, Iran  
Ahmad Sedaghat, Mohammad Khayyami, Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran  
Ehsan Gorakifard, iRMB - Institute for Computational Modeling in Civil Engineering, TU Braunschweig, Braunschweig, Germany  
Mojtaba Qolipour, Industrial Engineering Department, Yazd University, Yazd, Iran

ID 533  Clean and Green Technology: Hybrid Solar Lighting  
Yash Khandekar, KIT's College of Engineering, India

11:30 – 12:45, THURSDAY  
Session Chair: Ghizlane ELBOK, Ecole Mohammadia d’Ingénieurs, Mohammed V University of Rabat, Morocco  

ID 412  Using Microsoft Project in Highways Project Planning  
Chayma Sabiri and Ilham Kissoni, School of Science and Engineering, Al Akhawayn University, Ifrane, 48075, Morocco

ID 478  The New Project Management Maturity Mixed Model (P4M) and the OPM3: Case of a PMO Implementation  
Houda TAHR AND Omar DRISSI KAITOUNI, IMOSYS, Engineering, management and optimization of systems, Mohammadia School of Engineers, Agdal Rabat, Morocco

ID 505  A Preemptive Goal Programming Approach for Developing a Cost-Time Trading-Off Model based on Tolerated Cost  
Abbas Mahmoudabadi and Samira Khooshnoud, Department of Industrial Engineering, MehrAstan University, Guilan, Iran

ID 506  Remanufacturing Decision Support for Office Furniture  
Wilkistar Otieno, University of Wisconsin-Milwaukee, United States

ID 508  Towards an Effective Project Portfolio Selection Process  
Ghizlane ELBOK and Abdelaziz BERRADO, Research Team AMIPS, Ecole Mohammadia d’Ingénieurs, Mohammed V University, Rabat, Morocco
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<td>Developing a Quadratic Programming Model for Time-Cost Trading Off in Construction Projects under Probabilistic Constraint</td>
<td>Abbas Mahmoudabadi and Fateme Pakzad</td>
<td>11:30 – 12:45, THURSDAY</td>
<td>Automation and Control Room 8</td>
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<td>Comparative Study of Two Sliding Surfaces to Control a Double Boost Converter</td>
<td>Fadwa El Otmani, Abdelmajid Abouloufa, Meriem Aourir and Abdellatif Hamdoun</td>
<td>11:30 – 12:45, THURSDAY</td>
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<td>312</td>
<td>Optimizing Durability of the High Performance Nano-Concrete Applying Taguchi Method and Desirability Function</td>
<td>Elahe Abbasi, Hamid Reza Pasandideh, Mostafa Zandiyeh, Mohammad Hadi Behboodi</td>
<td>11:30 – 12:45, THURSDAY</td>
<td>Automation and Control Room 8</td>
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<td>616</td>
<td>Effective Implementation of Material Requirement Planning (MRP) in Manufacturing to Enhance Quality, Cost and Delivery</td>
<td>Daw Alwerfalli, Nawal Tiouri</td>
<td>11:30 – 12:45, THURSDAY</td>
<td>Automation and Control Room 8</td>
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<td>062</td>
<td>On Setting the Delivery Due Date with Production on a Machine under Outsourced Maintenance</td>
<td>Moosa Sharafali, Lee Kong Chian School of Business</td>
<td>11:30 – 12:45, THURSDAY</td>
<td>Automation and Control Room 8</td>
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**12:45 – 1:00 pm – Networking Break – Exhibition Hall**

**1:00 pm Thursday Lunch Keynote:**

**Mr. Hakim Abdelmoumen**  
President, Association Marocaine pour l’Industrie et le Commerce Automobile (AMICA)  
Moroccan Association for Automotive Industry and Trade, Casablanca, Morocco

**2:00 – 3:00 pm – Networking Break – Exhibition Hall**

**Session – Thursday (April 13) – 2:30 – 3:45 pm**

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<td>616</td>
<td>Effective Implementation of Material Requirement Planning (MRP) in Manufacturing to Enhance Quality, Cost and Delivery</td>
<td>Daw Alwerfalli, Lawrence Technological University</td>
<td>2:30 – 3:45, THURSDAY</td>
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<td>312</td>
<td>Optimizing Durability of the High Performance Nano-Concrete Applying Taguchi Method and Desirability Function</td>
<td>Elahe Abbasi, Hamid Reza Pasandideh, Mostafa Zandiyeh, Mohammad Hadi Behboodi</td>
<td>2:30 – 3:45, THURSDAY</td>
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<td>514</td>
<td>Developing a Quadratic Programming Model for Time-Cost Trading Off in Construction Projects under Probabilistic Constraint</td>
<td>Abbas Mahmoudabadi and Fateme Pakzad</td>
<td>2:30 – 3:45, THURSDAY</td>
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**2:30 – 3:45 (Thursday)**

**Engr. Prof. Adagbonyin Moses O. Obiazi**  
Dean, Faculty of Engineering and Technology  
Ambrose Ali University, Nigeria  
President, African Engineering Deans Council, AEDC

**3:20 – 3:45 (Thursday)**

**Mohammad A Rahman, Ph.D.**  
Manufacturing and Construction Management  
Central Connecticut State University, New Britain, CT, USA

**Role of Teams to Develop Quality Improvement Framework and Process Understanding**

**2:30 – 3:45, THURSDAY**

**Lean Six Sigma Green Belt (LSSGB) Workshop**  
LSSGB COACH: Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia

© IEOM Society International
ID 024  **Application of Quality Management Systems (QMS) in Construction Industry**  
Daw Alwerfalli, Master of Engineering Management, A. Leon Linton Department of Mechanical Engineering, Lawrence Tech, Michigan, USA  
Dr. Asilhan Karatas and Mutel Alshammari, Department of Civil Engineering, Lawrence Technological University, Southfield, MI, USA

ID 052  **Scope-based Carbon Footprint Analysis of Turkish Construction Industry**  
Nuri Cihat Onat and Murat Kucukvar, Department of Industrial Engineering, Istanbul Sehir University, Istanbul, Turkey

ID 058  **Construction of Ring Roads as Infrastructure Development Simeulue Aceh Region as a Result of Regional Disparity**  
Hafnidar A. Rani, Department of Civil Engineering, Muhammadiyah Aceh University, Banda Aceh, 23245, Indonesia

ID 143  **Influences of Mentoring On Retention and Socialization of New Employees in the Construction Sector through Knowledge Transfer**  
Morena William Nkomo, Wellington Didibhuku Thwala & Clinton Ohis Aigbavboa, Department of Construction Management and Quantity Surveying, University of Johannesburg, Johannesburg, South Africa

ID 146  **Factors Responsible for Engineering Skills Shortages in South African Construction Industry**  
MP Maake, WD Thwala, and CO Aigbavboa, Dept. of Construction Management and Quantity Surveying, University of Johannesburg, South Africa

ID 032  **Factors Affecting Special Core Analysis Resistivity Parameters**  
Hassan M. Sbiga, Libyan Petroleum Institute (L.P.I), Tripoli-Libya  
Saber Elmabrouk and Walid Mohamed Mahmoud, Petroleum Engineering Department, Tripoli University, Tripoli-Libya

ID 188  **Full Field Implementation of Cyclic Steam Stimulation to Enhanced Oil Recovery for a Sudanese Oil Field**  
Husham A. Elbaloula, Petro-Energy-E&P, Sudan  
Tagwa Musa, Sudan University of Science and Technology, Khartoum, Sudan

ID 329  **Economic Analysis of Scale Removal Utilizing Chemical and Pressure-Difference Mechanical Methods**  
Walid Mohamed Mahmoud and Saber Kh. Elmabrouk, Department of Petroleum Engineering, The University of Tripoli, Tripoli, Libya  
Hussam Ed. M. Abdul Jaliel, Reservoir Engineering and Geosciences Division, Mellitah Oil and Gas B.V., Tripoli, Libya

ID 343  **Revenue Management Model with Customer Behavior: An Application for Road Transportation Industry**  
Arslan Taşkın and Şakir Esnaf, Department of Industrial Engineering, Istanbul University, Istanbul, Turkey

ID 560  **A Fuzzy Programming multiobjective model for Urban Transport Planning**  
Fernando Lopez-Irragorri, Posgraduate Program in System Engineering, Faculty of Mechanical and Electrical Engineering, Universidad Autonoma de Nuevo Leon, Pedro de Alba, s.n, San Nicolas de los Garza, NL, 66455, Mexico  
Paulina Avila-Torres, Praxair Mexico

ID 331  **Improving Efficiency of a Production Line by Using Overall Equipment Effectiveness: A Case Study**  
Zineb Aman, Research Team - Mechanics & Integrated Engineering, Faculty of Sciences, Moulay Ismail University, Zitoune, Meknes, Morocco  
Latifa Ezzine, Jamal Fattah and Abdesslam Lachhab, Research Team: Modeling, Control Systems and Telecommunications, Faculty of Sciences, Moulay Ismail University, Zitoune, Meknes, Morocco  
Haj EL Moussami, Research Team: Mechanics & Integrated Engineering ENSAM School, Moulay Ismail University, Al Mansour, Meknes, Morocco

ID 341  **Integration of Health and Safety at Work and Environment perspectives in the Balanced Scorecard**  
Faiza AZOUR, Haj EL MOUSSAMI, Samya DAHBI, Mechanics & Integrated Engineering, ENSAM School, Moulay Ismail University, Al Mansour, Meknes, Morocco  
Latifa EZZINE, Modeling, Control Systems and Telecommunications, EST School, Moulay Ismail University, Toulal, Meknes, Morocco

ID 345  **Awareness of Industries toward Implementing Concurrent Engineering (CE) Culture - Case Study: Jordanian Industries**  
Mohammad D. AL-Tahat, Industrial Engineering Department, Hijawi Faculty for Engineering Technology, Yarmouk University, Irbid, Jordan

ID 378  **A New Performance Measurement Corporate Social Responsibility Model for Small and Medium-Sized Industrial Enterprises**  
Naoufal Sefiani, Engineering, Innovation Management and Industrial Systems Research Team, Faculty of Science and Technology of Tangier, University Abdelmalek Essaadi, BP 416 Tangier Morocco
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<td>Benchmarking in the E-Commerce Supply Chain – A Holistic Framework</td>
<td>Ananth Rangarajan and Rohit Kunal, Fulfilment Center Design, Flipkart Internet Private Ltd., Bangalore, India</td>
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<td>ID 106</td>
<td>Forward Placement of Inventory to Strategically Curb Delivery Lead Time - Decision Framework and Design Methodology</td>
<td>Rajat Varshney and Ananth Rangarajan, Fulfilment Centre Design, Flipkart Internet Private Limited, Bangalore, India</td>
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<td>ID 107</td>
<td>Optimization of Order Picking Cycle in the Fulfilment Center Leg of an E-Commerce Supply Chain</td>
<td>Rohit Kunal and Ananth Rangarajan, Fulfilment Center Design, Flipkart Internet Private Ltd., Bangalore, India</td>
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<td>ID 108</td>
<td>Applicability and Scope of the Lean Management Philosophy in an E-Commerce Fulfilment Center Environment</td>
<td>Subrata Pal and Ananth Rangarajan, Fulfilment Center Design, Flipkart Internet Private Ltd., Bangalore, India</td>
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<td>ID 594</td>
<td>Challenges and Opportunities in Computing Logistics Cost in E-commerce Supply Chain</td>
<td>Pramod Ghadge and Swadesh Srivastava, Flipkart Internet Private Ltd., Bangalore, Karnataka 560034, India</td>
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<td>ID 109</td>
<td>Returns Management and Value Recovery through Systemized Orchestration and Inventory Tagging</td>
<td>Udayan Kashalikar and Ananth Rangarajan, Fulfilment Center Design, Flipkart Internet Private Ltd., Bangalore, India</td>
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**2:30 – 3:45, THURSDAY**  
**Systems Engineering**  
Room 7  
Session Chair: Alireza Ghasemi, Dalhousie University, Canada

| ID 165 | Sensor Design and Layout for Airport Asphalt Pavement Instrumentation to Test for Delamination | Amarjit Singh and Manuela Melo, Department of Civil and Environmental Engineering, University of Hawai‘i at Mānoa, Honolulu, HI 96822, USA |
| ID 518 | New Classification Framework of ICT Deployments in Supply Chain                                 | Sara El Ouadaa, Slimane Bah and Abdelaziz Berrado, Équipe AMIPS, École Mohammadia d’Ingénieurs, University Mohammed V, Rabat, Morocco |
| ID 049 | Effective Factors of Customer Satisfaction in Medical Tourism Based on SERVQUAL Model and Ranking Them by Applying the TOPSIS Technique, Case study: Tehran Hotel hospital Gandhi | P. Romouzi Kouchebagh, M. Hossein-zadeh Shahiri and S.A. Alavifar, Russian State University of Tourism and Services, Russian Federation |
| ID 393 | A Multi Depot Crew Routing Problem for Post-Disaster Service Restoration Planning              | Parth Pancholi and Alireza Ghasemi, Dalhousie University, Canada                                                                     |
| ID 168 | Using Design of Experiment to Predict Concert Compressive Strength Using Fly Ash and GGBFS as Cement Alternative | Khaled Khaleel, Ahmed Mousa, Ahmed Qashlaq, Basel Hassan, Amir Ramadan and Belal Raslan, Engineering Management Department, Prince Sultan University, Riyadh, Saudi Arabia |

**2:30 – 3:45, THURSDAY**  
**Case Studies**  
Room 8  
Session Chair: Antonio Grilo, Universidade NOVA de Lisboa, Caparica, Portugal

| ID 568 | Investigating the Effectiveness of Entrepreneurial Marketing Aspects on the Success of Knowledge-Based Companies: A Case Study | Mahdi Siamak, Mohammad-Hossein Abooie, Mojtaba Qolipour and Ali Mostafaeipour, Industrial Engineering Department, Yazd University, Yazd, Iran |
| ID 570 | A Comparison between Nordic and Mediterranean Start Up Ecosystems: Economic Sectors, Business and Pricing Models | Marisa Abreu Gonçalves, Departamento de Engenharia Mecânica e Industrial, Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa, Caparica, Portugal |
| ID 571 | Public Private Partnerships (PPPs): An effective and legitimate finance model for TOD in South Africa? | Robert Ndebele and Clinton Aigbavboa, Dept. of Quantity Surveying & Construction Management, Faculty of Engineering and Built Environment, University of Johannesburg, South Africa |
| ID 575 | Analysis of a Manual Mixed-Model Assembly Line in Food Processing Industry: A Case Study | Mehmet Savsar, Angie K. Elsdadany, Rana Hassneiah and Alfat Alajmi, Industrial & Management Systems Engineering, College of Engineering & Petroleum, Kuwait University, Safat 13060 Kuwait |
| ID 573 | Allocation of Medical Service Demand and Capacity on Multi-Level Hospital Network                | Ye Eun Kim and Young Hoon Lee, Department of Industrial Engineering, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, SEOUL, KOREA |
Session – Thursday (April 13) – 4:00 – 5:15 pm

4:00 – 5:15, THURSDAY    Global Engineering Education XII

Session Chair: Dr. Kamran Ahmed Siddiqui, University of Dammam, Dammam, Saudi Arabia

4:00 – 4:25 (Thursday)
Dr. Christoph Wunck
Professor - Business Information Systems, Industrial Engineering, College of Management, Information, Technology
Jade University, Wilhelmshaven, Germany

*Computer Science Education for Industrial Engineers – Meeting the Challenges of the Smart Factory Paradigm*

4:25 – 4:50 (Thursday)
Dr. Ho Hwi Chie, M.Sc.
Dean, Binus Aso School of Engineering
Bina Nusantara University (Binus), Tangerang, Banten, Indonesia

*Quality Enrichment of Human Capital as Basis of Exponential Growth Development in Indonesia*

4:50 – 5:15 (Thursday)
Dr. Kamran Ahmed Siddiqui
Associate Professor, College of Business Administration and Director of Center for Innovation and Entrepreneurship
University of Dammam, Dammam, Saudi Arabia

*Entrepreneurship Education in an Engineering Curriculum*

4:00 – 5:15, THURSDAY    Lean Six Sigma Green Belt (LSSGB) Workshop

LSSGB COACH: Edly Ramly, Lean Six Sigma Master Black Belt, Certification Director, EFR Certification, Malaysia

4:00 – 5:15, THURSDAY    Construction Management

Session Chair: Abbas Mahmoudabadi, Mehrastan University, Astane Ashrafieh, Guilan, Iran

ID 147 Examination of Standard Code for Health and Safety in Alternative Construction System
Zakari Mustapha, Wellington Thwala and Clinton Aigbavboa, Department of Construction Management and Quantity Surveying, University of Johannesburg, Johannesburg, RSA

ID 176 Assessment of Financial Condition: A Case Study of Saudi Construction Companies
Naif Turki Ibn-Homaid and Tijani Ibrahim A, Construction Engineering & Management, Civil Engineering Dept., King Saud University, Riyadh, KSA

ID 450 Public Private Partnerships (PPPs): An effective and legitimate finance model for TOD in South Africa?
Clinton Aigbavboa, University of Johannesburg, South Africa

ID 451 Bridging the Gaps of Construction Marketing Frameworks for Construction Business Enterprises
Yankah, J.E1, Aigbavboa, C.O2, Thwala, W.D3, Pretorius, JHM4
1, 2, 3, 4 Department of Construction Management and Quantity Surveying, University of Johannesburg, Johannesburg, South Africa
1Department of Building Technology, Cape Coast Polytechnic, Cape Coast, Ghana

ID 522 Risk Evaluation on Construction Projects Using Fuzzy Logic and Binomial Probit Regression
Abbas Mahmoudabadi and Seyyede Mahsa Saleh, Department Of Industrial Engineering, Mehrastan University, Astane Ashrafieh, Guilan, Iran

4:00 – 5:15, THURSDAY    Case Studies

Session Chair: Ihfasuziella Ibrahim, Construction Research Institute of Malaysia (CREAM)

ID 390 Horizontal Drilling Cost Reduction; Case Study
Saber Kh. Elmabrouk and Walid Mohamed Mahmud, Petroleum Engineering Department, Faculty of Engineering, University of Tripoli, Tripoli, Libya

ID 496 Codification Domestic and International Tourism Development Strategies of Ocean Coast of Iran
Farzad Firouzi Jahantigh, Department of Industrial Engineering, University of Sistan and Baluchestan, Zahedan, Iran
**IEOM Rabat Conference**  
**TECHNICAL PROGRAM**  
April 11 - 13, 2017

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<td>Etude de l’Impact Financier d’Optimisation des Coûts Logistiques: Cas des multinationaux: l’exemple de YAZAKI MOROCO S.A –Tanger</td>
<td>Jannat Forouzandeh, Health in Disasters and Emergencies, University, Tehran University of Medical Sciences, Iran</td>
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<td><strong>ID 534</strong></td>
<td>An integrated planning budgeting model for transportation in a supply chain: A case study for phosphate industry Azouagh Yassine, Benhida Khalid and Elfezazi Said, Laboratory process signals industrials systems and computing (LAPPSSI), Higher School of Technology Safi, Cadi Ayyad Univ., Marrakech, Morocco</td>
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<td><strong>ID 595</strong></td>
<td>Optimal Sortation strategy for a distribution network in an E-commerce supply chain</td>
<td>Panthuri, Charumani Singh, Poomima Krothapalli and Krishna Karthik, Supply Chain Design, Flipkart Internet Pvt. Ltd., Bangalore, Karnataka, India</td>
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<td><strong>ID 530</strong></td>
<td>A Comparative Study on Criteria of Shopping Centre Classification in Malaysia</td>
<td>Isafuza Ilbrahim, Abdul Hadi Nawawi and Edie Ezwan Mohd Safian</td>
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<td><strong>ID 387</strong></td>
<td>An integrated planning budgeting model for transportation in a supply chain: A case study for phosphate industry Azouagh Yassine, Benhida Khalid and Elfezazi Said, Laboratory process signals industrials systems and computing (LAPPSSI), Higher School of Technology Safi, Cadi Ayyad Univ., Marrakech, Morocco</td>
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<td>The Effect of Part Assignment on Grouping Measures in Manufacturing Systems</td>
<td>Nadia Dahmani and Adrian Mukattash, Department of Management, Emirates College of Technology, Abu Dhabi, UAE and Department of Industrial Management, Emirates College of Technology, Abu Dhabi, UAE</td>
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<td><strong>ID 458</strong></td>
<td>Assessing Quality Practices and Performance Relationship: A Review from Different Industries</td>
<td>Mehran Doulat Abadi, Razak School of Engineering and Advanced Technology, Universiti Teknologi Malaysia, Kuala Lumpur. MALAYSIA Kamariah Ismail, Faculty of Management, Universiti Teknologi Malaysia, Johor Bahru, MALAYSIA</td>
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<td>Repairable 3-Out-Of-4: Cold Standby System Availability</td>
<td>Mohamed Gnda, Industrial Engineering Department, Faculty of Engineering, Zagazig University, Zagazig, Egypt. Abdelnaser Zaid, Faculty of Computers and Informatics, Zagazig University, Egypt</td>
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<td>Technical Viability of Kaolinite-Goethite Soil for Chromium (VI) Removal From Contaminated Water</td>
<td>Zenrhun Asmelash Samuel and Tilahun Seyoum Workneh, University of KwaZulu-Natal, School of Engineering, Pietermaritzburg, South Africa Cristina Trois, University of KwaZulu-Natal, School of Engineering, Durban, South Africa Fekadu Fufa Feyessa, Jimma University Institute of Technology, School of Civil and Environmental Engineering, Jimma, Ethiopia</td>
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<td>A Transport Strategy Developing Process Based on Stakeholder Engagement</td>
<td>Afaf Haial, Equipe MOAD-SCM, Ecole Mohammadia d’Ingénieurs, Mohammed V University, Rabat, Morocco Abdelaziz Berrado, Equipe AMIPS, Ecole Mohammadia d’Ingénieurs, Mohammed V University, Rabat, Morocco Loubna Benabbou, Equipe MOAD-SCM, Ecole Mohammadia d’Ingénieurs, Mohammed V University, Rabat, Morocco</td>
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<td><strong>ID 367</strong></td>
<td>Adaptive Backstepping Controller of a single-phase Multicellular inverter connected photovoltaic systems</td>
<td>C. Taghzaoui, A. Abouloifa, A. Hamdoun and A. Elallali, LTI Lab, Faculté des Sciences Ben Msik, HASSAN II University of Casablanca, Morocco I. Lachkar, LISER Lab, ENSEM Casablanca, HASSAN II University of Casablanca, BP 7955 Casablanca, Morocco</td>
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<td><strong>ID 380</strong></td>
<td>Controller Design and Average Performance Analysis of a single phase parallel active power filter</td>
<td>A. Elallali, A. Abouloifa, A. Hamdoun and C. Taghzaoui, LTI Lab, Faculté des Sciences Ben Msik, HASSAN II University of Casablanca, Morocco I. Lachkar, LISER Lab, ENSEM Casablanca, HASSAN II University of Casablanca, BP 7955 Casablanca, Morocco</td>
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<td><strong>ID 383</strong></td>
<td>An Optimized Algorithm for 2D image comparing based on Hausdorff Distance</td>
<td>Amina Kharbach, Amra Merdani, Benaisa Bellach and Mohamed Rahmoun, Physics and Engineering Department, LSE2I, ENSAO, University Mohamed 1st, Oujda, Morocco Mouad Elomari, Applied Mathematics and Information Systems Department, MATSI, ESTO, University Mohamed 1st, Oujda, Morocco</td>
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<td>New fuzzy-Based Process Control System for a Bag-filter in a Cement Manufacturing Plant</td>
<td>Hanane Zermane and Hayet Mouss, Laboratory of Automation and Manufacturing, Industrial Engineering Department, Batna 2 University, Algeria</td>
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<td><strong>ID 462</strong></td>
<td>A Passivity-based Control and Simulation for double cascade DC/DC Converter with a fuel cell</td>
<td>Fadwa El Ottmani, Abdellajid Abouloifa, Meriem Aourir and Abdellatif Hamdoun, LTI Lab, Faculty of Science Ben M’sik, University HASSAN II of Casablanca, Casablanca, Morocco Ibttissam Lachkar, LISER Lab, ENSEM Casablanca, University HASSAN II of Casablanca, Casablanca, Morocco</td>
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<td>Rahmat Nurcahyo, University of Indonesia, Depok, West Java, Indonesia</td>
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ID 163  Perceptions on Continuous Improvement in Postal Services
Thabiso John Mokoena and Charles Mbohwa, Faculty of Engineering and the Built Environment, Department of Quality and Operations Management, University of Johannesburg, Auckland Park 2006, South Africa

ID 304  Industrial Engineering and Operations Management Functions in the Apparel Manufacturing Industry
Md. Atikul Islam, Walton Micro-Tech Corporation, Bangladesh

ID 584  Current Status of Cycling Lanes at University of Johannesburg
Sebonkile Cynthia Thaba and Lunga Jacobs, Dept. of Transport and Supply Chain Management, Univ. of Johannesburg, Auckland Park, South Africa

ID 313  Study Analysis of Productivity Improvement Micro, Small And Medium Enterprises (MSMEs) Hand Craft With Line Balancing Method to Improve and Enhance Sustainable Economic In Depok, Indonesia
Muhammad and Rahmat Nurcahyo, Industrial Engineering (IE) Dept., Faculty of Engineering, University of Indonesia, Depok, West Java, Indonesia

ID 320  Quality Improvement of an Assembly Line using Industrial Engineering and Operations Management Techniques- A systematic approach
Md. Atikul Islam, First Senior Assistant Director, Walton Micro-Tech Corporation, Chandra, Kaliakoir, Gazipur, Bangladesh
Md. Sunny Ul Islam, Deputy Director, Walton Micro-Tech Corporation, Chandra, Kaliakoir, Gazipur, Bangladesh
Jiku Das Gupta, First Senior Assistant Director, Walton Micro-Tech Corporation, Chandra, Kaliakoir, Gazipur, Bangladesh

ID 324  A Most Advantageous Layout Design by Opposite Line Balancing using Industrial Engineering and Operations Management Techniques: A Case Study
Jiku Das Gupta, First Senior Assistant Director, Walton Micro-Tech Corporation, Chandra, Kaliakoir, Gazipur, Bangladesh

ID 359  Allocation and Optimization Approach for Safety Barriers in Hydrocarbons Storage Stations: Case of SBM station
Ouazraoui Nouara and Chebila Mourad, LARPI Laboratory, Safety Dept. Institute of Health and Occupational Safety, University of Batna 2, Algeria
Bouilia Khalil and Ouezane Fayçal, Safety Department, Institute of Health and Occupational Safety, University of Batna 2, Batna 05017, Algeria

ID 370  Strategic Analysis of Environmental Management:
Saadia Saadi and Mebarek Djebabra, Research Lab. in Industrial Prevention (RLIP), Institute of Hygiene and Safety, University Batna 2 – Algeria

Fedali Yamina, AZZOUTI Sid Ahmed and Lattari Youghourtha, LRPI Lab. - Institute of Health and Industrial Safety, University of Batna, Algeria

ID 023  Des Indicateurs et Ratios Financiers et non Financ
Madjid Ahmedouamar, Département économie et commercialisation des hydrocarbures, Faculté des hydrocarbures et de la chimie, Université de Boumerdes, Algeria

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**Presentations in French**

### 4:00 – 5:15, Thursday

**Room 8**

**Session Chair:** Saadia Saadi, University Batna 2 - Algeria

**ID 359**  Allocation and Optimization Approach for Safety Barriers in Hydrocarbons Storage Stations: Case of SBM station
Ouazraoui Nouara and Chebila Mourad, LARPI Laboratory, Safety Dept. Institute of Health and Occupational Safety, University of Batna 2, Algeria
Bouilia Khalil and Ouzzane Fayçal, Safety Department, Institute of Health and Occupational Safety, University of Batna 2, Batna 05017, Algeria

**ID 370**  Strategic Analysis of Environmental Management:
Saadia Saadi and Mebarek Djebabra, Research Lab. in Industrial Prevention (RLIP), Institute of Hygiene and Safety, University Batna 2 – Algeria

**ID 544**  A Performance Evaluation of the Human Barriers Security - Application of Omega 20 Method
Fedali Yamina, AZZOUTI Sid Ahmed and Lattari Youghourtha, LRPI Lab. - Institute of Health and Industrial Safety, University of Batna, Algeria

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**Posters**

**ID 035**  A Stochastic AHP Method for Bid Evaluation Plans of Military Systems In-Service Support Contracts
Ahmed Ghanmi, Defence Research and Development Canada, Centre for Operational Research and Analysis, Ottawa, Ontario, Canada

**ID 041**  Security of Data in the Utilization of E-Government
Abdulrahman Ahmed Alzand, Programmer at the Ministry of Science and Technology Iraqi, Faculty of Engineering / Iraqi University, Baghdad, Iraq

**ID 042**  Multi-criteria Decision Making: A Case Study in the Site Selection for Satellite Assembly and Tests
Atiya Al-Zuheri, School of Engineering, University of South Australia and Ministry of Science and Technology, Baghdad, Iraq
Yousef Amer, School of Engineering, University of South Australia, Mawson Lakes, South Australia

**ID 043**  Evaluation of Failure Probability of an Oven by Coupling MASD-MOSRA and Bayesian Networks
Chaouki Moumeni, Department of Mechanical Engineering, University of Mohamed Cherif Messaadia of Souk Ahras, Souk Ahras, Algeria
Kamel Tadjine, Department of Mechanical Engineering, University of Badji Mokhtar of Annaba, Annaba, Algeria

**ID 047**  Risks and Protection of Industrial Installation (Electric Discharges Effects)
DALIA Adallah and ABDERREZAK Hocine, Genie Electro-mechanical laboratory, Badji-Mokhtar University, Annaba Algeria

**ID 048**  Ranking Critical Success Factors for Sustaining Total Quality Management Implementation in Sudan
Sharaf Eldin Hamed Ahmed, RAZAK School for Engineering and Advanced Technology, Universiti Teknologi Malaysia (UTM), K.L, Malaysia

**ID 050**  The Masking Effect due to Industrial Noise and Applying the Method of the Level of Interference with Speech
ABDERREZAK Hocine and DALIA Adallah, Electromechanical Engineering Research Laboratory, Badji Mokhtar Annaba University, Algeria

**ID 053**  Intellectual Capital and its Measurement
Brahmi Samira, Aitouche Samia and Mouss Mohamed Djamel, Industrial Engineering Department, Batna 2 University, Batna, Algeria

**ID 054**  Risk Response Action Selection using Case-Based Analysis and Fuzzy Optimization Model
Yao Zhang, Department of Operations and Logistics Management, Northeastern University, Shenyang, China

**ID 069**  Catalytic Performance and Optimization of Hydrodesulfurization and Naphtha Reforming Processes for Clean Fuel Production

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ID 086  Developing Total Productive Maintenance Model (TPM) For Small Medium Size Enterprises (SME)
Lamyaa Mohammed Dawood and Mohanad A. Sahib, Production Engineering and Metallurgy Dept. University of Technology, Baghdad, Iraq

Arruda, J. M., Alumni of the Mackenzie Presbyterian University Campinas, São Paulo, Brazil
Araujo, Jr. A. H. and Barros, J. G. M., Professor of Production Engineering Dept., State University of Rio de Janeiro, RJ, Brazil
Ayres, L. F., Professor of Production Engineering Dept., Mackenzie Presbyterian University Campinas, São Paulo, Brazil

ID 103  Analysis of the Learning Model “School-University-Enterprise” in Preparation of Personnel Pool for Enterprises of Russian Electrical Energy Industry
Yuriy V. Daneykin, Elena V. Lisichko, Vera V. Shestakova and Natalia V. Daneikina, National Research Tomsk Polytechnic Univ., Tomsk, Russia
Artem S. Korolev, Charitable foundation “Nadzhdavnaya smena”, Moscow, Russia

ID 130  Servicification through Supply Chain Segmentation-One physical supply chain, multiple virtual supply chains
Sarvartana Kanchan and Chandni Agrawal, Flipkart Internet Private Ltd., Bangalore, Karnataka 560034, India

ID 131  Effect of Manufacturing Activities on Lean - Green Management Integration
Lamyaa Mohammed Dawood, Production Engineering and Metallurgy, Department/IE Division, University of Technology, Baghdad, Iraq
Zuher Hassan Abdullah, Department/Mechanical Technologies, Technical Institute of Babylon, Iraq

ID 142  Cost Optimization through Bi-Directional Supply Chain
Udaykiran Edikojlu, Specialist-Supply Chain Design, Flipkart Internet Private Limited, Bengaluru, India
Sarvartana Kanchan, Director-Supply Chain Design, Flipkart Internet Private Limited, Bengaluru, India

ID 153  Influence of Manufacturing Process on Wear Resistance of Grinding Balls
1,2Bourebia.Mounir, Bouhauml Khadija1, Maouche.Hichem1, Gherbi.Amel1, Chaouar.Mohamed1 and Laouar.Lakhdher2
1Industrial Technologies Research Center.CRTI-ex-CSC, Algérie
2Laboratory of Industrial Mechanics, Badji Mokhtar University, Annaba, Algeria

ID 154  Scope Creep is a Critical Risk Area of Contract Risk Management in Engineering-Procurement-Construction (EPC) Projects?
Rashid Hameed, Department of Management Sciences, Riphah International University, Al-Mezan Campus, Rawalpindi, Pakistan

ID 158  A Hybrid Genetic Algorithm with Intelligent Agents for the [FJ]_m|r_i, different Priority Levels| F_max
Nahavandi N and Mohammad Abbasian, Iran

ID 160  La Fonction Innovation au sein de l’entreprise: Revue de Littérature et Tentative de Modélisation du Processus Associé
Rime Ettabaa and Driss Bouami, Ecole Mohammedia d’ingénieurs, Rabat, Morocco
Elfezazi Said ERGI Université cadi Ayyad, Marrakech, Morocco

ID 169  Knowledge Management and Eco-Innovation: Issues and Organizational Challenges to Small and Medium Enterprises
Ahmed.Cherif1, Patrick M’Basségue2, Mickaël.Gardoni2, Jean Raudenaud, Rémy Houssin3
1Ecole de Technologie Supérieure, 1100 Notre-Dame Street West, H3C 1K3, Montreal
2École Polytechnique, Montréal, Canada
3Laboratoire L.Geo.Co INSA de Strasbourg

ID 175  Implementing a Combinational Framework to Accumulate the Most Efficient Regional Renewable Energy Technique: Aid the Power of Decision Making of the Future Energy Planning in UAE
Mohamed Al-Ali, MSc Engineering Project and Systems Management, Kingston University – London, UK

ID 177  Modeling and Solving A Bi-Objective Single-Period Problem within Incremental Discount in Framework of Solving Multi-Objective Problems Approach
Mahsa Najmy, Department of Industrial Engineering, Faculty of Engineering, Kharazmi University, Tehran, Iran
Seyed Hamid Reza Pasandideh, Assistant Professor, Dept. of Industrial Engineering, Faculty of Engineering, Kharazmi University, Tehran, Iran

ID 185  Factors Related to Role Model of Financial Planning for Retirement of Sirindhron College of Public Health’s Government officers
Rujeel Charupash, Department of Finance, Sirindhron College of Public Health Khon Kaen Province, Khon Kaen, Thailand

ID 191  Effect of Novolac wt.% on Rheological Properties of NBR/CR Blends
Ali I. Al-Mosawi and Shaymaa Abbas Abdulsada, Faculty of Materials Science and Engineering, University of Miskolc, Miskolc, Hungary
Mohammed H. Al-Maamori, College of Engineering Materials, Babylon University, Babylon, Hilla, IRAQ

ID 192  Maximizing the Probability of Arriving on Time: Robust Guidance
Farida Mansour, IFSTTAR/COSYS/GRETIA, Paris-Est University, Champs-sur-Mame, 77447, France
Nadir Farhi, Habib Haj-Salem and Jean-Patrick Lebacque, IFSTTAR/COSYS/GRETIA, Champs-sur-Mame, 77447, France

ID 306  Case Study: On-Plot Piping Corrosion Analysis for GOSP
Sultan A. Al Shaqaq, Inspection Department, Saudi Aramco Co., Dharan, Eastern Province, Saudi Arabia

ID 360  The Influence of Concentration and Temperature on the Rheological Behavior of Sodium Carboxymethyl Cellulose Solutions
Khaled Benyounes1, Abderrahmane Mellah1, Abdelbaki Benmounah2
1Université M’Hamed Bougara de de Boumerdes, Faculté des hydrocarbures et de la chimie, Laboratoire génie physique des hydrocarbures, Boumerdes, Algeria
2Université M’Hamed Bougara de de Boumerdes, Unité de recherche matériaux, procédés et environnement (UR-MPE), Boumerdes, Algeria
ID 369  Harmonious Industrialization: Classifying, Connecting and Valuating Industries Based on Their Contribution to Human Need
Hasan Danwsh, School of Industrial Engineering, North West University, Potchefstroom, North West Province, South Africa

ID 373  Skills development in South Africa through Idea2Product Lab layout for effective learning
Godfrey Ositadinma Nwanekah, Department of Industrial Engineering, Vaal University of Technology, P.O. Box: X021, Vanderbijlpark, South Africa
Malan Van Tonder, Department of Electrical Engineering, Vaal University of Technology, P.O. Box: X021, Vanderbijlpark 1900, South Africa
Deon D Beer, Technology Transfer and Innovation Support, North-West University, Private Bag: X6001, Potchefstroom 2520, South Africa

ID 405  Optimization of Extrusion Process Parameters using Taguchi integrated GRA
Getu Tadesse Fellek, Mekelle University, Ethiopia

ID 416  Developing an Effective ESP Curriculum Integrating Analysis with NIRS for Engineering Students
Rumi Tobita, Ashikaga Institute of Technology, Japan

ID 422  Building Information Modelling (BIM) for Productivity, in Rehabilitation and Repair of Buildings
Boulkenafet Nabil and Bouabaz Mohamed, Department of Civil Engineering LMGHU Laboratory, University 20 Aout 1955, Skikda, Algeria

ID 448  Safety Performance and Culture Impact on Work-Related Accidents: A Study with System Dynamics Approach
Hadi Abniki a, Mahdi Bastani b, Ehsan Kasraivalad c, and Ali Mohammad Ahmadvand d
a Department of Engineering, Industrial Engineering Group, Imam Hossein Compressive Univeristy, Tehran, Iran
b Department of Industrial Engineering & Management Systems, Amirkabir University of Technology, Tehran, 15875-4413, Iran
c Department of Industrial Engineering, Eyyankey University, Eyyankey, Iran

ID 452  An Investigation of Critical Factors That Causes the Cost of Poor Quality in Construction Projects in Swaziland
Nokulunga Xolile Mashwama, University of Johannesburg, Construction management and Quantity Surveying DepT., Doornfontein, South Africa
C.O Aigbavboa and D.W Thwaile, Univ. of Johannesburg, Dept. of Construction Management and Quantity Surveying, Doornfontein, South Africa

ID 459  Hydrocyclisation des Aromatiques à l’aide des catalyseurs à base de Molybdène et de Tungstène supportés sur le Kaolin de Remblénd
Mimoune Hadji, Maître conférence Département Génie des procédés Chimiques et Pharmaceutiques, Faculté des hydrocarbures, Université de Boumerdes, Algeria
BOUKHEMKHEM Ali, Département Génie des procédés Chimiques et Pharmaceutiques, Faculté des hydrocarbures, Univ. de Boumerdes, Algeria

ID 469  Performance Comparison between (ADI-FDTD) and Conventional (FDTD)
Adamu Abubakar Isah, Mehmet Kusaf and Oyku Akaydin, Cyprus International University, Turkey

ID 470  Improving the Passive Building Energy Efficiency – Case Study: Office Building in Tetuan City in Northern of Morocco
Abdelmajid El Bouardi, Faculty of Sciences, Abdelmalek Essaadi University, Tetuan, Morocco
Friedrich Sick, University of Applied Sciences, Berlin, Germany
Meriem Lebied, University of Applied Sciences, Berlin, Germany and Faculty of Sciences, Abdelmalek Essaadi University, Tetuan, Morocco

ID 485  Hydrocyclisation des Aromatiques à l’aide des catalyseurs à base de Molybdène et de Tungstène supportés sur le Kaolin de Remblénd
Mimoune Hadji, Maître conférence Département Génie des procédés Chimiques et Pharmaceutiques, Faculté des hydrocarbures, Université de Boumerdes, Algeria
BOUKHEMKHEM Ali, Département Génie des procédés Chimiques et Pharmaceutiques, Faculté des hydrocarbures, Univ. de Boumerdes, Algeria

ID 492  The Effects of Toluene-Methanol Mixture on Mechanical and Structural Properties of HDPE pipe
L. Alimi1,2, K. Bouhadou3, and K. Chauvel4
1 Mechanics of Materials and Plant Maintenance Research Laboratory (LR3MI), Mechanical Eng. Dept., Badji Mokhtar University, Annaba, Algeria
2 Centre de Recherche en Technologies Industrielles (CRTI), Route de Dély-Brahim, BP 64, Chéraga, Alger 16014, Algeria

ID 495  Synthesis and Structural Characterization of Nanocomposite Bioceramic Powder Based on Hydroxyapatite
M. Mokhtari, L. Bahloule, S. Guerfi, L. Lalimi and A. Azizi, Research Center in Industrial Technologies CRTI, P.O.Box 64, Cheraga 16104, Algiers, Algeria

ID 510  Made In Morocco: DINNA Diagram (Double Ishikawa and Naze Naze Analysis)
Mohammed HAMOUMI, HiQuality Association, Morocco

ID 513  Traceability in Animal Feed Industry in Morocco, Exploratory Investigation
Amina El Morhit, SMARTINDUS, Morocco

ID 523  Three-Dimensional Analysis of the Distribution of Defects in the Bone Cement Linking the Cup to the Bone
L. Zouambi1,2, S. Gouasmi1, F. Bouafia3, and B. Serier4
1 LMPM, Mechanical Engineering Department, University of Sidi Bel Abbes, 22000, Sidi Bel Abbes, Algeria,
2 University Center of Relizane, 48000, Relizane, Algeria
3 University of Temouchent, 46000, Temouchent, Algeria.

ID 527  Modeling Supply Chain Network for a Poultry Industry in Oman: a Case Study
Ahmed Al-Harrasi, Mohammed Al-Ajmi, Mohammed Al-Shidhani, Muktar Ambu-Saidi, Mohammad Khadem, Ahm Shamsuzzoha and Sujan Piya
Department of Mechanical and Industrial Engineering, Sultan Qaboos University, Muscat, Oman

ID 554  A Decision Mathematical Model for Selection Production Strategy
Ghada M Abdelsalam, Industrial Engineering Department, Zagazig University, Cairo, Egypt

ID 556  Behavioural Modelling of Corundum under the Effect of Porosity Rate
Self-Eddine Bendaoudi, Mokhtar Bounazef and Ali Djefal, Dept. of Mechanical Engineering, Djillali Liabes University of Sidi Bel-Abbes, ALGERIA

ID 569  Beyond Imagination
Deepak T and Aishwarya Ayachit, Department of Computer Science and Engineering, Jyothy Institute of Technology, Bangalore, India
Guru Charan R, Department of Computer Science and Engineering, Vivekananda Institute of Technology, Bangalore, India

ID 609  BIG MART Prediction Sales
Anas EL KAISSI, Anas ALLAM, Ibtihal AYAD, Imane EL YAMANI and Kenza BEN ABDERRAZIK, EMI, Morocco

High School STEM Project Poster Presentation

ID 152  Simulate Self-Driving Taxi in Route Tracking
Mason Chen, Milpitas Christian School, Morrill Learning Center, San Jose, CA, United States

ID 151  Data Mining- Detect Cheating Pattern
Mason Chen, Milpitas Christian School, San Jose, CA, USA
Timothy Liu, Lynbrook High School, San Jose, CA, USA

ID 480  Self-Parking Robotics
Mason Chen, Milpitas Christian School, San Jose, CA, USA

ID 484  Optimize Warehouse Locations
Timothy Liu, Lynbrook High School, San Jose, CA, USA

ID 500  Predict 2017 NBA Team Winning Percent
Mason Chen, Milpitas Christian School, San Jose, CA, USA
Maggie Lau, Challenger School, San Jose, CA, USA

Senior Capstone Design Poster Competition

ID 552  Traffic Sign Evaluation and Redesign of Typeface in Saudi Arabia
Ahmed M. El-Sherbeeny, King Saud University, Saudi Arabia

ID 587  Healthcare Practice and Stake Holders Satisfaction: Perspective from Oman Healthcare System
Alghaliya Nasser Rashid Alkalbani, Sultan Qaboos University, Maskat, Oman

ID 588: Lean Six Sigma to Improve Supply Chain Management in Oil and Gas Industry
Azza Al Riyami, Buthina Al Jabri and Jihan Al-Jashmi, Mohmoud Al-Kindi and Emad Summad, Sultan Qaboos University, Maskat, Oman

Senior Design Projects from Al Akhawayn University, Morocco

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<td>Capacitated Vehicle Routing Problem with Variable Fleet of Delivery Vehicles of Uniform Capacity</td>
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<tr>
<td>Oumayma Gnne</td>
<td>Vehicle Routing Problem with Time Window Constraints and Clustering</td>
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<tr>
<td>Kanza Beladhgar</td>
<td>Vehicle Routing Problem with Distance Constraints and Clustering</td>
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<tr>
<td>Chiayma Sabiri</td>
<td>Capacitated Vehicle Routing Problem with Fixed Fleet of Delivery Vehicles of Uniform Capacity</td>
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<td>Hajar Nibou</td>
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<td>Constructed Wetlands as an Environmental Friendly System for Wastewater Treatment in Al Akhawayn University</td>
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<tr>
<td>Zaineb El Qaissoumi</td>
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<td>Wiam Aissaoui</td>
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<td>Kawthar Khaloufi</td>
<td>Development of details steps and procedures to improve the quality of management and marketing strategy to expand the product to the U.S. Market</td>
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Senior Design Projects from École Mohammedia d’ingénieurs (EMI), Mohammed V University, Rabat, Morocco

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<td>DMAIC Implementation for Logistics Process Reengineering in a Sorting Center, Ayad Ibtihal</td>
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**Dr. Kottala Sri Yogi**  
Assistant Professor, Department of Industrial & Production Engineering  
Institute of Technology, Guru Ghasidas Vishwavidyalaya (A Central University)  
Bilaspur 495009 (C.G) India

An investigation of process capability indices: a case of soft drinks processing unit

Dr. Kottala Sri Yogi is Assistant Professor in the Department of Industrial & Production Engineering, Institute of Technology, Guru Ghasidas Vishwavidyalaya (A Central University) Bilaspur, Chhattisgarh, India. He has a PhD in Operations Management, which he obtained from one of the Asia’s Premier and oldest technical Institute i.e Indian Institute of Technology Roorkee, Roorkee, Uttarakhand, India. His doctoral thesis was on Analysis of Sustainable Supply Chain Management Practices in Indian Manufacturing Industries. He received Master of Engineering with Distinction Specialising Industrial Engineering and Management from Rajiv Gandhi Proudyogika Vishwavidyalaya Bhopal, India.He’s bachelor degree Bachelor of Technology Specialising in Mechanical Engineering in Acharya Nagarjuna University, Guntur Andhra Pradesh, India. He has published more than 15 research papers covering both national and International Proceedings and International Journals. His research interests include Sustainability, Supply Chain Management, Reverse Logistics, Quality Control & Reliability Engineering, product development and Operations Management. He is currently a regular reviewer of twelve top tier referred management journals.

**Professor Ashok Pundir**  
Dean, National Institute of Industrial Engineering (NITIE)  
Mumbai, Maharashtra, India

Prof. Ashok K Pundir is working as Professor (Operations Management) and Dean (Student Affairs & Placement) at NITIE. He has completed his Doctoral Program and Post-Graduation in Industrial Engineering from National Institute of Industrial Engineering (NITIE), Mumbai and B. Tech. in Mechanical Engineering from G.B. Pant University, Pantnagar.

For last more than 15 years, Prof. Pundir is actively associated with various Professional Bodies. He is a Fellow of Indian Institution of Industrial Engineering and also Fellow of Institution of Engineers (India) and Chartered Engineer. He is a Member of Indo-French Technical Association and Member of Global Institute of Flexible Systems Management. He continues to be actively associated with Industrial Engineering Profession and activities of IIIE. He is past Chairman, National Council, Indian Institution of Industrial Engineering (IIIE). In the past, he was Chairman-Board of Examination, Vice Chairman-National Council, and Chairman of Mumbai Chapter of IIIE. He has been actively involved in organizing CEO’s conferences and Annual Conventions organized by IIIE. At present, he is Member of National Council, Board of Examination of IIIE and Member of Editorial Board of Industrial Engineering Journal.

He is a Member of Governing Body of Institute of Engineering and Management, Kolkata. He was a Member of CII-Western Region, Sub-Committee on HR & IR and Environment and Member of FICCI's Western Region Committee for collaboration between technical institutes and industries .Member of Board of Studies at National Institute of Food Technology and Entrepreneurship Management (NIFTEM), Kundli, Haryana, KJ Somaiya Institute of Management Studies &Research, Mumbai . He has travelled to various countries like USA, UK, Germany, Italy and UAE on business trips as well as to attend conferences.

For his contribution to the profession of Industrial Engineering, Prof Pundir was awarded “Lillian Gilbreth Award” for the year 2008-09 by Indian Institution of Industrial Engineering. Also for his significant contribution in application of Industrial Engineering techniques in Industry, IIIE had conferred upon him “H K Firodia Award” for the year 1999-2000. Prof. Pundir has received Honour as “Director’s citation for Exemplary service” at NITIE on 26th January, 2003, Republic Day. He has also received award as “Best Professor in Operations Management” by DNA Innovative B-School Award organized by B-School Affaire, Mumbai on 17th February, 2013.
Syed Tanveer Ahmed is currently working as an Operations Research Analyst in Supply Chain Design for Flipkart India Pvt. Ltd., the largest e-commerce organization in India. He has earned his B.Tech. in Electronics Engineering from the Indian Institute of Technology (IIT) Bhubaneswar, India. He is now working to transform supply chain design through mathematical modeling and optimization and achieve the most simplified, 100% utilized, fastest supply chain network in the country. His research interests include soft computing, simulation, optimization and network design. He is a member of IEEE.

Sarvartha Kanchan is currently working as a Director of Supply Chain Design for Flipkart India Pvt. Ltd. He earned B.Tech. in Electronics and Communication Engineering from Technical University of Uttar Pradesh, India and Masters in Operations Management from ICFAI University, India. Sarvartha has worked in supply chain environment of highly regulated / process driven manufacturing companies like GE Healthcare, Britannia Industries Limited and complex logistics and warehousing domain with Flipkart. He has worked across different supply chain functions namely, Strategic Sourcing, Vendor Development, Process Engineering & Quality, Materials Management and Order Fulfillment. He was responsible for driving efficiency improvement projects in supply chain at a corporate level and was looking at end to end value chain for driving LEAN Six Sigma improvements. Currently he looking at transforming supply chain design to improve speed, reliability and cost for the logistics function of Flipkart. His interests include vendor development, manufacturing, simulation, optimization, design for six sigma and lean. He is a member of ASQ, APICS, WERC.

**Abstract:** Organizations need to diagnose their current operation performance and identify the opportunities for improvement in order to stay competitive. Based on literature, the common operational diagnosis approaches to identify operational improvements opportunities are: 1) Quality Audit; 2) Business Excellence Assessment; and 3) Project Selection for Lean and Six Sigma. While Balance Scorecard (BSC) and Value Stream Mapping (VSM) are powerful tools in operation management. Both of the tools have been utilized in operational diagnosis. The presentation provides the case studies in integration approaches to apply BSC and VSM in operational diagnosis to identify operational improvement opportunities in quality auditing, and BE Assessment.

**Biography:** Presently Mr. Edly is Certification Director and Lead Auditor for various certification schemes including ISO/TS16949. Apart from auditing, he is currently providing Lean, Business Excellence, Quality (ISO9001 and ISO/TS16949), Environment (ISO14001) and Safety (OHSAS18001) management system related consultancy, research and trainings to local and multi-national companies that seek operational improvement and breakthrough. His industrial experience was in the automotive industry. During his stayed with the TRW Automotive, he was tasked with the responsibility of promoting and implementing Lean and Six-Sigma within the Organization. Due to his extensive exposure in Lean and Six-Sigma Management System, he was invited by Malaysia Productivity Corporation (MPC) and Asia Productivity Organization (APO) to conduct training in the area of Lean and Six-Sigma implementation. Mr. Edly Ramly graduated from University of Bradford, UK with Bachelor Degree in Manufacturing System with Management. He then furthered his studies at Sheffield Hallam University, UK and awarded with a Master Degree of Science in Engineering with Management.
Prof. Shekar Babu
Founding Head, AMRITA School of Business, Bangalore
Adjunct Faculty, SUNY, Buffalo, USA
Research & Consulting
AMRITA University, Bangalore, India

Mr. Shekar Babu is the Founding Head of AMRITA School of Business, Bangalore. He started AMRITA School of Business in Bangalore in 2007 in collaboration with SUNY, Buffalo, NY, USA. Mr. Shekar worked as Director, Hewlett-Packard Co., Palo Alto, CA, USA for 11 years and 5 years as a Management Consultant at Price Waterhouse, Los Angeles, CA, USA. Mr. Shekar Babu is also an advisor and on board for a few start-up companies in India. Mr. Shekar Babu is also the Principal Investigator (PI) in developing and implementing CSR Projects since 2006. The 5 CSR projects termed as “Village Resource Centers (VRCs)" were implemented in 5 remote locations of Tamil Nadu and Kerala, in collaboration with Microsoft, HP, CTS, CISCO and ISRO. The projects were focused on Education, Healthcare and Agriculture. The results of these projects were presented in a paper “Enabling Rural Transformation through VRCs” at the International Conference “LifeSkills 2010” which was specifically appreciated by then President of India Dr. A.P.J. Abdul Kalam and Dr. P.V. Indiresan. Mr. Shekar Babu is currently pursuing his Ph.D in “CSR” at AMRITA University. His areas of research include Strategic Corporate Social Responsibility (CSR), Corporate Governance (CG) and Business Ethics. Mr. Shekar received B.E. (Electronics and Communications) degree from Bangalore University, India in 1990 and an M.S. (Computers & Electrical) from California State University, Los Angeles, USA. Mr. Shekar is also an Adjunct Faculty at School of Management, University at Buffalo, NY, USA.

Session III: Industry Solutions
2:30 – 3:45 pm (Tuesday) – Room 2
Session Chair: Dr. Abdul Talib Bon, Universiti Tun Hussein Onn Malaysia

Dr. Abdul Talib Bon
Professor of Technology Management, Department of Production and Operations Management
Faculty of Technology Management and Business
Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

Industrial Engineering Solution in the Industry: Artificial Neural Network Forecasting Approach [ID 555]

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 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 now. 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 28 years of 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 (ITTOn), Universiti Teknologi Malaysia as a lecturer in Mechanical Engineering Department. In this institute, he teaches engineering management and quality control at the undergraduate level. Dr. Abdul Talib Bon has multidisciplinary research interests that encompass industrial engineering, quality management and production and operation management. His completed ten research grant projects 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 65 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 150 International Proceedings and International Journals and 8 books. He is also President of Industrial Engineering and Operation Management Society (IEOMS, Malaysia), 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).

2:55 – 3:20 (Tuesday)

Babar Bilal
Chief Excellence Officer
Bilal Consultancy (Pvt) Ltd.
Multan, Pakistan

Mr. Babar is an Industrial Engineer by profession and Lean Six Black Belt certified from USA. He is also a certified Business Consultant and has been involved in numerous training and optimization projects all over the Pakistan. He has published Research papers at many different prestigious forums. Despite being a young professional, he is making continuous strides in the business by being a practitioner of Blue Ocean Strategical goal. Mr. Babar Bilal has been associated with big names in an industry. His clients fall in Sugar, Textile, Hosiery, Education Institutes, Automotive, Oil & Gas domain. He is currently a member of American Society of Quality & running an operation management company aiming to enhance the productivity of organizations in a proficient manner by dealing in Business Process Excellence (Consultancy/Training), Engineering & infrastructure and IT technological domain. Also, he is a co-founder of Titans Institute (E-learning startup). His core expertise/interests includes Process excellence in industrial & healthcare sector, Six Sigma, LEAN, Blue Ocean Strategy, Business Benchmarking, Manufacturing, Simulation and Supply Chain Management.
Sachin Raja is currently working as Architect in Automation Design department in Flipkart Internet Pvt Ltd and is involved with end-to-end material handling automation projects. Previously he has worked for leading companies like Siemens & Beumer. He has done his MBA through Symbiosis and bachelor studies in Electronics Engineering from Nagpur University.

Swadesh Srivastava is currently Director of Automation Design at Flipkart. Prior to Flipkart, he has worked at leading technology companies like Intel, Lam Research and Apple in the US. He is a technology leader with diverse global experience across R&D, Product Development, Design & Operations in different industries such as ecommerce logistics, consumer electronics, semiconductors, high-tech equipment. He has a PhD from University of Minnesota and B.Tech from Indian Institute of Technology. Swadesh is also active in non-profit sector, playing executive & entrepreneurial roles.

Session IV: Industry Solutions
4:00 – 5:15 pm (Tuesday) – Room 2
Session Chair: Dr. Franz-Josef Kahlen, Owner and MD, Kahlen GPS, Cape Town, South Africa

4:00 – 4:25 (Tuesday)
Mr. Abdul Mannan
Adjunct Professor, Department of Computer Science and Information Technology (CSIT)
The University of the District of Columbia
Washington, DC, USA

Bio: Mr. Abdul Mannan is an Adjunct Professor at Department of Computer Science and Information Technology (CSIT). The University of the District of Columbia, Washington, DC, USA. He is a Software Engineer at Social Security Administration. Mr. Mannan was a Software Developer at EDS, an HP Company for more than five years. He was a Software Engineer at CompSci Resources for three years. Mr. Mannan has earned Master of Science (MS) in Computer Science from New York Institute of Technology, USA and Bachelor of Science in Civil Engineering from Khulna University of Engineering and Technology, Bangladesh.

4:25 – 4:50 (Tuesday)
Ghizlane ELBOK
Division Head, Business Reengineering and Project Management Office (PMO)
Toyota du Maroc S.A.R.L
and
Researcher, AMIPS Research Team, Ecole Mohammadia d’Ingénieurs (EMI)
Mohammed V University, Rabat, Morocco

PMP (Project Manager Professional) and ITIL (Information Technology Infrastructure Library) Certified

Ghizlane ELBOK earned MS/BS in computer sciences in 2004 from the Ecole Mohammadia d’Ingénieurs (EMI), University Mohammed V, Rabat, Morocco. Currently, a PhD student since 2015 at AMIPS research team with 10 years’ experience in project management field. Mrs ELBOK’s research interest is actually focused on the area of Project Portfolio Management. Since 2013, she is a Division Head in charge of Business Reengineering and Project Management Office (PMO) at an automotive company in Morocco. She led the PMO creation and implementation in this company after being in charge of IT Business applications and governance for more than 7 years. She is also PMP (Project Manager Professional) and ITIL certified.

4:50 – 5:15 (Tuesday)
Dr. Franz-Josef Kahlen, AFAIAA, AIAA SciTech14 GEPC Tech Chair
Owner and MD, Kahlen GPS, Cape Town, South Africa
Associate Professor, Department of Mechanical Engineering
University of Cape Town, Upper Campus, Rondebosch, South Africa

Dr. Franz-Josef Kahlen is an owner and managing Director of Kahlen GPS, Cape Town, South Africa. Prof. Kahlen is an associate professor in mechanical engineering at the University of Cape Town, South Africa. He received Dipl-Ing from RWTH Aachen, Germany, MSc from University of Tennessee, USA and Ph.D. from University of Central Florida, USA. His research areas are manufacturing and operational excellence, systems thinking/problem solving and lasers and photonics. Dr. Kahlen focuses on operational excellence using the principles of lean manufacturing for engineering competency development. Research is underway to understand the human and engineering factors in complex systems and complex system failures, and to identify the lessons learned from such research. He has published about 35 papers in journals and conferences and hold 2 US-patents for a Rapid Manufacturing process together with co-inventors and provisional South African patents.
08:00 – 08:25 (Wednesday)

Hisham A. Raheem
Head, Streamlining and Transformation, Technology and Innovation Organization
TASNEE (National Industrialization Company)
Al-Jubail Industrial City, Saudi Arabia

Hisham A. Raheem is a PMP certified Industrial Engineer with a Post-Graduation in Management and 10+ years of experience driving corporate & site-wise, manufacturing, productivity or OE management system improvements in petrochemicals manufacturing, maintenance, R&D and Information Technology industries. He has also performed an OSM role, covering 25+ BSCs and 50+ initiative charters over 6 years across five manufacturing and five services industries. He recently led a maintenance optimization project resulting in multi-millions of dollars in annualized savings, 25-50% reduction in daily non-value added activities, in addition to improving safety, MTTR, process efficiencies, people capabilities and behaviors. The overall program was winner of the 2015 Oil, Gas & Refining – Petrochemicals Middle East (RPME) Operational Excellence project of the year award.

He has authored or co-author company standards and process maps on a range of topics including Enterprise Risk & Strategy management, Sustainability, Reliability & Maintenance, EHSS, Project Management, Product stewardship, CSR, Employee Engagement, Responsible Care® and is currently heading the Streamlining and Transformation function of TASNEEs R&D division and responsible for the integration of operational processes and structures of recently merged R&D centers across the globe.

08:25 – 08:50 (Wednesday)

Mohamed Salaheldin
Quality Assurance Sector Manager
Sidpec, Alexandria, Egypt

Culture of improvement Influences Management System Development – A Case Study about ISO 50001 implementation & ISO 9001:2015 Transition

Mohamed Salaheldin is Quality Assurance Sector Manager at Sidpec; Sidi Kerir Petrochemicals Co. and acting as Company Energy Manager. He is a PhD researcher, Production Engineering Department, Alexandria University, Egypt. He earned his M.Sc. in Industrial and Management Engineering 2008 from Arab Academy for Science and Technology and Maritime Transport, Alexandria, Egypt. He earned his B.Sc. in Electrical Communication and Electro-Physics 1996 from Electrical Engineering Department, Faculty of Engineering; Alexandria University. He has about 20 years of experience with background in oil & gas and petrochemicals in multiple disciplines including automation maintenance and technical studies, quality improvement, and energy efficiency. He is certified Lean Six Sigma Black Belt and UNIDO qualified Energy Management System Expert. He has written or co-authored some articles on multi-criteria decision making.

08:50 – 09:15 (Wednesday)

Andrea Chiarini, MEng, CEng, PGDipl BA, MA, Ph.D.
Visiting Professor, University of Ferrara, Italy
Managing Director, Chiarini & Associates, Bologna, Italy

How ISO/TS 16949 certification can improve performance results through Lean Six Sigma tools and principles: A case study from Italy (ID 178)

Andrea Chiarini, University of Ferrara, Italy
Cherrafi Anass, Cadi Ayyad University, Morocco

Dr. Andrea Chiarini is a Visiting Professor at Ferrara University (Italy). Andrea Chiarini received a Master Degree in Electronic Engineering (100/100 cum laude) and a Post Graduate Diploma in Business Administration from Bologna University, Italy. He has also been awarded a Master of Arts (MA) in Social Science and Research Methods (Organisation and Management) at Sheffield Hallam University, UK and a PhD in the ‘TQM and Business Excellence’ subject. Dr. Chiarini is a senior member of American Society for Quality (ASQ). Dr. Chiarini has been working and researching on subjects such as Operations Management, TQM, Lean Six Sigma, Logistics, Production Management and CSR. As yet he has published more than 50 papers. He is also Managing Director at Chiarini & Associati, Italian consulting firm. This latter has been managing consultancy projects inside world-wide companies such as: ABB, Barilla, Bulgari, Bridgestone, Continental, Ducati Motor Holding, Lamborghini, Fiat, Ferrari, Scavalini, Tyco, Tetrapak, etc. Dr. Chiarini is on the Editorial Board of 4 peer-reviewed journals which include some prestigious journals such as: Business Strategy and the Environment, Journal of Manufacturing Technology Management, Leadership in Health Services, The TQM Journal. He is chief-in-editor of a Springer series dedicated to Operations Management (MEOP).
IEOM Industry Solutions  
April 11-13, 2017  
Rabat, Morocco

Session VI: Industry Solutions  
11:30 am – 12:45 pm (Wednesday) – Room 2

Session Chair: Paul Liu, Director, Automotive Architecture, Renovo Motors, Sunnyvale, California, USA

11:30 – 11:55 (Wednesday)

**Mouna Al Ibrahim**  
Supply Chain, OE & Commercialization Manager, MENA  
The Coca-Cola Company  
Morocco

The Operational Excellence Model in the Coca-Cola System

Mouna holds a degree in Mechanical Engineering (Ecole Mohammadia des Ingénieurs, 1995) and has completed a Master in Business Administration (CSG de l'ISCAE, 2000) and a Master in Telecommunication (France Telecom / OFPPT, 2002). She also has professional accreditations in Project Management, Supply Chain Management and Total Productive Manufacturing/Management from renowned organizations (respectively PMI, APICS, JIPM).

Mouna held several positions in manufacturing and supply chain. She worked 5 years at Colgate-Palmolive Morocco in new product/package commercialization and in industrial engineering, and played critical role in the implementation of an ERP/MRP (Enterprise Resources Planning).

In 2000, Mouna joined Unilever, where she held several positions of growing responsibility, from factory performance improvement to capital projects manager, in Supply Chain management. Specifically, Mouna worked on design, building and implementation of a central logistics platform. Then moved as Supply Chain Manager for both Food and Health & Personal Care categories in Morocco. In that position, she was responsible for the entire supply chain for 2 plants, 250 SKU’s, 400 employees, and the merge of the 2 plants into one.

In 2008, Mouna joined Coca Cola as Supply Chain Improvement manager for the Middle East & North Africa ‘MENA’ region (33 countries/80 plants) and since 2009, she led the Operational Excellence (OE) program deployment and in 2011 took, she over the same responsibility for a wider territory; the Eurasia & Africa Group (88 countries/250 plants) where it was recognized as a great success in the system. From 2013 until now, she had an additional responsibility to look after for the new product commercialization within MENA region.

11:55 – 12:20 (Wednesday)

**Dr. Arnold Gia-Shuh Jang**  
Vice President, Inventec Ventures  
Inventec Corporation  
Santa Clara, California, USA

Human Computer Interactions (HCI)

Dr. Arnold Gia-Shuh Jang is Vice President, Inventec Ventures of Inventec Corporation (TWSE: 2356.TW) since Jan. 2, 2014. Inventec is a leading ODM provider of servers for enterprises and cloud computing, notebooks, smartphones, wearable and IoT devices, with annual sales of US$15B. With the digitalized trend, Inventec also steps into fields of consumer electronics, mobile communications, wireless integrated solutions in the hope of providing customers the best products and service. Dr. Jang led Inventec’s strategic investments at Ignition Design Labs, Rescale, CloudMosa, SKSpruce, Kinwaytek (TPEX: 6516), VoiceBox, Sensel and Qeexo. He serves as board of director at VoiceBox, CloudMosa and SKSpruce, and as board observer at Ignition Design Labs, Linc, Kingwaytek, Sensel and Qeexo. He was Vice President, Investment and Alliance Management, of Inventec Appliances Corp. (IAC) in Taiwan from Oct. 1, 2004 to Jan. 1, 2014. He was responsible for IAC’s investments at TomTom (AEX: TOM.TA), AutoNavi (NYSE: BABA), InvenSense (NYSE: INVN), WIN Semiconductors Corp. (TWSE: 3105.TW), Huga Optotech (TWSE: 2448.TW) and Impinj (NASDAQ: PI). IAC is a global leader in smart handheld devices and internet appliance solutions, specializing in multimedia, broadband and wireless technology convergence. With integrated engineering design and manufacturing capabilities, IAC provides world-renowned ODM customers innovative products and solutions to address the latest high-potential market trends – connected anytime and anywhere. Headquartered in Wugu Industrial Park, Taiwan, IAC was traded on the Taiwan Stock Exchange market under ticker symbol (TWSE: 3367.TW) from 2005 to 2011. IAC was fully acquired by Inventec in Oct. 2011.

Before joining IAC in 2004, Dr. Jang was Senior Investment Manager of Technology Associates Management Company, Ltd. (TAMC), a venture capital firm in Silicon Valley, CA and Plano, Texas, USA, from 1999 to 2004. He was responsible for TAMC’s investments at Fortinet (NASDAQ: FTNT), Integrated Telecom Express (NASDAQ:ITXI), Linkup Systems (acquired by NeoMagic (NASDAQ:NMGC)), Plato Design Systems (NASDAQ: CDNS), Asset Intertech, QPixel, Lynuxworks, Tapwave, RFco, Geometrix, Qustdi and IP Dynamics. He was actively involved with TAMC’s investments at NetScreen Technologies (NASDAQ:JSNP), AlliGen Communications (NASDAQ:ATGN) and Applied Optoelectronics (NASDAQ:AALI).

Dr. Jang was Vice President of Intelligent Trading Systems unit of Springfield Financial Advisory, an affiliate of the Morningside Group, from 1993 to 1999. As a hedge fund manager specialized in technology sector, he closely followed the market trends, technology innovations, manufacturing and global logistics of major listed technology companies in Taiwan and USA.

Dr. Jang received Ph.D. and MS in Electrical Engineering from the National Taiwan University at Taiwan in 1993 and 1989, respectively. He received BS in Electronic Engineering with honors from the Tamkang University at Taiwan in 1987.

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Ms. Resh Plaha, BSc (Hons), IoD, IRCA, ACQI
Crystal Quality UK Ltd

Ms. Resh Plaha sits on the UK’s Chartered Quality Institute ISO9001:2015 Review Panel which reports directly into the ISO Geneva Head Office, ISO Technical Committee 176: Quality Management and Quality Assurance. Resh is also a member of the International Register of Certificated Auditors (IRCA) Advisory Panel responsible for providing thought leadership on the development, promotion and publication of audit methodologies, auditor competencies, auditor training plans, and continuous professional development. Resh is a registered Quality Lead Auditor with IRCA and a Member of the Institute of Directors. She is Managing Director of Crystal Quality UK Ltd, a private company offering bespoke project management consultancy and training services to organisations seeking registration to international standards in Quality Management Systems, Environmental, Health and Safety Systems including Food Safety. Major clients include Mercedes-Benz UK Ltd; the Ministry of Defence; Food and Beverage suppliers to Marks and Spencer plc; Central and local UK Government; Aerospace and other capital goods manufacturing organisations. Resh has a wealth of industrial and management experience that spans over 30 years in Quality Management Systems, commencing in the Food Industry before joining SGS, the international leading certification company. She is a highly experienced trainer and international speaker having personally delivered numerous short public IRCA approved training courses to delegates worldwide. Resh has presented at international conferences, delivered entrepreneurial and quality training at Singapore Nanyang Technological University, Hong Kong Polytechnic University and is a guest lecturer at Loughborough University, United Kingdom. She is a strong advocate of women’s business roles in society and believes in leading by example.

Dr. Ilham Kissani
Assistant Professor of Engineering & Management Science
School of Science & Engineering
Al Akhawayn University, Ifrane, Morocco

Dr. Ilham Kissani is an assistant professor in the field of engineering management for the School of Science and Engineering at Al Akhawayn University in Ifrane, Morocco. She has served as the main advisor and lead instructor for the undergraduate and MS programs in Engineering and Management Systems since 2010. She has helped create very close ties with the AUI School of Business Administration, which allows both schools to leverage our resources and deliver a greater diversity of courses to students, such as supply chain management and operations management. Her background is diverse and includes industrial experience as well as academic. Her degrees are from INSEA, Morocco (Engineer) and Université Laval, Canada (Master and Ph.D). She has worked with Royal Dutch Shell as a project manager and with Modellium Québec, where she consulted in logistics and supply chain issues. Additionally, Dr. Kissani contributes in research in supply chain management, planning, and operations research. She is a member of ASEM, IEEE, IEOM, IIE, INFORMS.

Dr. Noha Mostafa
Assistant Professor
Department of Industrial Engineering
Zagazig University, Egypt

Dr. Noha Mostafa is an assistant professor in the department of Industrial Engineering of Zagazig University, Egypt. She received her B.Sc. in Industrial Engineering from Zagazig University in 2007 and earned her M.Sc. from Zagazig University in 2012. She was a visiting PhD student in Tokyo Institute of Technology, Japan in 2016. She will get her PhD in Industrial Engineering and Management from Egypt-Japan University of Science and Technology (E-JUST) in 2017. Her research interests include supply chain management, logistics management, operations research, and statistics. She has many journal and conference publications in addition to a book chapter. Although her studies are mainly scientific, Noha is interested in many other disciplines including history, literature, arts, and music. She believes that it is necessary to have such balance between science and arts in one’s life. Noha’s objectives are to contribute to the research in her field, and make good communications in the academic and industrial society to be able to strengthen the link between them. Noha is a wife since 2010 and she has a 5-year-old daughter, she believes that she would never have been able to succeed in her work and research without the support of her family.
Dr. Tagwa Ahmed Musa
Associate Professor
Dean – College of Petroleum Engineering and Technology
Sudan University of Science and Technology, Khartoum, Sudan

Dr. Tagwa Ahmed Musa Mohamed is an Associate Professor and Dean – College of Petroleum Engineering and Technology at Sudan University of Science and Technology, Khartoum, Sudan. Her specialist is Petroleum Engineering. She is the first woman in Sudan has a Ph.D. in Petroleum Engineering. She has a good contribution locally, globally, and internationally.

Session VIII: Industry Solutions
4:00 – 4:25 pm (Wednesday)
Dr. Trinath Sahoo
Deputy General Manager, Indian Oil Corporation Ltd., India

Trinath Sahoo is a mechanical engineer with good academic and profession standing. He currently holds the post of Deputy General Manager, IOCL (Indian Oil Corporation Limited) with 20 years of experience in technical and management fields. He has completed Ph.D. from prestigious Indian Institute of Technology. His key expertise areas are innumerable. A few of them are project engineering design, project implementation, process plant maintenance, troubleshooting and analysis of rotating equipments, etc. He has worked as the Plant Turnaround Engineer for various projects and companies. He has published papers in various international magazines and conferences. He has thorough knowledge on pumps operation and maintenance, compressor operation and maintenance, shutdown management, maintenance and reliability, project management, asset management, advanced maintenance strategies etc. He has published several papers in international conferences and books like Carbon, Hydrocarbon Processing, Chemical Engineering and Chemical engineering progress etc. He has published a book on Process plant – Shutdown and Turnaround management thru Taylor and Francis, USA. A leader in workshops, and a public speaker in various nation-wide / international conferences held at Egypt, London, Canada, Germany, South Africa, etc. He is a very motivating and enchanting personality.

4:25 – 4:50 pm (Wednesday)
Professor Donald M. Reimer
Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kern Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs’ Organization. Mr. Reimer serves as a Kern Fellow of The Kern Family Foundation, Co-Direct of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs’ Organization Faculty Advisory Council and is a member of the American Society of Engineering Education. He has received several awards and recognition by local, state and federal agencies for his work in entrepreneurship and minority business development. Mr. Reimer served as member of the Minority Economic Development Committee of New Detroit. Mr. Reimer is member of the Small Business Advisory Council of the Detroit Regional Chamber of Commerce. Mr. Reimer is a member of Advisory Board of the Milwaukee Junction Small Business Assistance Center. He is also a member of the Applied Innovation Alliance. Mr. Reimer serves as a KEEN Fellow for The Kern Family Foundation and is a member of United States Association of Small Business and Entrepreneurship.

4:50 – 5:15 pm (Wednesday)
Dr. Daw Alwerfalli
Professor and Director of Master of Engineering Management Program, College of Engineering
Lawrence Technological University, Southfield, Michigan, USA

Prominent professor, senior technical industry consultant and manufacturing engineering educator with a tremendous expertise in program and curriculum development in higher technical education. Highly experienced and dedicated community leader with great ability to work with an array of constituencies and coalitions in developing shared organizational vision to create and implement strategies aimed at advancing common causes to accomplish goals in fulfillment of the organization’s mission. Highly perceived expert and industrial advisor. He is the founder of Manufacturing Engineering Solutions (MES) a consulting firm founded in 2000. He is senior technical consultant and strategist to the US manufacturing industry. MES developed executive training programs to numerous organizations such as Chrysler, Ford, GM, Exxon Mobil, Conco Philips, Marathon and Tier I and II suppliers to the US auto industry and other international companies. Published numerous research papers in many national and international conferences. Dr. Alwerfalli is a recipient of many prestigious awards including, the 2009 Arab American of the year in education, 1997 Lawrence Tech. Excellence in Teaching Award, 2004 Outstanding Engineering Faculty. He serves on many boards of directors, he also served on the Advisor Council of the Governor of Michigan for the Arab American and Chaldean Affairs Committee. He is currently serving on the steering committee of MAT 2 for dual education where he is a lead assessor to evaluate colleges for readiness in joining MAT 2 coalition of several German US based companies. Dr. Alwerfalli is also serving on the steering committee of “LIFT” Lightweight Innovation for Tomorrow. The committee is to develop innovative educational curriculum and skills for the next generation workforce for the Michigan, Ohio, Indiana and Tennessee under $148 Million, a federal grant for the year 2015-2016. For several years, Dr. Alwerfalli served as the academic advisor of many doctoral students who obtained their doctorate degrees and are currently leaders in the US auto industry.
Ms. Iman Youssef, MA. ILC. CA
CEO, Amour Fragrances
CEO, Best Canadian Liquidation (BCL)
LaSalle, Ontario, Canada

Ms. Youssef, is an Arab-Canadian woman-entrepreneur, community activist, CEO of two companies Amour Fragrances and Best Canadian Liquidation (BCL) located in Canada.

Ms. Youssef is a humanitarian activist, national and international volunteer who regularly manages sponsorships and raises funds to support international causes. She participates in humanitarian and voluntary community work and fully engaged in supporting many charity organizations.

Ms. Youssef is currently pursuing her Doctorate of Business Administration at William Howard Taft University with a research focused on Entrepreneurship among female immigrants; in collaboration with Windsor Women working with immigrant women WWWIW. Iman is fluent in Arabic, English and Sign language, she has applied these skills to pursue other opportunities in business. In 2007, Iman participated in hosting a health and beauty segment on My Second Home, a weekly television program through Rogers T.V. The purpose of this show was to help new immigrants to Canada by providing them with information to assist in the transition from the Middle East to Canada.

Ms. Youssef is a member of board of directors of Daughters for Life Foundation; a non-profit organization, providing quality education for young women of the Middle East to achieve lasting peace. Ms. Youssef has more than two decades of experience in entrepreneurship, and a member of the Canada Arab Chamber of Commerce who awarded her the Business Excellence Award in 2013.

Ms. Youssef was cited in the book titled SHEROES NEXT DOOR, When Ordinary women make extraordinary resolve by Subarna Gupta which was published by Next Century Publishing, Las Vegas Nevada, 2016. The book has helped thousands of people to think big. Iman has an interesting Entrepreneurship journey was one of ten inspiring stories published by the author.
IEOM Student Chapter at Al Akhawayn University, Ifrane Morocco

FACULTY ADVISOR:
Dr. Ilham Kissani
Engineering & Management Science
School of Science & Engineering

IEOM Student Chapter at Ecole Mohammadia d'Ingénieurs (EMI)
Mohammed V University, Rabat, Morocco

COMMITTEE:
Président: Mohamed BAHTAOUI
Vice-Président: Hajjout Tarik
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Director of Program: Lamyae Nabiib
Director of Membership: Zineb El Ghali
Director of Communication: Salma Boutarf

Faculty Advisors:
Dr. Abdelaziz Berrado
Dr. Loubna Benabbou
The International Federation of Engineering Education Societies (IFEES)

IFEES was founded in 2006 at the American Society for Engineering Education’s Global Conference in Rio de Janeiro, Brazil. Engineering education leaders from around the world had gathered the previous year to explore possibilities of creating an international organization for engineering education societies. IFEES is proud to be leading the effort in connecting the world’s engineering education societies and leveraging our members’ collective strengths in order to improve engineering education worldwide. IFEES members represent a diversity not only in cultures, but in engineering education interests, from quality assurance to engineering education, from pedagogy to the role of technology in the classroom. IFEES member societies are expanding their global reach, and new relationships and collaborations are created all the time through IFEES’ global network.

Through the collaboration of its member societies, IFEES will work to establish effective engineering education processes of high quality around the world to assure a global supply of well-prepared engineering graduates. IFEES will strengthen member organizations and their capacity to support faculty and students. It will attract corporate participation, helping to connect engineering graduates with international corporations that have a pressing need for well-trained engineers who can work in a global environment. IFEES will also enhance the ability of engineering faculty, students and practitioners to understand the varied cultures of the world and work effectively in them.

Global Engineering Deans Council (GEDC)

Recognizing the global need for a world-wide forum of engineering deans and rectors, a group of over 20 leaders of engineering education institutions and corporate partners first met in Rio de Janeiro, Brazil, on 9 October 2006 and in Istanbul, Turkey, on 30 September 2007. Encouraged by IFEES and modeled after the ASEE Engineering Deans Council (EDC), the Global Engineering Deans Council (GEDC) was created on 9 May 2008 in Paris, France. The main goal of the GEDC is to provide engineering deans and rectors with ideas, tools, and “best” practices necessary to become innovative leaders of engineering education.

The GEDC holds annual meetings surrounding four strategic objectives: Institutional Leadership, Curriculum Leadership, Policy Leadership and Accreditation Leadership. Accommodating for its diverse membership, the GEDC has met in Argentina, Brazil, Turkey, France, China, and the United Arab Emirates, and will meet in the United States in 2017.

Represented by Dr. Hans J Hoyer (Secretary General, IFEES and Executive Secretary, GEDC)

AFRICAN ENGINEERING EDUCATION ASSOCIATION (AEEA)

The African Engineering Education Association (AEEA) was established at University of Pretoria, South Africa in 2006 after the 3rd African Regional Conference on Engineering Education. The Association was registered in Nigeria in 2012. AEEA is a member of the International Federation of Engineering Education Societies (IFEES). It also has relationships with other national, regional and international organizations. The members of AEEA are from the five sub-regions (North, Southern, West, East and Central) of Africa.

Some of the objectives of the AEEA are to:
- Promote excellent quality engineering education in Africa and bridge the North-South divide.
- Provide network opportunities of engineering educators through Regional Conference on Engineering Education.
- Improve teaching and learning in educational institutions, through workshops for engineering educators.
- Enhance the development of next generation engineering educators with regional Postgraduate Training Centres.
- Promote exchange of students across the continent through removal of international fee barriers.
- Promote technological careers for women, so as to increase the proportion of women in the engineering workforce.
- Collaborate with international organizations to promote research & development in engineering education in Africa.

AEEA’s Activities

1st and 2nd African Regional Conference on Engineering Education (ARCEE) in 2002 & 2004 at the University of Lagos, Nigeria.

3rd ARCEE in 2006 at Univ. of Pretoria, South Africa.

4th ARCEE in 2008 at Dar es Salaam, Tanzania.

In 2008, AEEA co-hosted the 7th American Society of Engineering education (ASEE) Global Colloquium on Engineering Education and 2nd Summit of the International Federation of Engineering Education Societies (IFEES) at Univ. of Cape Town, South Africa.

China-AEEA Capacity Building Workshop was held in Tsinghua University, Beijing, China for AEEA members from the five African sub-regions in 2009.

5th ARCEE 2013 and Inauguration of the African Engineering Deans’ Council (AEDC) at the University of Lagos, Nigeria.

The 6th African Regional Conference on engineering education has been scheduled in South Africa in 2016.

Prof. Funso Falade, President, AEEA
IEOM Student Chapters

IEOM Student Chapter can help students in the development or enhancement of their important skills, including: leadership, communications, organization, planning, time management, budgeting and finance, and other professional skills. Those can help to prepare for their career and to be successful in longer term. If any student group of any educational institute is interested to form an IEOM Student Chapter, please submit chapter establishment form. Contact: info@ieomsociety.org.

Suggested Student Chapter Activities

- Workshops and Seminars
- Industry Speakers
- Plant Tours
- Communication Development
- Career Development
- Networking
- Poster and Paper Contest
- Fund Raising
- Membership Building
- Community Outreach
- Alumni Relations
- Networking Opportunities
- Conferences and Seminars
- Career and Leadership Development

Details can be found in the website: http://ieomsociety.org/ieom/chapters/

IEOM Student Chapters around Globe

1. Ahsanullah Univ. of Science & Technology, Dhaka, Bangladesh
2. Akhawayn University, Morocco
3. Babylon University, Iraq
4. College of Engineering Guindy (Anna University), Chennai, India
5. Government College University Faisalabad, Pakistan
6. Islamic University of Technology (IUT), Bangladesh
7. Jeevod University of Science and Technology (JUST), Bangladesh
8. Kathmandu University, Nepal
9. Khulnag University of Engineering and Technology (KUET), Bangladesh
10. Khulnag University, Bangladesh
11. King Abdulaziz University, Saudi Arabia
12. Lawrence Technological University, Michigan, USA
13. Mehran Univ. of Eng. and Technology, Jamshoro, Sindh, Pakistan
14. National Univ. of Science and Technology in Windhoek, Namibia
15. Pandit Dendayal Petroleum University, Ahmedabad, Gujrat, India
16. Sultan Qaboos University, Oman
17. Tribhuvan University, Nepal
18. Universidad del Rosario, Bogota, Colombia
19. Universiti Utara Malaysia
20. University of Costa Rica
21. University of Indonesia
22. University of Johannesburg, South Africa
23. University of Peradeniya, Sri Lanka
24. Vellore Institute of Technology, India
25. Vidya Jyothi Institute of Technology, Hyderabad, India

Establish Your Institution IEOM Student Chapter
Visit IEOM Website for details: www.ieomsociety.org

MEMBERSHIP BENEFITS
- Be part of the Diverse Industrial Engineering (IE) and Operations Management (OM) Profession
- Professional Development
- Access IEOM Publications
- IEOM Newsletters
- Access IEOM Online Resources
- Networking Opportunities
- Conferences and Seminars
- Career and Leadership Development

IEOM Professional Chapters

AFRICA
- IEOM Society of Botswana
- IEOM Society of Cameroon
- IEOM Society of Ethiopia
- IEOM Society of Ghana
- IEOM Society of Kenya
- IEOM Society of Libya
- IEOM Society of Mauritius
- IEOM Society of Morocco
- IEOM Society of Namibia
- IEOM Society of Nigeria
- IEOM Society of Tunisia
- IEOM Society of Zimbabwe

ASIA and AUSTRALIA
- IEOM Society of Australia
- IEOM Society of Bangladesh
- IEOM Society of Bhutan
- IEOM Society of Indonesia
- IEOM Society of Kazakhstan
- IEOM Society of Malaysia
- IEOM Society of Pakistan
- IEOM Society of Sri Lanka
- IEOM Society of Uzbekistan

MIDDLE EAST
- IEOM Society of Iran
- IEOM Society of Iraq
- IEOM Society of Jordan
- IEOM Society of Lebanon
- IEOM Society of Qatar
- IEOM Society of Saudi Arabia
- IEOM Society of UAE
- IEOM Society of Yemen

NORTH AMERICA
- IEOM Society of Michigan
- IEOM Society of New York
- IEOM Society of Oregon
- IEOM Society of Washington DC

SOUTH AMERICA
- IEOM Society of Colombia
- IEOM Society of Peru

CENTRAL AMERICA AND CARIBBEAN
- IEOM Society of Costa Rica
- IEOM Society of Honduras

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How should an Engineering Student be Equipped with the Required Skills for Future Career?
Workshop Conducted by IEOM Student Chapter at Vidya Jyothi Institute of Technology, Hyderabad, India

Harsh Sharma, August 27, 2016

One-Day Workshop was conducted on 27th August, 2016 titled “HOW SHOULD AN ENGINEERING STUDENT BE EQUIPPED WITH THE REQUIRED SKILLS FOR HIS/HER FUTURE CAREER?” The workshop was graced by the faculties of the English Department and by Dr. Siddhartha Ghosh, Head of training and placements and also Head of CSE Dept. The keynote speaker of the day was Mr. Zia-ul-Haq Husamuddin, who is an incredible person equipped with skills and expertise in the field of training students for their career.

In order to acquaint student participants with the members of the chapter, a brief introduction of the IEOM Student Chapter was provided.

The winner of the Creative Writing Competition, Harsh Sharma and the other student members gave their experiences of how this chapter had helped them in knowing various perspectives. The topic for the competition was “Technical Students Problems in Developing Communication Skills and Some Possible Solutions”.

Dr. Siddhartha Ghosh, Training and Placement Officer, who is a dynamic leader and professor, utilized this platform for expressing his views on how a candidate can build his future if he/she knows the right track and is working hard to achieve goals. He also congratulated the students for their participation and thanked Dr. M. Pratibha, Faculty Advisor of IEOM Student Chapter, for organizing this workshop. He also introduced the Chief Guest and Trainer of the day, Mr. Zia-ul-Haq Husamuddin and welcomed him for further events.

Mr. Zia-ul-Haq Husamuddin, Editor, Movie Director, and Soft Skills Trainer is a person with extraordinary qualities of a leader and has expertise in the field of Soft Skills Training. He had been training students since 14 years and he also worked as a recruiter for an MNC.

Mr. Zia-ul-Haq Husamuddin began the workshop with a small speech which focused on the need of soft skills today as a student studying technical subjects. The series of training events that took under his guidance were as follows:

1. **Body Language:** He first explained how our body language leaves an impact on the recruiter when we go for an interview. The words “First Impression is the Last Impression” were aptly defined by him. Body Language is significant in effective communication. Every student was then called on the dais and asked to self-introduce themselves. He corrected the students on their weaknesses and gave his valuable feedback. Then he spoke about ‘eye contact’ which is important to showcase one’s confidence. He also explained how we should manually grasp control and actively become more observant, because you start to understand what you project with your own body language. The relevant body languages is all about evaluating the situation and adjusting to feel natural and comfortable in it.

2. **Do’s and Don’ts during an Interview:** The next part of the training during the workshop (for an interview) was how the HR Interview takes place. Being a HR Interviewer himself, Mr. Zia-ul-Haq Husamuddin taught about the common mistakes that the applicants make during an interview which makes them nervous and leads to problems during the HR Rounds.

3. **Role Play:** The trainer then divided the students into small teams and asked them to present a Role Play which would be on a specific topic of their choice. The students actively participated in this and then he gave his feedback and correction.

Mr. Zia-ul-Haq Husamuddin ended the training with a valuable suggestion emphasizing on the importance of work and quoted a small quote from the Bhagavad-Gita on the same.

Mr. Zia-ul-Haq Husamuddin was given a token of appreciation by Dr. Pratibha, Faculty Advisor and Dr. Ghosh, T&P officer, for giving his time and advice to the workshop and students.

The workshop ended with prize distribution by the trainer to the winners of the various competitions under the IEOM Student Chapter. The workshop was conducted with active participation by the students and staff collectively.
IEOM 2016 Malaysia Conference Photos (March 8-10, 2016)

IEOM 2016 Detroit Conference Photos (September 23-25, 2016)
IEOM Women in Industry and Academia Forum

Website: http://ieomsociety.org/ieom/women-in-industry-and-academia/
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Industrial Engineering and Operations Management (IEOM) Society recognizes educators, researchers, and professionals for the significant contribution through teaching, research and publication, service, innovation, or leadership in the field of industrial engineering and operations management. The awards presented can be found on the IEOM Society website: http://www.ieomsociety.org/awards/

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IEOM Student Chapter at King Abdulaziz University
Department of Industrial Engineering
Jeddah, Saudi Arabia

Faculty Advisor: Dr. Raed Rida Obaid

Chapter Officers:
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Director of Communications: Bushra Alkhalidi
Director of Membership: Dania Memish

IEOM Student Chapter at Sultan Qaboos University,
College of Engineering, Muscat, Oman

Plan of Activities:

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## IEOM Partner Events

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<td>Charlotte, NC, USA, May 1-3, 2017&lt;br&gt;<a href="https://asq.org/wcqi/">https://asq.org/wcqi/</a></td>
<td><strong>IEOM Symposium on Lean Six Sigma</strong>&lt;br&gt;Bogota, Colombia, May 13, 2016&lt;br&gt;Venue: Universidad del Rosario Campus&lt;br&gt;Symposium Chair: Professor Sandra Milena Chacon Sanchez, Director of Logistics and Production Program, Universidad del Rosario, Bogota, Colombia&lt;br&gt;<a href="http://ieomsociety.org/ieom/bogota2016/">http://ieomsociety.org/ieom/bogota2016/</a></td>
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### IEOM STEM Poster Competitions for High School and Middle School Students
Website: [http://ieomsociety.org/ieom/stem/](http://ieomsociety.org/ieom/stem/)

The IEOM Society (Industrial Engineering and Operations Management Society) is organizing the IEOM STEM Poster Competition for Middle School and High School students in the USA and globally. 2017 IEOM STEM Poster Competitions for Middle Schools and High Schools:

- IEOM STEM Poster Competition – California (San Jose – Sofia University)
- IEOM STEM Poster Competition – Michigan (Southfield – Lawrence Tech)
- IEOM STEM Poster Competition – Oregon (Klamath Falls – Oregon Tech)
- IEOM STEM Poster Competition – West Virginia (Huntington – Marshall University)
- IEOM STEM Poster Competition – Arkansas (Jonesboro – Arkansas State University) along with the 61st Northeast Arkansas Regional Science Fair (NEARSF)

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Upcoming Events

**International Symposium on Industrial Engineering and Operations Management (IEOM UK 2017)**
Bristol, United Kingdom (UK), July 25-26, 2017

**Symposium Website:** [www.ieomsociety.org/ieomuk/](http://www.ieomsociety.org/ieomuk/)

**Venue:** The University of the West of England

**Organized by:** University of Derby and University of the West of England

**Symposium Chairs:**
Dr. Jose Arturo Garza-Reyes, Derby Business School, University of Derby, UK
Dr. Vikas Kumar, Bristol Business School, University of the West of England, UK

**International Congress on Industrial Engineering and Operations Management (IEOM Bogota 2017)**
Marriott Hotel, October 25-26, 2017

**Conference Website:** [www.ieomsociety.org/bogota2017/](http://www.ieomsociety.org/bogota2017/)

**Venue:** Marriott Bogota Hotel

**Host:** U. Rosario

**Conference Chair:**
Professor Sandra Milena Chacon Sanchez
Directora del Programa de Administración de Empresas
Directora programa de Administración en Logística y Producción
Universidad del Rosario, Bogota, Colombia

**8th IEOM International Conference**
Hilton Hotel, Bandung, Indonesia, March 6-8, 2018

**Conference Website:** [www.ieomsociety.org/ieom2018/](http://www.ieomsociety.org/ieom2018/)

**Venue:** Hilton Hotel Bandung