International Conference on Industrial Engineering and Operations Management

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Submissions Received from the Following Countries and Territories:

Algeria, Australia, Azerbaijan, Bangladesh, Belgium, Botswana, Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Croatia, Czech Republic, Denmark, Egypt, Ethiopia, Finland, France, Germany, Ghana, Hungary, India, Indonesia, Iran, Iraq, Ireland, Italy, Japan, Jordan, Kenya, Kuwait, Latvia, Libya, Malaysia, Maldives, Mauritius, Mexico, Morocco, Namibia, Nepal, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Philippines, Portugal, Qatar, Russian Federation, Saudi Arabia, Senegal, Singapore, South Africa, South Korea, Spain, Sri Lanka, Sweden, Taiwan, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States, West Bank and Gaza, Zimbabwe.
Welcome to Kuala Lumpur and the 2016 IEOM Conference

To All Conference Attendees:

On behalf of the IEOM Society, we would like to welcome you to the Sixth International Conference on Industrial Engineering and Operations Management (IEOM) in Kuala Lumpur, Malaysia. 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. With a record number of attendees over 500, we will also have an excellent opportunity to network with the leading scholars and practitioners of our field. After a thorough peer review process, about 500 papers/abstracts have been accepted from about 750 submissions representing more than 70 countries. The program includes many cutting edge topics of industrial engineering and operations management. Full papers will be published in IEEE Xplore and indexed in Scopus.

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. Perhaps the most important example of this issue is the current financial crisis facing the world. This crisis represents extraordinary challenges, but it may also represent significant opportunities for future industrial growth and new directions. We have selected eight outstanding keynote speakers to address these issues:

- Dr. Ron Askin, Prof. & Director, School of Computing, Informatics, and Decision Systems Eng., Arizona State Univ. USA
- Dr. Anwar Ali Mohamed, Former Principal Engineer at Intel Malaysia
- Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia (CREAM), Malaysia
- Dr. Rupy Sawhney, Heath Fellow in Business and Engineering and Professor, University of Tennessee, Knoxville, USA
- Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software, USA
- Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFEES)
- Prof. Dr. Noraini Kaprawi, Dean - Centre for Graduate Studies, Faculty of Technical and Vocational Education, UTHM
- Rajiv Ghatikar, Vice President and General Manager, Siemens PLM Software, ASEAN/Australasia

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 2016 Kuala Lumpur 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 Kuala Lumpur and wishes you an enjoyable learning experience at the conference and a safe and fun adventure exploring Malaysia with its many outstanding attractions.

Enjoy the conference, and the Kuala Lumpur experience.

“Achieving and Sustaining Operational Excellence”
Overall Conference Program

March 7, 2016 (Monday)
13:00 – 21:00 Registration
08:00 – 16:30 Lean Six Sigma Green Belt Certification Workshop

March 8, 2016 (Tuesday)
07:00 – 17:00 Registration
08:00 – 09:15 Parallel Sessions
09:15 – 09:30 Break
09:30 – 10:00 Welcome Address: Professor Datuk Dr. Mohd. Noh bin Dalimin, VC, Universiti Tun Hussein Onn Malaysia
10:00 – 11:00 Opening Keynote: Dr. Ronald G. Askin, Arizona State University, Tempe, AZ, USA
11:00 – 11:30 Networking Break - Exhibition Hall
11:30 – 12:45 Parallel Sessions
12:45 – 13:00 Break
13:00 – 14:00 Industry Keynote: Dr. Anwar Ali Mohamed, O.R. Freelance Consultant & Former Principal Engineer at Intel Malaysia (Boxed Lunch Provided)
14:00 – 14:30 Networking Break - Exhibition Hall
14:30 – 15:45 Parallel Sessions
15:45 – 16:00 Break
16:00 – 17:15 Parallel Sessions
17:15 – 17:30 Break
17:30 – 19:00 Poster Session and Student Chapter Mixer – Exhibition Hall

March 9, 2016 (Wednesday)
07:00 – 17:00 Registration
08:00 – 09:15 Parallel Sessions
09:15 – 09:30 Break
09:30 – 10:15 Morning Keynote: Ir. Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia
10:15 – 11:00 Morning Keynote: Mohammad Shaharudin bin Shamsudin, Head of Production Planning and Control, PROTON Holdings Berhad, Malaysia
11:00 – 11:30 Networking Break - Exhibition Hall
11:30 – 12:45 Parallel Sessions
12:45 – 13:00 Break
13:00 – 14:00 Lunch Keynote: Dr. Rupy Sawhney, University of Tennessee, Knoxville, USA (Boxed Lunch Provided)
14:00 – 14:30 Networking Break - Exhibition Hall
14:30 – 15:45 Parallel Sessions
15:45 – 16:00 Break
16:00 – 17:15 Parallel Sessions
17:15 – 19:00 Break
19:00 – 22:00 CONFERENCE AWARD DINNER and Cultural Program by Cultural Academy of Kuala Lumpur
Award Keynote: Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM

March 10, 2016 (Thursday)
07:00 – 17:00 Registration
08:00 – 16:30 Smart Manufacturing Workshop
08:00 – 09:15 Parallel Sessions
09:15 – 09:30 Break
09:30 – 10:15 Morning Keynote: Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFlEES), Executive Secretary of the Global Engineering Deans Council (GEDC)
10:15 – 11:00: Morning Keynote: Prof. Dr. Noraini Kaprawi, Director of Strategic and Quality Management Office, Faculty of Technical and Vocational Education, University of Tun Hussein Onn Malaysia
11:00 – 11:30 Networking Break - Exhibition Hall
11:30 – 12:45 Parallel Sessions
12:45 – 13:00 Break
13:00 – 14:00 Lunch Keynote: Rajiv Ghatikar, VP & General Manager, Siemens PLM, ASEAN/Australasia (Boxed Lunch Provided)
14:00 – 14:30 Networking Break - Exhibition Hall
14:30 – 20:00 Entrepreneurship Workshop
14:30 – 15:45 Parallel Sessions
15:45 – 16:00 Break
16:00 – 17:15 Parallel Sessions
17:15 – 17:30 Break
17:15 – 18:00 CLOSING MIXTURE – Exhibition Hall

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**Program Matrix- IEOM 2016 Kuala Lumpur**

**March 7, 2016 (Monday): 13:00 – 21:00 Registration 08:00 – 16:30 Lean Six Sigma Green Belt Workshop**

**March 8, 2016 (Tuesday)**

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<td>08:00</td>
<td>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>Lean 6G Green Belt Workshop</td>
<td>OM I</td>
<td>SCM I</td>
<td>Material Flow Cost Accounting</td>
<td>Grad Student Paper Competition</td>
<td>Occupational Safety and Health (OSH)</td>
<td>Data Analytics</td>
<td>Case Studies</td>
<td>Reliability and Maintenance</td>
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<td>09:30</td>
<td>Welcome Address: Professor Datuk Dr. Mohd. Noh bin Dalmi, Vice-Chancellor, Universiti Tun Hussein Onn Malaysia (UTHM)</td>
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<td>10:00</td>
<td>Opening Keynote: Dr. Ronald G. Askin, Professor and Director, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, AZ, USA - Mayang Sari Grand Ballroom</td>
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<td>11:30</td>
<td>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>Lean 6G Green Belt Workshop</td>
<td>OM II</td>
<td>SCM II</td>
<td>Material Flow Cost Accounting</td>
<td>Grad Student Paper Competition</td>
<td>Human Factors and Ergonomics</td>
<td>Data Analytics</td>
<td>Case Studies</td>
<td>Transportation and Traffic</td>
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<tr>
<td>13:00</td>
<td>Industry Keynote: Dr. Anwar Ali Mohamed, O.R. Freelance Consultant, Penang, Malaysia and Former Principal Engineer at Intel Malaysia (Lunches Provided) - Mayang Sari Grand Ballroom</td>
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**March 9, 2016 (Wednesday)**

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<td>08:00</td>
<td>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>Lean and Six Sigma I</td>
<td>SCM V</td>
<td>Manufacturing and Design</td>
<td>Undergraduate Research Pres.</td>
<td>Reliability and Maintenance</td>
<td>Human Factors and Ergonomics</td>
<td>Decision Analysis</td>
<td>Engineering Management</td>
<td>Energy</td>
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<td>09:30</td>
<td>Wednesday Morning Keynote: Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia (CREAI) - Mayang Sari Grand Ballroom</td>
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<td>10:15</td>
<td>Wednesday Morning Keynote: Mohammad Shaharudin bin Shamsudin, Head of Production Planning and Control, PROTON Holdings Berhad, Malaysia - Mayang Sari Grand Ballroom</td>
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<td>11:30</td>
<td>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>Lean and Six Sigma II</td>
<td>SCM VI</td>
<td>Manufacturing and Design</td>
<td>High School STEM Project Pres. n</td>
<td>Reliability and Maintenance</td>
<td>Production Planning</td>
<td>eBusiness &amp; eCommerce</td>
<td>Facility Planning</td>
<td>Energy</td>
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<td>13:00</td>
<td>Wednesday Lunch Keynote: Dr. Rupy Sawhney, Heath Fellow in Business and Engineering, Professor, Industrial and Systems Engineering, University of Tennessee, Knoxville, USA (Lunches Provided) -</td>
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<td>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>OR I</td>
<td>Lean and Six Sigma III</td>
<td>SCM VII</td>
<td>Automation and Control</td>
<td>Healthcare Systems</td>
<td>Production Planning</td>
<td>Information Technology</td>
<td>Financial Engineering</td>
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<td>16:00</td>
<td>GEE: Panel Session</td>
<td>Industry Solutions</td>
<td>OR III</td>
<td>Lean and Six Sigma IV</td>
<td>SCM VIII</td>
<td>Entrepreneurship and Innovation</td>
<td>Engineering Education</td>
<td>Healthcare Systems</td>
<td>UG Research Competition</td>
<td>Project Management</td>
<td>Sustainability and Green Systems</td>
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<td>19:00</td>
<td>Conference Award Dinner and Cultural Program by Cultural Academy of Kuala Lumpur - Mayang Sari Grand Ballroom</td>
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<td>Award Keynote - Hulas King, Director, Diversity, Professional Affiliations &amp; Global Community Relations, Siemens PLM Software</td>
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**March 10, 2016 (Thursday)**

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<td>08:00</td>
<td>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>Smart Manufacturing Workshop</td>
<td>Quality Control</td>
<td>Logistics</td>
<td>IEOM in Asia</td>
<td>Artificial Intelligence</td>
<td>Healthcare Systems</td>
<td>Modeling and Simulation</td>
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<td>09:30</td>
<td>Thursday Morning Keynote: Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFIES), Executive Secretary - GEDC</td>
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<td>Artificial Intelligence</td>
<td>Lean and Six Sigma</td>
<td>Case Studies</td>
<td>Sustainable Manufacturing</td>
<td>Service Systems</td>
<td>Modeling and Simulation</td>
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<td>13:00</td>
<td>Thursday Lunch Keynote: Rajiv Ghatikar, Vice President and General Manager, Siemens PLM, ASEAN/Australasia, (Lunches Provided) - Mayang Sari Grand Ballroom</td>
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<td>16:00</td>
<td>Global Engineering Education</td>
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<td>Smart Manufacturing Workshop</td>
<td>Operations Excellence</td>
<td>Entrepreneurship Workshop:</td>
<td>Case Studies</td>
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<td>IEES Meeting</td>
<td>IEOM Student Chapter Dev. Meeting</td>
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Keynote Speakers

Opening Keynote (Tuesday, March 8, 2016): 10:00 – 11:00 am

Dr. Ronald G. Askin
Professor and Director - School of Computing, Informatics, and Decision Systems Engineering
Arizona State University, Tempe, AZ, USA

Key Industrial Engineering Principles and Research Opportunities for Advancing Operations Management

Ronald G. Askin, Ph.D., is a Professor of Industrial Engineering and Director of the School of Computing, Informatics, and Decision Systems Engineering at Arizona State University. Dr. Askin received a B.S. in Industrial Engineering from Lehigh University and an M.S. in Operations Research and a PhD in Industrial and Systems Engineering from Georgia Institute of Technology. He has over 30 years of experience in the development, teaching and application of methods for systems design and analysis with particular emphasis on production and material flow systems. Dr. Askin is a Fellow of the Institute of Industrial Engineers (IIE) and Editor-in-Chief of IIE Transactions. He also serves on the INFORMS Board of Directors and has previously served on the IIE Board of Trustees, as President of the IIE Council of Fellows, Chair of the INFORMS Manufacturing and Service Operations Management Society, Chair of the Council of Industrial Engineering Academic Department Heads (CIEADH) and Chair of the Association of Chairs of Operations Research Departments (ACORD). Dr. Askin has published over 120 journal and conference papers and presented invited keynote addresses on four continents. His list of awards includes a National Science Foundation Presidential Young Investigator Award, the Shingo Prize for Excellence in Manufacturing Research, IIE Joint Publishers Book of the Year Award, IIE Transactions Development and Applications Award, Young Investigator Award, the Shingo Prize for Excellence in Manufacturing Research, IIE Joint Publishers Book of the Year Award, the Eugene L. Grant best paper award from The Engineering Economist, and the IIE Transactions Development and Applications Award.

Industry Keynote (Tuesday, March 8, 2016): 1:00 – 2:00 pm (Lunch Provided)

Dr. Anwar Ali Mohamed
O.R. Freelance Consultant, Penang, Malaysia
Former Principal Engineer at Intel Malaysia

Dr. Anwar Ali is a freelance trainer and consultant in Operations Research (OR). He has 27 years’ experience in semiconductor industry, 2 years at Texas Instruments in Kuala Lumpur followed by 25 years at Intel Technology Sdn Bhd in Penang. He was a Principal Engineer for his last 5 years at Intel. He practised OR in a discrete event simulation and mathematical modelling for 13 years. His areas of expertise include high fidelity equipment simulation modelling, factory capacity modelling and optimization, and the relevant enterprise data integration involved. Previously, he held Industrial Engineering (IE) management positions supporting factory start-up and designing, developing and deploying enterprise systems for IE capacity planning. He was an equipment development engineer for 7 years, developing IC logo machine vision inspection and PC-based equipment control during the days of 286/386. Dr. Anwar Ali completed his B.Eng. in Mechanical Engineering (Industrial Engineering major) from Universiti Teknologi Malaysia (UTM) in 1989, M.Sc. in Decision Science from Universiti Utara Malaysia (UUM) in 2005, and doctorate in Engineering Business Management from UTM in 2014.

Wednesday Morning Keynote (March 9, 2016): 9:30 – 10:15 am

Ir. Dr. Zuhairi Abd. Hamid
Executive Director - Construction Research Institute of Malaysia (CREAM)
Kuala Lumpur, Malaysia

Green, Sustainability and Lean Systems in Malaysia Construction Industry and Management

Zuhairi Abd. Hamid is the Executive Director of Construction Research Institute of Malaysia (CREAM), a research institute established under Construction Industry Development Board (CIDB) which he joined in January, 2006. He has over 27 years of experience in the construction industry and started his professional career as a civil and structural engineer with Public Works Department of Malaysia in 1984. He has worked under various capacities as road engineer, bridge engineer, building engineer, district engineer, assistant director of planning, forensic and structural design engineer. He joined CIDB in 1998 as a senior manager at the Technology Development Division and later was appointed to his current post at CREAM. He holds a B.Eng. (Hons.) Civil from University Technology Malaysia. He gained his Masters in Structural Dynamic Engineering from Kanazawa University, Japan and his PhD in IT Construction majoring in Healthcare Facilities Management from University of Salford, United Kingdom. He is a Professional Engineer (P.Eng.) in the Board of Engineers Malaysia and a Fellow of the Institution of Engineers Malaysia (FIEM). He sits in many committees as construction industry advisor to UTM, UTHM, UTP, UPNM and UTM. He also sits as a Board Member in the United Nation support International Research Council, CIB “Conseil International du Bâtiment” (International Council for Research and Innovation in Building and Construction). His research interest and expertise is within the area of Strategic Management of IT in Construction, Strategic Facilities Management in Health Sector, Structural dynamic (wind engineering and earthquake engineering), Prefabricated building construction and Open Building System and Manufacturing.

Wednesday Morning Keynote (March 9, 2016): 10:15 – 11:00 am

Mohammad Shaharudin bin Shamsudin
Head of Production Planning and Control
PROTON Holdings Berhad, Malaysia

En Mohammad Shaharudin Bin Shamsudin was borned in 1969 at Machang in Kelantan. He studied at Sekolah Menengah Sains Kelantan and then further his studies in Mechanical Engineering in 1987. He graduated with a BSc (Honours) in Mechanical Engineering from University Technology Malaysia. He joined Proton in 1994 as an Executive in Production Planning and Control Department and have been there until the present time. He gradually work his way up in the department to be the Head of Progress Control Tanjung Malim. There he is involved in the development of the Automatic line Control (PALC) in the new plant at Tanjung Malim. Then he is transferred to be the head of Manufacturing Product and Data Management. This involve the management of data of new products as well as managing changes in product engineering changes in current products. Engaged with consultants in developing manufacturing system and Enterprise resource planning, En Mohammad Shaharudin have wide experience in systems. However his main speciality is still in the development of the Manufacturing Bills of Material and Production Planning. In 2014, he was appointed as the Head of Supply Chain Management and Production Control. In this position he is involved with improvements in the efficiency of supply chain through out the process flow in the making of vehicles.
Wednesday Lunch Keynote (March 9, 2016): 1:00 - 2:00 pm (Lunch Provided)

Dr. Rupy Sawhney
Health Fellow in Business and Engineering and Professor, Industrial and Systems Engineering
University of Tennessee, Knoxville, USA

Rupy Sawhney is a Professor & Health Fellow in Industrial and Systems Engineering at the University of Tennessee, Knoxville. He earned B.S. and M.S. in Industrial Engineering and Ph.D. degrees in Engineering Science and Mechanics from the University of Tennessee, Knoxville in 1981, 1984 and 1991 respectively. He was a Weston Fulton Professor and Department Head during 2010-2013. He is also a faculty for the newly created Center for Interdisciplinary Research and Graduate Education (CIRE) in Energy. His current research focuses on trying to use technology and innovation to enhance organizational productivity. Dr. Sawhney has assembled a team over the past five years that has a greatest critical mass within the history of the Industrial Engineering department to compete with other academic institutions in the lean area. His research group at this moment consists of 40 Postdocs, Ph.D. and Master students. He has published significant journal papers, conference papers and has submitted for 5 patents. He has graduated more than 50 Master’s and 8 Ph.D. students. His funded research projects are in the millions of dollars. He has worked with over 200 companies and is a recipient of various awards (Boeing Welliver Fellow, Alcoa Faculty Award, IE Lean Teaching Award, Reuben Harris Award, and Accenture Teaching Excellence Award).

Conference Award Keynote, Wednesday, March 8, 2016, 7:00 pm

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 (IFEES) 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.

His 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

Thursday Morning Keynote Speaker (March 10, 2016): 9:30 – 10:15 am

Dr. Hans-Juergen Hoyer
Secretary General of the International Federation for Engineering Education Societies (IFEES)
Executive Secretary of the Global Engineering Deans Council (GEDC)
Resident Scholar in Global Engineering at Marquette University

Hans J. Hoyer is the Secretary General of the International Federation for Engineering Education Societies (IFEES), Executive Secretary of the Global Engineering Deans Council (GEDC), and Resident Scholar in Global Engineering at Marquette University. Former Director of International Programs and Strategy for the American Society for Engineering Education (ASEE) and co-founder of the Indo-US Collaborative for Engineering Education (IUCEE). Prior to 2006, Hans J. Hoyer was CEO of World Links, a spin-off of the World Bank. In this capacity, he worked globally on issues related to secondary education, teachers’ education, and on-line collaborative learning focusing on science and social studies among high school students across the globe.

Dr. Hoyer has been a Visiting Scholar at the Center for International Studies at MIT, a Fellow at Harvard’s School of Education and Visitor at the Kennedy School of Government. He was dean of the graduate program at the School for International Training, World Learning and Executive Director of the Executive Training Program for global governmental and NGO leaders in Brattleboro, Vermont. Prior to this, he taught cultural anthropology and Latin American Studies at George Mason University in Fairfax, VA. and Montgomery College, Takoma Park, MD. He earned his Ph.D. at American University in Washington, D.C. and was a post-doctoral fellow at the Organization of American States, carrying out research in the Rio de la Plata region of South America. He is Honorary Professor in universities in India, Hungary, Peru and Kazakhstan. He started his career as a Peace Corps Volunteer and high school teacher in Linares and Talca, Chile and has lived in over twenty countries including India, Sri Lanka, Chile, Peru, Brazil, Ecuador, Paraguay, Argentina, Mexico, South Asia, Belgium, and Sub-Saharan Africa (Kenya and Zimbabwe). Over his extensive career he has visited more than 136 countries, is fluent in four languages and conversant in an additional five languages.

Dr. Hoyer has led several international development programs, including CARE, Plan International, and Heifer International. In these latter roles, he held executive leadership positions such as Senior Vice-President/Chief Operating Officer, and Regional Executive and was responsible, among others, for raising large financial resources from a multitude of donors including government agencies, the World Bank, IAB, several foundations, corporations and private donors. He also represented the largest U.S. farming membership association as a spokesperson at the European Union and European Parliament in Brussels and also represented them in Mexico and Central America. He has served on the board of directors with Nelson Mandela of El Taller, a global civil society network headquartered in Tunisia as well as on several social-action community groups. He was also on the staff with the Nelson Mandela Foundation, created by the U.S. Congress to support socio-economic development throughout Latin America/Caribbean. He was on the advisory board of Hewlett Packard’s e-Inclusion Global Advisory Board related to their work in South Africa and Founding member of the Board of the Engineering for the Americas (EFA) initiative under the umbrella of the OAS. He serves on the Executive Board of the International Journal of Engineering Education, Sciene and Technology. He has written and published on a broad range of subjects related to international development, politics, health, education, and engineering education. Born in Berlin, Germany, he immigrated to the US as a teenager. His wife is Canadian and he has four children who were born in the U.S., Brazil, Mexico and Belgium.
Thursday Morning Keynote Speaker (March 10, 2016): 10:15 – 11:00 am
Prof. Dr. Noraini Kaprawi
Director of Strategic and Quality Management Office, Faculty of Technical and Vocational Education University of Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

Prof. Dr. Noraini Kaprawi is Director of Strategic and Quality Management Office at Universiti Tun Hussein Onn Malaysia (UTHM). Previously she was Dean of the Centre for Graduate Studies. She received Ph.D. in Management of Higher Education from University of Manchester, United Kingdom, M.Sc. in Technology Management from University of Technology Malaysia (UTM), Postgraduate Teacher Certificate, Temenggong Ibrahim Teachers College (MPTI) in Johor Bahru and B.Sc. in Physics, from University of Aston in Birmingham, United Kingdom. Dr. Noraini held positions at Teacher/Education Officer of Ministry of Education Malaysia during 1986 – 1996. She was Lecturer at Politeknik Port Dickson (1992-2000) and Assistant Director Technical and Vocational Education Planning and Research Division, Ministry of Education (2000-2001). Dr. Noraini held various positions at Universiti Tun Hussein Onn Malaysia (UTHM) including lecturer, Assoc. Professor, Deputy Director of Continuing Education, Centre for Research Consultancy and Continuing Education, and Head of Manager for Institutional Project Management Office (iPMO lead). Dr. Noraini has served in many national and international professional organization including Wide involvement in National and Institutional TVE (Technical and Vocation Education) Projects. She has published many papers, provided workshops and attended national and international conferences. Many of her publication are related on technical and vocational education and training. Dr. Noraini has received various awards including:

2012: Universiti Tun Hussein Onn Malaysia, Jasa Bakti 10 Tahun
2010: Research and Innovation Festival 2010, Universiti Tun Hussein Onn Malaysia, for the project Development of A New Empirical Based Competency Profile for Malaysian Technical and Vocational Education and Training (TVET) Instructors, Silver Medal
2009: Universiti Tun Hussein Onn Malaysia, Vice Chancellor Award
2007: Universiti Tun Hussein Onn Malaysia, Excellent Teaching Award
2006: 34th International Exhibition of Inventions of New Techniques and Products, Geneva, Bronze Medal
2006: The International Technology Exibition (ITEX 2006 in KLCC for the project of Curriculum Design Management System (CDMS), Bronze Medal
2005: Kolej Universiti Teknologi Tun Hussein Onn, Potential Researcher Award
2003: Kolej Universiti Teknologi Tun Hussein Onn, Excellent Service Award

Thursday Lunch Keynote Speaker (March 10, 2016): 1:00 - 2:00 pm (Lunch Provided)
Rajiv Ghatikar
Vice President and General Manager
Siemens PLM, ASEAN/Australasia

Rajiv Ghatikar is the Vice President and General Manager for Siemens PLM Software’s business in ASEAN and Australasia. Siemens PLM Software, a business unit of the Siemens Digital Factory Division, is a world-leading provider of product lifecycle management (PLM) software, systems and services with nine million licensed seats and 77,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software helps thousands of companies make great products by optimizing their lifecycle processes, from planning and development through manufacturing and support. Located in Hong Kong, Rajiv is responsible for managing all sales, sales support and services delivery for his region. Prior to his current role, Rajiv was associated with PLM industry. From 1991 to 1998 he also worked with Procter & Gamble in both India and China in various financial roles with increasing levels of responsibility. In charge of a region that is predominantly run through a network of channel partners, Rajiv’s personal approach towards life is most helpful. As a forward thinker, Rajiv believes that it is important to build trust and mutual respect with his team, partners and customers so as to achieve the best possible results. Born in Mumbai, India, Rajiv studied at both the St. Mary’s School and the Sydenham College before completing his professional studies as a Chartered Accountant. Rajiv has spent most of his work life and career outside of India and is committed to developing the potential of the Asia Pacific region, which he sees as his home. A keen traveler and one who enjoys learning about different cultures, Rajiv spends most of his spare time visiting various countries with his wife. He is also actively involved in hiking and other outdoor activities.
PROGRAM (Global Engineering Education)

March 8, 2016 (Tuesday)
07:00 – 17:00 Registration
08:00 – 09:15 Session I:
- Dr. C. Chinanaraj, Professor of Mechanical Engineering and State Project Coordinator (TEQIP), Directorate of Technical Education, Chennai, INDIA
- Dr. S. Indra Devi, Senior Lecturer, Department of Languages, Centre for Languages and Human Development, Universiti Teknokal Malaysia Melaka
- Ahmed E. Haroun and Salih O. Duftuwa, Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, KSA
09:30 – 10:00 Welcome Address – VC UTHM
10:00 – 11:00 Opening Keynote: Dr. Ronald G. Askim, Professor and Director, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, AZ, USA
11:00 – 11:30 Break
11:30 – 12:45 Session II:
- Professor Dr. Mushkat Al-Atabi, Dean, School of Engineering, Taylor’s University, Selangor Darul Ehsan, Malaysia
- Professor R. Natarajan, Former Chairman, AICTE, Former Director, IIT Madras, India
- Dr. Christoph Wunck, Professor, Business Computing Systems, Industrial Engineering, Jade University, Wilhelmshaven, Germany
13:00 – 14:00 Industry Keynote: Dr. Anwar Ali Mohamed, O.R. Freelance Consultant, Penang, Malaysia and Former Principal Engineer at Intel Malaysia
14:00 – 14:30 Break
14:30 – 15:45 Session III:
- Dr. Alok Verma, Ray Ferrera Professor and Chair, Department of Engineering Technology, Old Dominion University, Norfolk, Virginia, USA
- Dr. Ramiro Jordan, Professor and Associate Dean of Engineering for International Programs, Univ. of New Mexico, USA and ISTE founder, IFEES ExCom
- Dr. Mohammad Yakoob Ali, Professor and Head, Department of Manufacturing and Materials Engineering, International Islamic University Malaysia
16:00 – 17:45 Session IV:
- Dr. Chan Chee-Ming, Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies, Universiti Tun Hussein Onn Malaysia
- Dr. Ayyam Jaaroon, Asst. Prof. in IE, Director of Quality Assurance Unit, Director of ABET Centre, Annajah National Univ., Nablis, West Bank, Palestine
- Prof. Dr. Gunduz Ulusoy, Faculty of Engineering and Natural Sciences, Sabanci University, Istanbul, Turkey
17:30 – 19:00 POSTER SESSION and Student Chapter Mixer

March 9, 2016 (Wednesday)
07:00 – 17:00 Registration
08:00 – 09:15 Session V:
- Dr. Adagbonyin Moses Obiazi, Dean, Faculty of Engineering and Technology, Ambrose Alli Univ., Nigeria and President, African Engineering Deans Council
- Dr. C. B. Gupta, Professor, Department of Mathematics, Birla Institute of Technology and Science, Pilani (Raj.), India
- Dr. Jahn Mohd Rohani, Head - Industrial Engineering Programme, Dept. of Materials, Industrial & Manufacturing Engineering, Universiti Teknologi Malaysia
09:30 – 10:15 Keynote: Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia (CREAM), Kuala Lumpur, Malaysia
10:15 – 11:00 Keynote: Speaker from Proton Automobile
11:00 – 11:30 Break
11:30 – 12:45 Session VI:
- Dr. Alfredo Soureiro, Associate Professor, University of Porto, Portugal and Past President - European Society of Engineering Education
- Dr. Rosemary Seva, Dean of Gokongwei College of Engineering, De La Salle University (DLSU), Manila, Philippines
- Dr. Asela K. Kulatunga, Senior Lecturer, Department of Production Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka
13:00 – 14:00 Keynote: Dr. Rupiy Sawhney, Heath Fellow in Business and Engineering, Professor of Industrial and Systems Eng., Univ. of Tennessee, Knoxville, USA
14:00 – 14:30 Break
14:30 – 15:45 Session VII:
- Dr. Md. Mizanur Rahman, Senior Lecturer, Faculty of Mechanical Engineering, University Technology Malaysia (UTM), Skudai, Johor Bahru, Malaysia
- Dr. Pal Pandi Ammarasvi, Associate Professor, Bharath Niketan Engineering College, Aundipatty, Taminadu, India
- Dr. Eldon Caldwell, Director, Industrial Engineering Department, Engineering School, University of Costa Rica
15:45 – 16:00 Break
16:00 – 17:45 Session VIII: Panel Session
- Dr. Abu Masud, Boeing Global Engineering Professor, Professor of Industrial and Manufacturing Engineering, Wichita State University, Kansas, USA
- Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies and Resident Scholar - Marquette University
- Dr. Funso Falade, Department of Civil & Environmental Engineering, University of Lagos, Nigeria and President, African Eng. Education Association
- Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software, St. Louis, Missouri, USA
19:00 – 22:00 CONFERENCE AWARD DINNER, AND CULTURAL PROGRAMS
Award Keynote: Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software, St. Louis, Missouri, USA

March 10, 2016 (Thursday)
07:00 – 17:00 Registration
08:00 – 09:15 Session IX:
- Dr. Khatriyag Mohd Yusof, Director, Centre for Engineering Education (CEE), Universiti Teknologi Malaysia, Johor Bahru, Malaysia
- Dr. Armar Partap Singh Phanaw, Professor, Sant Longowal Institute of Engineering & Technology (SLIET)-Deemed University, Punjab, India
- Dr. Funso Falade, Department of Civil & Environmental Engineering, University of Lagos, Nigeria and President, African Engineering Education Association
09:30 – 10:15 Keynote: Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFESS)
10:15 – 11:00 Keynote: Prof. Dr. Noraini Kaprawi, Dean-Centre for Graduate Studies, Faculty of Technical and Vocational Education, Univ. Tun Hussein Onn Malaysia
11:00 – 11:30 Break
11:30 – 12:45 Session X:
- Dr. Kamel Hawwash, Professor in the School of Civil Engineering, Univeristy of Birmingham, UK and Immediate Past President of SEFI
- Dr. Charles Mbohwa, Professor and Vice-Dean Postgraduate Studies, Research and Innovation, University of Johannesburg’s (UJ), South Africa
- Dr. S. C. Naik, Professor, Former Head of Chem Engg and Dean, National Institute of Tech., Rourkela, India and Past President, The Ins. of Engineers
13:00 – 14:00 Keynote: Rajiv Ghatikar, Vice President and General Manager, Siemens PLM, ASEAN/Australasia
14:00 – 14:30 Break
14:30 – 15:45 Session XI:
- Professor Khaledda ALUA, Research Laboratory of Science in Industrial Process Engineering (LSGPI), USTHB - FGMPG, Bâb-Ezzouar, Algiers- Algeria
- Shri. Mahesh Anant Kakade, Controller of Examinations, Shivaji Univ., Kolhapur and Chairman, Indian Society for Technical Education, Maharashtra- Goa
- Dr. Hamid Parsaei, Prof. of Industrial and Systems Eng., Texas A&M Univ. (College Station) and Director of Academic Outreach - Texas A&M Univ. Qatar
15:45 – 16:00 Break
16:00 – 17:45 Session XII:
- Nidhi M B, A/HOd Mechanical Engineering Department, MarBaselios College of Engineering & Technology (MBCET), Thrivunanthapuram, Kerala, India
- Dr. P. Muredzi, Dean – School of Engineering, Harare Institute of Technology, Zimbabwe
17:30 – 19:00 Closing Mixer
DISTINGUISHED SPEAKERS – Global Engineering Education
Tuesday (March 8, 2016)

Session I: Global Engineering Education Room Starhill 4

Session Chair: S. Indra Devi, Universiti Teknikal Malaysia Melaka

08:00 – 08:25 (Tuesday)

Dr. C. Chinnaraj
Professor of Mechanical Engineering and State Project Coordinator (TEQIP)
Directorate of Technical Education, Chennai, Tamil Nadu, INDIA

Global Engineering Education Challenges and Opportunities

Prof. Dr. C. Chinnaraj is a Professor of Mechanical Engineering, Government College of Engineering, Salem, Tamil Nadu, India. He is now a State Project Coordinator (TEQIP), Directorate of Technical Education, Chennai-25, Tamil Nadu, India. Dr. Chinnaraj has received Ph.D. and master from ANNA University, Guindy, Chennai and B.E (Mechanical) from Madras University, Chennai, India. He has 32 Years as a Teacher in various State Government Engineering Colleges, acted as Examiner, Question paper setter and Chairman for various University examinations. Governing and Academic Council Member for many Engineering Colleges and Polytechnic Colleges and guided many Undergraduate and Post Graduate student Projects. He also received certificate for Guiding the State level Student best Project (Solar Wind ventilated Drier) and assisted the head of Institution in development of department, starting of new Post Graduate degree course in thermal engineering and Institution. Dr. Chinnaraj has 8 years in administrative line at Directorate of Technical Education, Chennai-25, Tamil Nadu initially as Assistant Director (planning) and then as Project Coordinator for the World Bank assisted Technical Education Quality Improvement Programme (TEQIP). He assisted the Commissioner of Technical Education in execution of State’s various Schemes, starting of new Government Polytechnic and Engineering Colleges, curriculum / syllabus revision for Polytechnic Colleges, formation of skill development centre, Quality Circle and Teaching Learning Centre at Engineering Colleges and also for conducting Faculty Development Programmes. He visited leading Technical Universities in GERMANY, Peking University in BEIJING, CHINA and University of Buffalo, USA. Dr. Chinnaraj has served two times as State Secretary and Treasurer for Tamil Nadu and Puducherry State Indian Society for Technical Education (ISTE) Section and two times received the best section National award for the drive in the ISTE membership, starting of ISTE chapters, encouraging the institutions to conduct the State level and National level Programmes for faculty and students. Two times National Executive Council Member of ISTE and helped the Institutions to conduct the Faculty Development Programmes, National Seminar, Conference and workshop for Faculty and Students. He represented and Lead the Anna University Volley Ball Team.

08:25 – 08:50 (Tuesday)

S. Indra Devi
Senior Lecturer, Department of Languages, Centre for Languages and Human Development
Universiti Teknikal Malaysia Melaka


S. Indra Devi who serves as a senior lecturer at the Department of Languages in the Technical University of Malaysia Melaka currently teaches Technical Communication and English for Professional Communication. She holds a Diploma in ESL from University Malaysia, Bachelor Degree in Education (TESL) from Putra University Malaysia, Master in Arts (TESL) from The National University of Malaysia and presently she is about to complete her PhD in English Language Studies. With 30 years of teaching experience and as a consultant in the field of TESL and ESP, she conducts various courses for undergraduate engineers, teaching engineers and professionals in government and statutory bodies besides being a trainer for the IELTS examination. Her research interest include Engineering Education, TESL, ESP as well as Multimodal and Computer Mediated Communication. As an instructor in a technical university, she has gained vast practical experiences in relation to communication skills and competencies among engineers as well as its implication towards global engineering practice. She has authored various scientific journal articles on topics related to oral communication apprehension, communication competencies, strategic competence and oral presentations of undergraduate engineers besides designing assessments, needs surveys and language related courses for engineers. Her other research publications include topics related to university-industry strategic alliances, employer engagement in teaching and learning, and her most recent research is related to Multimodal and multiliteracies approach as well as neuroscience intervention in ESP instruction for engineers. She has authored several books and her recent book is Grammar for Technical Writing which was specifically written for engineers and was published by Pearson Publishers. She is also active in various community projects and leadership posts. Due to her excellent achievements, she has received the award for Excellence in Service from UTem in 2014.

08:50 – 09:15 (Tuesday)

Ahmed E. Haroun and Salih O. Duffuaa
Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, KSA

An Effective Organizational Structure to Implement Strategic Plans In Higher Education Institutions

Session II: Global Engineering Education Room Starhill 4

Session Chair: Dr. Christoph Wunck, Jade University, Wilhelmshaven, Germany

11:30 – 11:55 (Tuesday)

Professor Dr. Mushtaq Al-Atabi
Dean, School of Engineering, Taylor’s University, Selangor Darul Ehsan, Malaysia

Bio: Professor Mushtaq Al-Atabi is currently the Dean of School of Engineering at Taylor’s University, Malaysia. His research interests include engineering, entrepreneurship, education and leadership. He is an Honorary Chair at the School of Mechanical Engineering of the University of Birmingham (UK) and the Editor-in-Chief of Journal of Engineering Science & Technology. Professor Al-Atabi published two books, “Think Like an Engineer” and “Driving Performance” and he has numerous research publications, awards and honours. He is a Co-Founder of the Global Challenges Alliance, Fellow of the Institution of Mechanical Engineers (FI MechE) and an ExCo of the Global Engineering Deans Council. Professor Al-Atabi is an innovative educator; he pioneered the CDIO (Conceive, Design, Implement, Operate) and delivered the first MOOC (Massive Open Online Course) in Malaysia. He trains executives from Multinational Corporations including banks and energy companies.
11:55 – 12:20 (Tuesday)
**Professor R. Natarajan**
Former Chairman, AICTE and Former Director, IIT Madras, India

Emerging Engineering Education Challenges and Opportunities – Indian Perspectives

R Natarajan received his M.A.Sc and Ph.D degrees from the University of Waterloo, Canada. He has worked as a National Research Council Fellow in Canada, an Alexander von Humboldt Research Fellow in Germany. He served as The Director of the Indian Institute of Technology, Madras from 1995 to 2001, and as the Chairman of The All India Council for Technical Education, a statutory body of the Government of India, from 2001 to 2004. He was the Vice – President of The Indian National Academy of Engineering during 2002-2006, and the Chairman of the Research Council of the Central Fuel Research Institute, Dhanbad during 1995-2005. He is a Fellow of: Indian National Academy of Engineering, Indian Society for Technical Education and several other Professional Societies. He has been conferred Honorary Doctorate Degrees by: The University of South Australia, Jawaharlal Nehru Technological University (A.P.), and four other Indian Universities. He has been a Member of the Editorial Boards of: Fuel (London), Fuel Science and Technology, ASEE Journal of Engineering Education, and several other Journals.

12:20 – 12:45 (Tuesday)
**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 Industry 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.

Session III: Global Engineering Education - Room Starhill 4
Session Chair: Dr. Mohammad Yeakub Ali, International Islamic University Malaysia

2:30 – 2:55 (Tuesday)
**Dr. Alok Verma**
Ray Ferrari Professor and Chair, Department of Engineering Technology, Old Dominion University, Norfolk, Virginia, USA

Dr. Alok K. Verma is Ray Ferrari Professor and Chair of the Engineering Technology Department at Old Dominion University. Dr. Verma also serves as the chief editor of the International Journal of Agile Manufacturing. Prof. Verma received his B.S. in Aeronautical Engineering from IIT Kanpur, MS in Engineering Mechanics and PhD in Mechanical Engineering from ODU. Prof. Verma is a licensed professional engineer in the state of Virginia, a certified manufacturing engineer and has certifications in Lean Manufacturing and Six Sigma. He has organized several international conferences as General Chair, including ICAM-2006, ICAM-1999, Lean Educator Conference and also serves as associate editor for two International Journals. His scholarly publications include 35 journal papers and 55 papers in conference proceedings. Dr. Verma has developed and delivered training programs in Lean Enterprise & Design for Manufacturing for Northrop Grumman Newport News, STIHL and several other companies in U.S. At ODU, he has developed the Automated Manufacturing Laboratory at Old Dominion University. Dr. Verma received the Regional Alumni Award for Excellence, the International Education Award at ODU and Ben Sparks Medal by ASME. He is active in ASME, ASEE, SME, IEEE and SNME. Dr. Verma continues to serve the Hampton Roads community in various leadership positions.

2:55 – 3:20 (Tuesday)
**Dr. Ramiro Jordan**
Professor and Associate Dean of Engineering for International Programs, Department of Electrical and Computer Engineering, University of New Mexico

Dr. Ramiro Jordan is a scientist, innovator, educator and entrepreneur. He is a faculty member of the Electrical and Computer Engineering (ECE) department at the University of New Mexico, and is currently the Associate Dean of Engineering for International Programs. His research activities include sustainability, Smart Grid, cognitive radio, multi-dimensional signal processing, and software development. He is a dedicated educator, actively creating educational infrastructure in academic institutions worldwide with emphasis on the “culture of quality” in educational programs for accreditation and certification. He is driving innovative curricula development programs such as Peace Engineering, is establishing International Graduate Double Degree programs and is creating opportunities for student engagement and leadership development. He was actively involved with the University Faculty Senate and served on the Operational Committee that, with the Faculty President, ensures shared governance of the University. Dr. Jordan holds a faculty position at the Universidad Nacional de La Plata, Argentina, and has served as visiting and resident professor at universities in Brazil, Costa Rica, Chile, Mexico, Peru, Bolivia, Argentina, Uruguay, Colombia, Ecuador, Paraguay, Spain, and Venezuela, among others.

Dr. Jordan is a founder of the Ibero-American Science and Technology Education Consortium (ISTEC), a successful non-profit organization that was created in 1990 with the mission to accelerate STEM education, R&D and entrepreneurship in Latin America and the Iberian Peninsula. ISTEC is comprised of over 100 educational, research, industrial, and multilateral organizations throughout the Americas and Iberia, and is now reaching into the global arena. Dr. Jordan is a recognized leader in his field and serves on the Board of Directors of several industrial and professional organizations. He served as Vice President for the Americas Region and is currently in the Executive Committee of the International Federation of Engineering Education Societies and is VP for the Americas. He is on the Board of the Engineering for the Americas Initiative, an initiative hosted by the Organization of American States involving all Heads of State in the Americas Region. He is advisor to the International Conference in Engineering Education...
Education (ICEE) and advisor to the Institute of Electrical and Electronics Engineers (IEEE) Latin America Region, IEEE Senior member. He has served as a member of the National Academy of Sciences of Bolivia, as special consultant to the Latin American ambassadors to the United Nations in the area of Science and Technology, and is advisor to several governments and multilateral organizations (OAS, IDB). He has been involved in the creation and enhancement of over 12 international Technology Parks and has fostered entrepreneurial activities worldwide. He was the Executive Vice-president and Chief Development Officer for Gridline Communications Holdings, Inc. a startup company.

An active member of scientific and professional societies including ASEE and IEEE, Dr. Jordan has published extensively in books, journals, magazines and on the Web. He serves on the editorial board of Computers and Software Engineering, is editor of Journal of Computer Science and Technology, and is editor and advisor to The Ibero American Journal on Technology in Education and Education in Technology. In addition to conference presentations, he has given over 80 invited keynote presentations. He has received many national and international Honors and Awards including two Silver Quilt Awards, Motorola; International Excellence Award, University of New Mexico; Growing with Technology Award, Cisco Systems; Professional Progress Award, Kansas State University; Award for Contributions in Higher Education and Science and Technology, Organization of American States; Achievement Award for Innovations and Accomplishments in Multilingual IT Infrastructure in Engineering Education, INEER-ICEE; and Award for Meritorious Work in Engineering and Computer Education, International Conference on Engineering and Computer Education. He is bestowed with the Order of Rio Branco, in the rank of Officer, by the Brazilian Government. Dr. Jordan obtained his MS and Ph.D. in Electrical and Computer Engineering from Kansas State University in 1984 and 1987 respectively, and the degree of Telecommunications Engineer at the Universidad Nacional de La Plata in 1981.

3:20 – 3:45 (Tuesday)

Dr. Mohammad Yeakub Ali
Professor and Head, Department of Manufacturing and Materials Engineering
Faculty of Engineering, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Malaysian Engineering Education and Accreditation

Dr. Mohammad Yeakub Ali is a Professor in Manufacturing Engineering. Currently he is the Head of the Department of Manufacturing and Materials Engineering at Kulliyyah of Engineering, International Islamic University Malaysia (IIUM). Upon completion of his PhD in 2002, he started his career as a Research Fellow in Precision Engineering and Nanotechnology Centre at Nanyang Technological University, Singapore. He then joined IIUM as an Assistant Professor in 2004 in the Department of Manufacturing and Materials Engineering. Since then, he engaged actively in teaching, research, supervision, administration, securing research grants, and publishing research findings in reputed journals and proceedings. He has published more than 200 technical papers in different reputed journals and conference proceedings at national and international level. He is also reviewer of many reputed international journals and funding projects. He is actively involved in professional societies and institutions including IMechE (UK), ASME (USA), euspen (Europe), IEM (Malaysia), IEB (Bangladesh), and BSME (Bangladesh). He holds various positions in organizing international conferences such as Technical Chair for ICAMME 2012, Chairman for ICAMME 2014, and Technical Committee for AMPT 2009.

Session IV: Global Engineering Education - Room Starhill 4

Session Chair: Dr. Gunduz Ulusoy, Sabanci University, Istanbul, Turkey

4:00 – 4:25 (Tuesday)

Dr. Chan Chee-Ming
Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies
Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

Chee-Ming Chan is an Associate Professor with the Civil Engineering Technology Department, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia. She is presently holding the office of Deputy Dean in Academic and Research at the Centre for Graduate Studies in the University. Her area of expertise includes geo-materials, engineering education and higher education improvement. More recently, Dr. Chan’s current work on dredged materials from Malaysian waters has gained momentum and support from the Ministry of Science, Technology and Innovation and Department of Marine, Malaysia. She is also involved in professional bodies, including the Society for Engineering Education Malaysia (SEEM), Malaysian Geosynthetics Society (MyIGS), Institution of Engineers Malaysia (IEM), Board of Engineers Malaysia (BEM), and is an education quality auditor for the Malaysian Qualification Agency (MQA). From 2008-11, Dr. Chan served as a Postdoctoral Research Fellow at the Port and Airport Research Institute (PARI), Japan.

4:25 – 4:50 (Tuesday)

Dr. Ayham Jaaron
Asst. Prof. in Industrial Engineering and Director of Quality Assurance Unit, Director of ABET Centre
An-Najah National University, Nablus, West Bank, Palestine

Dr. Ayham Jaaron is Director of Quality Assurance Unit at An-Najah National University, Nablus, Palestine. He is also Director of ABET Centre at the Faculty of Engineering and Information Technology, and assistant professor at the Industrial Engineering Department. He received his PhD degree (full time) in Manufacturing Engineering and Operations Management from the Wolfson School of Mechanical and Manufacturing Engineering, Loughborough University, England, UK in 2010. He was a full-time instructor at the Industrial Engineering Department of An-Najah National University, Nablus, Palestine from 2005-2007. Dr. Jaaron is recognized for his expertise and contributions to the quality of education in Palestine. He led the largest ABET Accreditation project in the region for seven engineering programs simultaneously at An-Najah National University, that resulted in a successful ABET Accreditation process. He is extensively involved in drawing and planning quality assurance policies for academic programs. His research activities have focused on service operations, service quality, resource utilization, organizational resilience, and human aspects of motivation in the manufacturing and service sectors. He was an Academic Visitor to the University of Strathclyde, Glasgow, UK in 2006. He is also academic visitor to the Wolfson School of Mechanical and Manufacturing Engineering of Loughborough University, England, UK.

4:50 – 5:15 (Tuesday)

Prof. Dr. Gunduz Ulusoy
Professor, Faculty of Engineering and Natural Sciences
Sabanci University, Orhanli, Tuzla, Istanbul, Turkey

Gündüz Ulusoy received his BS in mechanical engineering from Robert College, Istanbul in 1970; MS in mechanical engineering from University of Rochester in 1972 and PhD in operations research from Virginia Tech in 1975. He worked as a researcher in Marmara Research Center in 1976. From 1976 to 1999 he was a faculty member in the Industrial Engineering Department of Boğaziçi University, Istanbul. He was a postdoctoral fellow at Lancaster University in 1982. During the years (1984-1985), he was on leave from Boğaziçi University and worked as a manufacturing systems engineer at a white goods manufacturer in Istanbul. He served as the Chairman of the Industrial Engineering Department (1985-1993) and Vice Rector of Boğaziçi University (1992-1994). He was a member of the Executive Committee of the Turkish Scientific and Technical Research Council (1993-1997) and Chairman of the Marmara Research Center (1995-1997). In 1999, he joined the Faculty of Engineering and Natural Sciences at Sabanci University in Istanbul as the Founding Coordinator of the Manufacturing
Systems Engineering Program. In 2001, he initiated the Leaders for Industry Program – a double degree joint program between the Faculty of Engineering and Natural Sciences and the Graduate School of Management and was the Co-Director till 2004. In 2003, he founded the TUSIAD – Sabancı University Competitiveness Forum and has served as the Founding Director of the Forum till 2008. Between 2007-2010 he was a member of the Standing Committee on Sustainable Competitiveness of the Manufacturing Industry established by the Office of the Prime Minister of Turkey.


Wednesday (March 9, 2016)

Session V: Global Engineering Education - Room Starhill 4

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

08:00 – 08:25 (Wednesday)

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 Kuaye. 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 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 as 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 sabbatical 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.

8:25 – 8:50 (Wednesday)

Dr. C. B. Gupta
Professor, Department of Mathematics
Birla Institute of Technology and Science Pilani(Raj.), India

A recipient of Shiksha Rattan Puraskar 2011, Best Citizens of India award 2011, listed in Marquis who is who in Science and Technology in the world December 2010, 2013 and listed in top 100 scientists of world in 2012, glory of India Award 2013. Dr. Gupta who is presently working as a Professor in the Department of Mathematics, obtained his Master’s degree in Mathematical Statistics and Ph.D. in Operations Research from Kurukshetra University, Kurukshetra. His field of specialization is Applied Statistics, Optimization and Operations Research. A number of students have submitted their thesis/dissertation on these topics under his supervision. He has published a large number of research papers on these topics in peer reviewed national and international journals of repute. He has authored/ co-authored 14 books on the topics Probability and Statistics, quantitative Methods, Optimization and Operations Research, Advance Discrete Mathematics, Engineering Mathematics, Advance Mathematics etc. He is also on the editorial board and reviewer of a number of national and International journals. Dr. Gupta is a member on various academic and management committees of many Institutes/ Universities. He has participated in large number of national and International conferences in which he has delivered invited talks and chaired technical sessions. Dr. Gupta has been member of Rajasthan board of school education and also member of various committees of RPSC Ajmer, UPSC, New Delhi and AICTE, New Delhi. He was awarded best paper award at the annual conference of National Academy of Science India held at Calcutta University, Kolkata from 15-17 December 2009.
Dr. Jafri Mohd Rohani is a Senior Quality and Statistical Engineering Lecturer. He is also Head of the Industrial Engineering Programme at the Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia.

Dr. Jafri Mohd Rohani is a Senior Quality and Statistical Engineering Lecturer. He is also Head of the Industrial Engineering Programme at the Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia. His works appear in Applied Ergonomics and International Journal of Industrial Ergonomics.

Dr. Alfredo 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 IACCEE, International Association of Continuing Engineering Education, Washington DC, USA; between 2003 and 2005 was president of SEFI Societe Europeenne 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 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 IACCEE, International Association of Continuing Engineering Education, Washington DC, USA; between 2003 and 2005 was president of SEFI Societe Europeenne 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. Alfredo Soeiro was 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 Allegre, entitled the University without Walls, 1998.

Dr. Alfredo Soeiro was 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 Allegre, entitled the University without Walls, 1998.

Dr. Rosemary Seva is a Professor of Industrial Engineering and former Dean at the Gokongwei College of Engineering - De La Salle University. She is the current President of the Human Factors and Ergonomics Society of the Philippines (HFESP) and the past President of the Southeast Asian Network of Ergonomics Societies (SEANES). She is one of the Top 150 scholars and scientists in the Philippines from Webometrics. She obtained her doctorate degree at the Nanyang Technological University (Singapore). She has two master’s degrees: one in Ergonomics from the University of New South Wales (Australia) and in Industrial Engineering from De La Salle University. She is an ASEAN Engineer and a Professional Industrial Engineer. She has published a number of journal articles on affective design, safety, and usability studies. Her works appear in Applied Ergonomics and International Journal of Industrial Ergonomics.
12:20 – 12:45 (Wednesday)

**Dr. Asela K. Kulatunga**
Senior Lecturer, Department of Production Engineering, Faculty of Engineering
University of Peradeniya, Sri Lanka

"**Industrial Engineering Education in Sri Lanka**"

Dr. Asela K. Kulatunga currently work as a Post-doctoral Research Fellow at University of Bremen, Germany. He has been serving as a Lecturer since 2007 at the Department of Production Engineering, University of Peradeniya, Sri Lanka and later promoted to Senior Lecturer in 2013. He conducts courses on Industrial Engineering, LEAN Manufacturing, Sustainable Manufacturing and Operations Management in the areas of Industrial Engineering, LEAN Manufacturing, Sustainable Manufacturing and Operations Management. In addition, he has served as a co-drafter for O-LCA, for UNEP/SETAC Life Cycle Initiative and severed in some UNIDO projects in Sri Lanka. Meanwhile, he has been underwriting the manufacturing industry as an Engineering Consultant for several local manufacturing firms. Besides his academic and industrial involvements he is credited for his valuable contribution to the society through various societal activities. Recently he has been elected as the country representative for IEOM Society in Sri Lanka. Further he holds professional memberships in IEEE, IEOM, ERSCP, and IESL.

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**Session VI: Global Engineering Education - Room Starhill 4**

**Session Chair:** Dr. Eldon Caldwell, University of Costa Rica

2:30 – 2:55 (Wednesday)

**Dr. Md. Mizanur Rahman**
Senior Lecturer, Department of Thermo Fluids, Faculty of Mechanical Engineering
University Technology Malaysia (UTM), Skudai, Johor Bahru, Malaysia

*Engineering education in energy technology: paradigm shift from technology-centred to multidisciplinary focused*

Md. Mizanur Rahman is currently a Senior Lecturer at Department of Thermo-Fluids, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia UTM, Johor Bahru, Malaysia. Before joining at UTM, he has served as a Postdoctoral Researcher at Aalto University School of Engineering, Finland. Rahman also has more than 12-year working experience in a government statutory body namely Rural Electrification Board (REB), Bangladesh. During his tenure in REB, Dr. Rahman has gathered practical experience in dealing with techno-economic and sociocultural challenges faced by rural electrification programme. He has accumulated deep insights towards the solution pathways for the Global Mega-challenge of having 1.2 billion people without access to electricity yet. Mr. Rahman has sound understanding into the global energy sector challenges and its societal implications. Mr. Rahman received his Ph.D. in Energy Economics and Power plant Engineering from Aalto University, Finland, M.Sc. in Sustainable Energy Engineering from Royal Institute of Technology KTH, Sweden, and B.Sc. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh. His research interests include rural electrification, energy economics, energy management, energy efficiency and system, sustainable and renewable energy, energy system modelling, Life-Cycle Analysis, distributed power generation, multicriteria evaluation etc. Dr. Rahman has several publications in International refereed journals in energy engineering domain.

2:55 – 3:20 (Wednesday)

**Dr. Eldon Caldwell**
Director, Industrial Engineering Department, Engineering School, University of Costa Rica

*Using Robotics as Educational Framework Strategy in Industrial Engineering*

Eldon Caldwell is a full professor/Cathedraticus of the University of Costa Rica, Central America; Doctor (Ph.D.) in Industrial Engineering major in Lean Operations Engineering. He developed new heuristic sequencing algorithms in order to reduce cycle times and received Summa Cum Laude in his doctoral dissertation and Academic Crown Excellence Award in Autonomous University of Central America/ University of Nevada, USA. Currently, he is doctoral researcher at the (Dr. Sc.) Computing Science Program at the University of Alicante, Spain and doctoral researcher at the Ed. Program at University of Costa Rica, receiving the Academic Crown Excellence Award in Autonomous University of Central America/ University of Nevada, USA. He has 25 years of experience as advisor and consultant in Operations Management, Lean Manufacturing and Lean Logistics at Interamerican Bank for Development, WHO, UN, World Wide Bank, Coca-Cola, Ministry of Health, Costa Rica, Honduras, Panamá, Costa Rican Institute for Electricity, RTC- Perú, Young Electrical Signs, Nevada, USA, AirCare Inc., Reno, Nevada, Plan International-Honduras, and many others. Currently, Dr. Caldwell is Director of Industrial Engineering Department at Engineering School of University of Costa Rica.

3:20 – 3:45 (Wednesday)

**Dr. Pal Pandi Ammavasi, M.E., Ph.D (Engg.), MBA., Ph.D (Mgmt)**
Associate Professor, Bharath Niketan Engineering College, Aundipatty, Tamilnadu, India

Dr. A. Pal Pandi is working as an Associate Professor in Bharath Niketan Engineering College, Aundipatty, Tamilnadu, India. He has seventeen years of experience in both academic and industry streams. He has published more than 26 papers in International and National journals including Inderscience, Elsevier and Taylor and Francis. He has published 45 papers in proceedings of international and national conferences held across India. He has a wide range of expertise and knowledge in Mechanical Engineering as well as Management sciences. He holds doctorate degree in both Faculty of Management Sciences and Mechanical Engineering. He also reviewer for some reputed international journals. His area of research is total quality management, quality engineering and manufacturing management. Seven scholars are pursuing research programme under his guidance.
Session V: Panel Session - Global Engineering Education  
4:00 – 5:15 pm (Wednesday) - Room Starhill 4

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

Panelists

Dr. Abu Masud, P.E.
Boeing Global Engineering Professor and 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. Hans-Juergen Hoyer
Secretary General of the International Federation for Engineering Education Societies (IFEES)
Executive Secretary of the Global Engineering Deans Council (GEDC)
Resident Scholar in Global Engineering at Marquette University

Hans J. Hoyer is the Secretary General of the International Federation for Engineering Education Societies (IFEES), Executive Secretary of the Global Engineering Deans Council (GEDC), and Resident Scholar in Global Engineering at Marquette University. Former Director of International Programs and Strategy for the American Society for Engineering Education (ASEE) and co-founder of the Indo-US Collaborative for Engineering Education (IUCEC). Prior to 2006, Hans J. Hoyer was CEO of World Links, a spin-off of the World Bank. In this capacity, he worked globally on issues related to secondary education, teachers’ education, and on-line collaborative learning focusing on science and social studies among high school students across the globe.

Dr. Funso Falade
Department of Civil & Environmental Engineering, University of Lagos, Akoka, Lagos, Nigeria

Funso Falade 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 national and international conferences. He 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.

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 (IFEES) 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.

* 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 and Business Systems
* Southern Illinois University, Edwardsville, 1979: SPC, Health Care Management Systems
* University of Missouri - Columbia, 1983: MS, Industrial Engineering
Thursday (March 10, 2016)

Session IX: Global Engineering Education - Room Starhill 4

Session Chair: Dr. Khairiyah Mohd Yusof, Universiti Teknologi Malaysia

8:00 – 8:25 (Thursday)
Khairiyah Mohd Yusof, PhD
Director, Centre for Engineering Education (CEE)
Universiti Teknologi Malaysia, Johor Bahru, Malaysia

Dr. Khairiyah Mohd Yusof is the Director of Universiti Teknologi Malaysia (UTM) Centre of Engineering Education (CEE), promoting meaningful research and scholarly practices in engineering education and managing the PhD in Engineering Education program. She obtained her PhD in Chemical Engineering for the University of Waterloo, Canada. Prior to becoming the Director of CEE, she was the Deputy Director at the Centre for Teaching & Learning (2008 – 2011), and Head of the Chemical Engineering Department (2006-2008). An Associate Professor in the Department of Chemical Engineering, Dr. Khairiyah is regularly invited as a speaker in various conferences and workshops in Asia, Europe and North America. She conducts research and receives funding for her work in engineering education, and dynamic process modeling and control. Dr. Khairiyah has also won several awards, including the Diamond Award for Best Paper at the 2005 UNESCO International Centre of Engineering Education Asia Pacific Conference on Engineering Education in Bangkok, Thailand, the Best Paper Award at the 2011 IEEE Global Engineering Education Conference in Amman, Jordan, the 2013 Institution of Chemical Engineers Malaysia Award for Education and Training and the Best of the Best Award at the 2014 Innovative Practices in Higher Education Exposition in Johor Bahru, Malaysia. Currently, Dr. Khairiyah is an Editor for the ASEAN Journal of Engineering Education, an Associate Editor for the Journal of Engineering Education, and is in the Editorial Board for the Journal of Problem Based Learning in Higher Education and the IChemE Education for Chemical Engineers Journal. She is also a Master Trainer for the Higher Education Leadership Academy (AKEPT) under the Malaysian Ministry of Education, the Secretary for the Society of Engineering Education Malaysia (SEEM), and board member representing Asia for the Research in Engineering Education Network (REEN). Dr. Khairiyah had chaired and organized various Engineering Education Conferences in Malaysia, including the 2013 International Research Symposium on PBL in collaboration with the Aalborg University UNESCO Chair on PBL in Engineering Education and AKEPT, and the 2013 Research in Engineering Education Symposium in collaboration with REEN, AKEPT and SEEM.

8:25 – 8:50 (Thursday)
Dr. Amar Partap Singh Pharwaha
Professor, Department of Electronics & Communication Engineering
Sant Longowal Institute of Engineering & Technology (SLIET)-Deemed University
Longowal, Sangrur, Punjab, India

Virtual Instrument for Monitoring Process Parameters: A Versatile Tool for Engineering Education

Dr. Amar Partap Singh, was born in Sangrur, Punjab in 1967 & received his B. Tech. (Electronics Engineering) in 1990 from Guru Nanak Dev University, Amritsar, M. Tech. (Instrumentation) in 1994 from Regional Engineering College (now NIT), Kurukshetra & Ph.D. on Intelligent Instrumentation in 2005. Presently, he is Professor (Electronics & Communication Engineering) and Part-time Chief Vigilance Officer (appointed by Govt. of India) at Sant Longowal Institute of Engineering & Technology (SLIET-Deemed University, established by Govt. of India), Longowal. Dr. Singh is credited with a professional experience of more than 24 years including the position of Research & Development Engineer, Dean (Student & Faculty Welfare), Dean (Planning & Development), Head (Department of Electrical & Instrumentation Engineering) and Professor & Joint Director at Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo. He has guided seven Ph. D. Theses and six more are under his supervision for Ph.D. degrees. He preferred to remain active in his passion for research teaching instead of joining to the Post of Director, Punjab University Regional Center, Hoshiarpur, for which he was also selected in 2008. He has published more than 170 Research Papers in various National & International Journals/Conferences and received various awards including IETE Students Journal Award-2006 by Institution of Electronics and Telecommunication Engineers, New Delhi, Certificate of Merit by the Institution of Engineers (India) in 2006, KF Antia Award by the Institution of Engineers (India) in 2009, Sir Thomas Ward Award by the Institution of Engineers (India) in 2010 & again KF Antia Award by the Institution of Engineers (India) in 2014. Dr. Singh has the honour of being elected for the third time as member of the State Committee of Institution of Engineers (India), Punjab & Chandigarh State Centre. He is a Fellow of Institution of Engineers (India) as well as Institution of Electronics & Telecommunication Engineers. He is also the Life Member of Punjab Academy of Sciences, Instrument Society of India, Metrology Society of India, Indian Society for Technical Education & International Association of Engineers (Hong Kong). He has visited a number of countries including US, UK, France, Australia, Singapore & Pakistan.

8:50 – 9:15 (Thursday)
Dr. Funso Falade
Department of Civil & Environmental Engineering
University of Lagos, Akoka, Lagos, Nigeria and
President, African Engineering Education Association

Session X: Global Engineering Education - Room Starhill 4

Session Chair: Dr. S. C. Naik, National Institute of Technology, Rourkela, Odisha, India

11:30 – 11:55 (Thursday)
Kamel Hawwash, BSc, MSc, MAPM, FHEA
Professor in the School of Civil Engineering, University of Birmingham, UK
Immediate Past President of SEFI and Member of the European Engineering Deans Council

Kamel Hawwash is Professor in the School of Civil Engineering and Immediate President of the European Society for Engineering Education, SEFI. He is the Convenor of the long-established MSc Construction Management Programme. He was Head of the School of Civil Engineering from 2008 to 2011. Between 2009 and 2012 he was the Regional Director for the Midlands and East Anglia for the National HE STEM Programme. Professor Hawwash is past Chair of the Association of Civil Engineering Departments, and member of the Engineering Education, Employability and Skills sub-committee of the Engineering Professors' Council and Associate of the Engineering Council, UK. He
11:55 – 12:20 (Thursday)
**Dr. Charles Mbohwa**
Professor and Vice-Dean Postgraduate Studies, Research and Innovation Faculty of Engineering and the Built Environment (FEBE)
University of Johannesburg’s (UJ), South Africa

Professor Charles Mbohwa is the Vice-Dean Postgraduate Studies, Research and Innovation at University of Johannesburg’s (UJ) Faculty of Engineering and the Built Environment (FEBE). As an established researcher and professor in the field of sustainability engineering and energy, his specializations include sustainable engineering, energy systems, life cycle assessment and bio-energy/fuel feasibility and sustainability with general research interests in renewable energies and sustainability issues. Professor Mbohwa has presented at numerous conferences and published more than 150 papers in peer-reviewed journals and conferences, 6 book chapters and one book. Upon graduating with his B.Sc. Honors in Mechanical Engineering from the University of Zimbabwe in 1986, he was employed as a mechanical engineer by the National Railways of Zimbabwe. He holds a Masters in Operations Management and Manufacturing Systems from University of Nottingham and completed his doctoral studies at Tokyo Metropolitan Institute of Technology in Japan. Prof Mbohwa was a Fulbright Scholar visiting the Supply Chain and Logistics Institute at the School of Industrial and Systems Engineering, Georgia Institute of Technology, is a fellow of the Zimbabwean Institution of Engineers and is a registered mechanical engineer with the Engineering Council of Zimbabwe. He has been a collaborator to the United Nations Environment Programme, and Visiting Exchange Professor at Universidade Tecnológica Federal do Paraná. He has also visited many countries on research and training engagements including the United Kingdom, Japan, German, France, the USA, Brazil, Sweden, Ghana, Nigeria, Kenya, Tanzania, Malawi, Mauritius, Austria, the Netherlands, Uganda, Namibia and Australia.

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

**Engineering Education and Environment**

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, an established researcher and professor in the field of sustainability Engineering and Energy, his specializations include sustainable engineering, energy systems, life cycle assessment and bio-energy/fuel feasibility and sustainability with general research interests in renewable energies and sustainability issues. Professor Mbohwa has presented at numerous conferences and published more than 150 papers in peer-reviewed journals and conferences, 6 book chapters and one book. Upon graduating with his B.Sc. Honors in Mechanical Engineering from the University of Zimbabwe in 1986, he was employed as a mechanical engineer by the National Railways of Zimbabwe. He holds a Masters in Operations Management and Manufacturing Systems from University of Nottingham and completed his doctoral studies at Tokyo Metropolitan Institute of Technology in Japan. Prof Mbohwa was a Fulbright Scholar visiting the Supply Chain and Logistics Institute at the School of Industrial and Systems Engineering, Georgia Institute of Technology, is a fellow of the Zimbabwean Institution of Engineers and is a registered mechanical engineer with the Engineering Council of Zimbabwe. He has been a collaborator to the United Nations Environment Programme, and Visiting Exchange Professor at Universidade Tecnológica Federal do Paraná. He has also visited many countries on research and training engagements including the United Kingdom, Japan, German, France, the USA, Brazil, Sweden, Ghana, Nigeria, Kenya, Tanzania, Malawi, Mauritius, Austria, the Netherlands, Uganda, Namibia and Australia.

Session XI: Global Engineering Education - Room Starhill 4
**Session Chair: Dr. Hamid Parsaei, Texas A&M University**

2:30 – 2:55 (Thursday)
**Professor Khedidja ALLIA**
Research Laboratory of Science in Industrial Process Engineering (LSGPI)
USTHB - FGMGP, Bâb-Ezzouar, Algiers- Algeria

Khedidja Allia is a Chemical Engineering Professor and research director at the University of Sciences and Technology (USTHB), Algiers. She holds engineer diploma and Doctorate Es Science in Chemical Engineering at National Polytechnic School, Algiers (ENP) and part at Thames Polytechnic - London-UK. She is engaged in the supervision of students at different levels (Doctorates, Magisters, masters), and lectured at the USTHB (Algiers) and she is member of Scientific committee of the faculty. Pr Khedidja Allia published several scientific works in the fields of chemical and environmental engineering (Multiphase flow, Pneumatic conveying, fluidization, semi fluidization and wastewater treatment, solid wastes, ...), and has been and is involved with a number of research projects and was a Fulbright Researcher at Mechanical department and Aerospace Engineering, Cornell University, Ithaca, New.York, USA. She occupied several posts as; Director of Higher Education (MESRS), Director of Industrial chemistry institute USTHB and President of Scientific Committee - Industrial Chemistry institute. Head of Chemical Engineering Department at the National Polytechnic school of Algiers (E.N.P), and Researcher at Research and Development Direction at SONATRACH. She took part at many commissions on the higher education reforms, and she was the National Coordinator of « the higher education Commission (Technology) of "Maghreb Equivalence", and president of PURAQ (Pôle Universitaire et de recherche Algéro-Québécois). For her achievements, she has been awarded and appreciated by State and Global Institutions.

2:55 – 3:20 (Thursday)
**Shri. Mahesh Anant Kakade, MIE, MISTE, MIV, MIEEES**
Controller of Examinations, Shivaji University, Kolhapur
Chairman, Indian Society for Technical Education
Maharashtra- Goa Section, India
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 (IIE), and a Fellow of the American Society for Engineering Education (ASEEE). 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.

Session XII: Global Engineering Education - Room Starhill 4

Session Chair: Nidhi M B, MarBaselios College of Engineering & Technology (MBCET), Thiruvananthapuram, Kerala, India

4:00 – 4:25 (Thursday)

Nidhi M B
A/HoD Mechanical Engineering Department
MarBaselios College of Engineering & Technology (MBCET)
Thiruvananthapuram, Kerala, India

National Executive Council Member ISTE

Enhancing outcome Based Education through Self awareness

Prof. Nidhi M B is currently working as Assistant Head of dept. Mechanical Engineering Dept. of Mar Baselios College of Engineering and Technology, Trivandum, Kerala. She is also in the capacity of National Executive Council Member of ISTE (Indian Society for Technical education) (2015-2018) and joint Secretary to IIIE (Indian Institution of Industrial Engineers, Kerala chapter) (2011–2012, 2014-2015, 2015-2016). She has been serving as State Management Committee Member ISTE Kerala section from 2012-2015. Apart from the above responsibilities she has consistently initiated the release of Kerala Section Newsletter for the last 5 years, in the capacity as Newsletter Editor. She has gained appreciation by the Kerala Section for the efforts to promote ISTE. She has been instrumental in bridging the Industry Academia Gaps, and she is co-coordinating 5 projects with industry apart from current teaching responsibilities on the interest of the Institution. Ms Nidhi MB has been a special invitee to GEDC (Global Engineering Deans Council Summit), Singapore. She has been instrumental in initiating ISTE Faculty and Student Chapters in MBCET and currently the Chairman of ISTE-MBCET Chapter. Under her leadership the ISTE Chapter has organised many events for the benefit of students and Faculty. The Chapter has won 5 awards within the short span of 2.5 years. She has delivered many Keynotes addresses and Invited Lectures at State, National and International forums. She has to her credit 26 papers in National, International Journals and Conferences of which 8 papers are in education research. She is also reviewer of journals and conferences in areas relating to Sustainability in Engineering, Supply Chain Management, Engineering & Technology trends in Mechanical Engineering, etc. Her areas of interest include Pedagogy and Training, Outcome Based Education, Changing roles of Industrial Engineering, Design and Engineering, Green Supply Chain Management etc. She graduated from the SCT College of Engineering in BTech Mechanical Production in the year 2001. She worked in Industry Leela Lace International Ltd, as Industrial Engineer for 3 years. There by developing a passion for Industrial Engineering, she pursued her Master’s Degree in Industrial Engineering from CET, Kerala, (2006-2008). Since then she started her career in Engineering Education as lecturer, Sr Lecturer and as Asst. Prof with Saintgits College and Mar Baselios College of Engineering and Technology. She has also won many Best Paper Awards in various forums of International conferences and National Conventions. She is also serving as mentor to other ISTE chapters in Kerala. She is currently pursuing her research at the National Institute of Technology Calicut on Sustainability.

4:25 – 4:50 (Thursday)

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

Perkins Murendzi 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 from 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 Murendzi teaches Food Engineering 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) UFost, EFOST, 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 (JSTT) of the Harare Institute of Technology. Dr Murendzi 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
TECHNICAL PROGRAM

March 7, 2016 (Monday), 08:00 am – 05:00 pm (Room Starhill 4)
Lean Six Sigma Green Belt Certification Workshop
Dr. Joseph M. Ogundu, President and CEO – Emerald Global Consulting Inc., West Bloomfield, Michigan, USA

March 8, 2016 (Tuesday)

08:00 – 09:15, TUESDAY  Global Engineering Education I  Starhill 4
Session Chair: S. Indra Devi, Universiti Teknikal Malaysia Melaka
08:00 – 08:25: **Dr. C. Chinnaraj**, Professor of Mechanical Engineering and State Project Coordinator (TEQIP) and Directorate of Technical Education, Chennai, India
*ID 267: Developing Productivity Monitoring System in a governmental organization with multi-performance objectives: A case study in National Iranian Gas Company*
08:25 – 08:50: **S. Indra Devi**, Senior Lecturer, Dept. of Languages, Centre for Languages and Human Development, Univ. Teknikal Malaysia Melaka
*ID 090: A Multiliteracies Approach in the Delivery of Engineering Education for Future Global Engineers: The Malaysian Context*
08:50 – 09:15: **Ahmed E. Haroun and Salih O. Duffuaa**, Systems Engineering Department, KFUPM, Dhahran, KSA
*ID 030: An Effective Organizational Structure to Implement Strategic Plans in Higher Education Institutions*

08:00 – 09:15, TUESDAY  Industry Solutions I  Starhill 5
Session Chair: Dr. Ari Maunuksela, TEAK Ltd., Finland
08:00 – 09:15: **Ali Massaeli**, Technical Inspection and Control, National Iranian Gas Company, Tehran, Iran
*ID 267: Developing Productivity Monitoring System in a governmental organization with multi-performance objectives: A case study in National Iranian Gas Company*
08:25 – 08:50: **Saeed Salimi Beni**, National Iranian Gas Company, Tehran, Iran
*ID 268: Index Selection of Monitoring Technical Inspection Department in National Iranian Gas Company*
08:50 – 09:15: **Dr. Ari Maunuksela**, Director/Principal, TEAK Ltd. – A Center for Vocational Training and Education, Teuva, Finland

08:00 – 09:15, TUESDAY  Lean Six Sigma Green Belt Workshop  Starhill 6
Dr. Joseph M. Ogundu, President and CEO – Emerald Global Consulting Inc., West Bloomfield, Michigan, USA

08:00 – 09:30, TUESDAY  Operations Management I  Starhill 7
Session Chair: Rahmat Nurcahyo, Universitas Indonesia, Indonesia

08:00 – 09:30, TUESDAY  Supply Chain Management I  Starhill 8
Session Chair: Erdem Aksakal, Gazi University, Ankara, Turkey

ID 043  Re-shoring Manufacturing through the Application of Additive Technologies
Christopher Backhouse and Hamid Moradiou, Loughborough University, Leicestershire, United Kingdom

ID 041  Enhancing Enterprise Performance with Social BPM and TOGAF Framework
Jyhjong Lin, Ming Chuan University, Taoyuan City, Taipei, Taiwan

ID 055  Improving the manufacturing performance by using the appropriate purchasing strategy
Ahmed Attia, Effat University, Jeddah, Mekka, Saudi Arabia

ID 210  Customer Orders Prioritization Using Topsis in Multi Business Channel Environment
Muhammad Haris Aaz and Summyia Qamar, University of Engineering and Technology, Taxila, Pakistan
Chanchal Saha, Binghamton University, Poughkeepsie, New York, United States
Saifullah Khan, Qasim Ali Jahanzaib Mirza, University of Engineering and Technology, Taxila, Pakistan

ID 273  Production Efficiency Improvement through Preventive Maintenance and Production Scheduling Optimization
Rahmat Nurcahyo and Aamar Rachman, Universitas Indonesia, Depok, Jawa Barat, Indonesia

ID 019  Determinants of the Scope of Supply Chain E-Collaboration
Tesfaye Tolu Feyissa R.R.K. Sharma, Indian Institute of Technology, Kanpur, Uttar Pradesh, India

ID 191  Improving organizations performance through Supply Chain Quality Management practices
Paulo Sampaio, Maria Carvalho and Ana Cristina Fernandes, University of Minho, Braga, Portugal

ID 171  Literature review of Physical Delivery Service Quality: type of research and research gap
Teuku Yuri M. Zagoeloe, Akhmad Hidayatno and Clara Benarto, Industrial Engineering Department, University of Indonesia, Depok, Indonesia

ID 325  Green Supplier Selection under Risk Assessment
Erdem Aksakal and Emre Caliskan, Gazi University, Ankara, Turkey
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<th>Time</th>
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<tr>
<td>08:00 – 09:30, TUESDAY</td>
<td>Material Flow Cost Accounting</td>
<td>Framework of an '(In) Efficiency Costing' based on the idea of Material Flow Cost Accounting</td>
<td>Ronny Sygulla and Uwe Götze, Technische Universität Chemnitz, Saxony, Germany</td>
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<td>Material Flow Cost Accounting</td>
<td>How will MFCA make Usefulness on Sustainable Engineering - Based on practical experiences in Japanese and Southwestern Asian Companies?</td>
<td>Michiyasu Nakajima and Asako Kimura, Kansai University, Suita-Shi, Osaka, Japan</td>
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<td>Material Flow Cost Accounting</td>
<td>Application of Material Flow Cost Accounting (MFCA) and Quality Control Tools in Wooden Toys Product</td>
<td>Wasawat Nakkiew and Pattarawadee Poolperm, Department of Industrial Engineering, Chiang Mai University, Thailand</td>
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<td></td>
<td>Material Flow Cost Accounting</td>
<td>Impact of Introducing Material Flow Cost Accounting: A Comparative Review of Supply Chains and Individual Companies</td>
<td>Kana Okada and Katsuhiro Kokubu, Kobe University, Hyogo, Japan</td>
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<td>Material Flow Cost Accounting</td>
<td>Application of Material Flow Cost Accounting Analysis to Increase Pajama Production Efficiency: A Case Study of Confederate International Co., Ltd.</td>
<td>Wichai Chattinnawat, Industrial Engineering Department, Chiang Mai University, Thailand</td>
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<td></td>
<td>Material Flow Cost Accounting</td>
<td>The Limitation of MFCA-based Cost Analysis for Serial Manufacturing Process with Sampling Scheme</td>
<td>Wichai Chattinnawat, Industrial Engineering Department, Chiang Mai University, Thailand</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Undergraduate Student Paper Competition sponsored by Siemens</td>
<td>An estimation of land price by kriging using geographic information system</td>
<td>Yoichi Shimakawa, Salesian Polytechnic, Machida-shi, Tokyo, Japan</td>
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<td>Undergraduate Student Paper Competition sponsored by Siemens</td>
<td>River’s Rubbish Catcher Machine (RRC-Machine) - The Planning of a Machine Instrument to Catch the Rubbish in the River towards Healthy Environment</td>
<td>Rendhie Suswanto, Mining Engineering Department, University of Sriwijaya, Inderalaya, South Sumatera, Indonesia</td>
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<td>Undergraduate Student Paper Competition sponsored by Siemens</td>
<td>Fuzzy AHP based Multi-Criteria Decisions Support System for Eco-Design</td>
<td>Asela Kulatunga and Chanjief Chandrakumar, Faculty of Engineering, University of Peradeniya, Sri Lanka</td>
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<td>Undergraduate Student Paper Competition sponsored by Siemens</td>
<td>Assessment on 5S System of Rules in a Cosmetics Manufacturing’s Central Weighing Area, Processing and Packaging Area for Creams, Liquids and Lotions (CLL)</td>
<td>Ma. Erika R. Laguardia and Rachel C. Villanueva Department of Industrial Engineering, Malayan Colleges Laguna, Cabuyao Laguna, Philippines</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Graduate Student Paper Competition sponsored by EATON</td>
<td>Superstructure Optimization of Multiple Gas-Solid Cyclone Arrangements</td>
<td>Ali Elkameel, University of Waterloo, Ontario, Canada</td>
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<td>Graduate Student Paper Competition sponsored by EATON</td>
<td>Similarity Measures and Distance Measures Applications: An Analysis and Design of Systems prospective</td>
<td>Osama Rabie, King Abdullah University, Jeddah, Saudi Arabia</td>
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<td>Graduate Student Paper Competition sponsored by EATON</td>
<td>Design and Manufacturing of Automobile Testing Track Sweeping Machine</td>
<td>Nazish Quadri Syed, College of Pune, Maharashtra, India</td>
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<td>Graduate Student Paper Competition sponsored by EATON</td>
<td>Geometric Chip Analysis of Helical End Milling Based on a Variable Flow Stress Machining Theory</td>
<td>Majed Masmali and Philip Mathew, The University of New South Wales, Sydney, NSW, Australia</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Occupational Safety and Health (OSH)</td>
<td>AHP-Based Conceptual Model for Selection of Key Elements for Safety Culture Using SMART Criteria</td>
<td>Shahid Ali and Azmi Mohd Shariff, Universiti Teknologi Petronas, Tronoh, Perak, Malaysia</td>
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<td>Occupational Safety and Health (OSH)</td>
<td>Knowledge Management (KM) in Human Error (HE) in Accident Prevention</td>
<td>Ahmad Soyuti Haji Sabran, Saparakencana TI Offshore Sdn Bhd, Puchong, Selangor, Malaysia</td>
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<td>Occupational Safety and Health (OSH)</td>
<td>The Level of Safety Culture Beliefs and Practices amongst Safety and Health Officers (Shos) in Malaysian Manufacturing Companies</td>
<td>Rozlina Md Sirat and Jafri Mohd Rohani, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor Bahru</td>
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<td>Occupational Safety and Health (OSH)</td>
<td>Fire Safety and Availability of Fire Fighting Equipment in Selected Garment Factories in Bangladesh</td>
<td>Mohammad Iqbal, Salma A. Iqbal, Shahjalal University of Science and Technology, Sylhet, Bangladesh</td>
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<td>Occupational Safety and Health (OSH)</td>
<td>Estimation of compensation cost related to Musculoskeletal Disorder: Younger versus Older Malaysian Manufacturing Workers</td>
<td>Jafri Rohani, Affandi Mohd Zainal, Mohamed Fitri Johari, Rozlina Md Sirat, Raemy Md Zein and Ismail Abdul Rahman, Universiti Teknologi Malaysia</td>
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### IEOM Kuala Lumpur Conference

#### TECHNICAL PROGRAM

**March 8-10, 2016**

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<td>08:00 – 09:15, TUESDAY</td>
<td>Data Analytics</td>
<td>ID 061 Integration of Business Process management and Big Data technologies</td>
<td>Christoph Wunck and Alfred Wulff, Jade University of Applied Sciences, Wilhelmshaven, Lower-Saxony, Germany</td>
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<td>ID 142 Categorization of Web News Documents Using Word2Vec and Deep Learning</td>
<td>Hiroyuki Goto and Ryoma Kato, Hosei University, Koganei, Tokyo, Japan</td>
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<td>ID 232 Knowledge extraction from TB patients- A hybrid model with clustering and decision tree</td>
<td>F. Firuzi Jahantigh, Department of Industrial Engineering, University of Sistan and Baluchestan, Zahedan, Iran; Hakimeh Ameri, Department of Industrial Engineering, Khaje Nasir Toosi University of Technology, Tehran, Iran</td>
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<td>ID 278 Innovation Clusters and Determinants of Innovativeness in Manufacturing Industries</td>
<td>Mete Sevinc, School of Industrial Engineering, Operations, Planning, Accounting &amp; Control Group, Eindhoven University of Technology, Eindhoven, The Netherlands; Gündüz Ulusoy, Department of Industrial Engineering, Sabanci University, Istanbul, Turkey</td>
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<td>ID 216 Big Data Business Analytics: Attitude and Readiness</td>
<td>Xin James He, Fairfield University, Fairfield, CT, United States; Myron Sheu, California State University, Dominguez Hills, CA, United States</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Case Studies</td>
<td>ID 046 The importance of learning computer programming for engineers</td>
<td>Carlos Oliveira, Department of Computing, Rio de Janeiro Federal Institute of Education Science and Technology Rio de Janeiro (IFRJ), Brazil</td>
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<td>ID 119 Product-Service System and Inventory Control: Provision in a UK manufacturing case study</td>
<td>Siti Ismail and J.A. Harding, Loughborough University, Leicestershire, United Kingdom</td>
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<td>ID 136 A Study on the Business Strategy of Highly Profitable Electronic Component Manufacturers</td>
<td>Chihiro Sato, Tohoku University, Sendai, Miyagi, Japan</td>
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<td>ID 332 Importance of Business Incubators for New Business and its Development in Latvia</td>
<td>Ineta Geipele, Linda Kauškale and Iveta Pukite, Riga Technical University, Riga, Latvia</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Reliability and Maintenance</td>
<td>ID 129 An Optimal Preventive Maintenance Plan According to Power Generation for a Wind Turbine</td>
<td>Hajej Zied and Nidhal Rezg, LGIPM, METZ, France</td>
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<td>ID 203 A Methodology for Simultaneously Optimizing Selective Maintenance Decision and X-Control Chart Parameters</td>
<td>Pravin Tambe, Industrial Engineering Department, RCOEM, Nagpur, India; Makarand Kulkarni, IIT Delhi, New Delhi, Delhi, India</td>
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<td>ID 287 Value of Perfect Information in Condition Based Maintenance using Proportional Hazards Models; a comparison of maintenance strategies</td>
<td>Alireza Ghasemi and Alireza Farhang Doost, Dalhousie University, Halifax, NS, Canada</td>
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<td>ID 237 Visual data mining of faults in machining process based on machine learning</td>
<td>Soumaya Yacout, École Polytechnique, Montreal, Quebec, Canada; Yasser Shaban, Faculty of Engineering, Helwan University, Cairo, Egypt; Jose Luis, Gonzalez Rubio, Madrid, Spain</td>
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<td>ID 040 Manufacturing cell layout improvement using Simulation Modeling and Group Technology</td>
<td>Annamalai Pandian, Saginaw Valley State University, Michigan, United States; Ahad Ali, Lawrence Technological University, Southfield, MI, United States</td>
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**Welcome Address:**

**Professor Datuk Dr. Mohd. Noh bin Dalimin**

Vice-Chancellor, Universiti Tun Hussein Onn Malaysia (UTHM) - Mayang Sari Grand Ballroom

**Opening Keynote:**

**Dr. Ronald G. Askin**

Professor and Director, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, AZ, USA (Mayang Sari Grand Ballroom)

11:00 – Networking Break at Exhibition Hall
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<td>11:30 – 12:45, TUESDAY</td>
<td>Global Engineering Education II</td>
<td>Starhill 4</td>
<td>Session Chair: Dr. Christoph Wunck, Jade University, Wilhelmshaven, Germany</td>
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<tr>
<td>11:30 – 11:55</td>
<td>Professor Dr. Mushtak Al-Atabi</td>
<td></td>
<td>Dean, School of Engineering, Taylor’s University, Selangor Darul Ehsan, Malaysia</td>
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<tr>
<td>11:55 – 12:20</td>
<td>Professor R. Natarajan</td>
<td></td>
<td>Former Chairman, AICTE and Former Director, IIT Madras, India</td>
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<tr>
<td>12:20 – 12:45</td>
<td>Dr. Christoph Wunck</td>
<td></td>
<td>Professor, Business Computing Systems, Industrial Engineering, College of Management, Information, Technology, Jade University, Wilhelmshaven, Germany</td>
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<tr>
<td>11:30 – 12:45, TUESDAY</td>
<td>Industry Solutions II</td>
<td>Starhill 5</td>
<td>Session Chair: Dr. Adibah Shuib, Universiti Teknologi MARA (UiTM)</td>
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<td>11:30 – 11:55</td>
<td>Dr. Adibah Shuib</td>
<td></td>
<td>Head of Strategic Planning (Monitoring), Centre for Strategic Planning, Universiti Teknologi MARA (UiTM) and Acting President - MSORMS (Malaysian Society of Operations Research and Management Science)</td>
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<tr>
<td>11:55 – 12:20</td>
<td>Dr. Mei Fong Chong</td>
<td></td>
<td>Professor, Faculty of Engineering, The University of Nottingham Malaysia Campus, Malaysia</td>
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<tr>
<td>11:30 – 12:45, TUESDAY</td>
<td>Lean Six Sigma Green Belt Workshop</td>
<td>Starhill 6</td>
<td>Dr. Joseph M. Ogundu, President and CEO – Emerald Global Consulting Inc., West Bloomfield, Michigan, USA</td>
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<tr>
<td>11:30 – 12:45, TUESDAY</td>
<td>Operations Management II</td>
<td>Starhill 7</td>
<td>Session Chair: Hiroyuki Goto, Hosei University, Tokyo, Japan</td>
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<tr>
<td>11:30 – 12:45, TUESDAY</td>
<td>Supply Chain Management II</td>
<td>Starhill 8</td>
<td>Session Chair: Sinta Sarpani, University of Indonesia, Indonesia</td>
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<tr>
<td>11:30 – 13:00, TUESDAY</td>
<td>Material Flow Cost Accounting</td>
<td>Bintang V</td>
<td>Session Chair: Chompoonoot Kasemset, Department of industrial engineering, Chaing Mai University, Thailand</td>
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<td>11:30 – 13:00</td>
<td>Management Control Systems for Material Flow Cost Accounting: A Case of Japanese Company</td>
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<td>Hirotsugu Kitada, Faculty of Business Administration, Hosei University, Tokyo, Japan Akira Higashida, Faculty of Business Management, Meijo University, Nagoya, Japan</td>
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<tr>
<td>11:30 – 13:00</td>
<td>Material Flow Cost Accounting in Supply Chains – Challenges and Approaches</td>
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<td>Ronny Sygulla, Uwe Götzte and Fanny Dressel, Technische Universität Chemnitz, Saxony, Germany</td>
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<td>11:30 – 13:00</td>
<td>Ceramics Process Improvement with Material Flow Cost Accounting</td>
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<td>Wimalin Laosirilaworn, Chaing Mai University, Chaing Mai University, Muang, Chiang Mai, Thailand</td>
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<td>11:30 – 13:00</td>
<td>Application of Material Flow Cost Accounting Analysis to Increase Pajama Production Efficiency: A Case Study of Con</td>
<td></td>
<td>Wichai Chattinnawat, Industrial Engineering Department, Chaing Mai University, Muang, Chiang Mai, Thailand</td>
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<td>11:30 – 13:00</td>
<td>Application of Material Flow Cost Accounting and System Dynamics Approach for Waste Reduction and Sustainable Food Manufacturing Development in Thailand</td>
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<td>Jedsada Tipmontian and Ketinun Kittipongpittaya, King Mongkut's University of Technology, North Bangkok, Muang, Prachinburi, Thailand Rajmohan Murugesan, Anna University, Chennai, Tamilnadu, India</td>
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<tr>
<td>ID</td>
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<td>537</td>
<td>Application of MFCA and ECRS in Waste Reduction: A Case Study of Electronic Parts Factory</td>
<td>Chompoonoot Kasemset, Department of Industrial Engineering, Chiang Mai University, Chiang Mai, Thailand Chawis Boonmee, Division of Sustainable and Environmental Engineering, Muroran Institute of Technology, Hokkaido, Japan</td>
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11:30 – 12:45, TUESDAY  
Undergraduate Student Paper Competition sponsored by Siemens  
Bintang VI

Session Chair: Abbas Mahmoudabadi, MehrAstan University, Gilan, Iran

ID 228  
Optimal Aggregate Production Planning using Genetic Algorithm  
Gaurav Banthia, Ronak Vyas and Juhi Gupta, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India

ID 236  
An Optimization Model for Managing System Inventories in a Disaster Supply Chain  
Charlile Sy, Martin Julian Ongchuan, Steven Ong and Hazel Lynne Lim, De La Salle University, Manila, Philippines

ID 292  
Feasibility Analysis of Indonesian Traditional Shipping Industry to Strengthen Domestic Maritime Logistic System  
Rahmat Nurcahyo and Wegit Triantoro, Universitas Indonesia, Depok, West Java, Indonesia

ID 697  
Developing a cost-effective model for evaluating the efficiency of weigh in motion system  
Razieh Akbari, Faculty of Economics, Kharazmi University, Iran Abbas Mahmoudabadi, Master Program in Industrial Engineering (MPIE), MehrAstan University, Gilan, Iran

11:30 – 12:45, TUESDAY  
Graduate Student Paper Competition sponsored by EATON  
Bintang VII

Session Chair: Dr. D. Muruganandam, Production Engineering Department, Sri Sairam Engineering College, Chennai, India

ID 477  
A new risk-based dynamic approach for Prioritizing Patients' access to healthcare services  
Daoud Al Kadi, Samira Abasgholizadeh Rahimi and Angel Ruiz, Université Laval, Quebec, Canada

ID 500  
Determining the Effect of Key Process Parameters on Forming Force of Single Incremental Sheet Metal Forming  
Abdulmajeed Dabwan, Adham Ragab, Mohammad Saleh and Abdelnaser Daoud, King Saud University, Riyadh, Saudi Arabia

ID 561  
A Prospective Solution for Consistent Aerostatic Lift for a Hybrid Buoyant Aircraft  
Anwar Ul Haque, Waqar Asrar, Erwin Sulaeman, and JS Mohamed Ali, Experimental & Computational Thermofluid Mechanics Research Group, ECTMRG, Department of Mechanical Engineering, International Islamic University Malaysia (IIUM), Kuala Lumpur, Malaysia Ashraf Ali Omar, University of Tripoli (UOT), Tripoli, Libya

ID 382  
Feasibility of Implementation of Project Management System in Project Oriented Organizations–A Case Study of Electrical Distribution Company  
Amin Lakzadeh, Middle East Mines & Mineral Industries Development Holding Company (MIDHCO), Kerman, Alghadir, Iran

ID 135  
Ergonomics as a Lean Manufacturing Tool for Improvements in a Manufacturing Company  
Rosnah Mohd Yusuff and Nor Suhada Abdullah, Universiti Putra Malaysia, Serdang, Selangor, Malaysia

ID 201  
Structure, Evaluation System, and Employee Resistance: Impediments to Horizontal Strategy Implementation in Diversified Corporations  
Pratima Verma, IIT Kanpur, UP, India

11:30 – 12:45, TUESDAY  
Human Factors and Ergonomics  
Mayang Sari I

Session Chair: Pratima Verma, IIT Kanpur, India

ID 079  
Czech students' perception of careers in the Shared Services industry  
Oksana Koval and Stephen Nabareseh, Tomas Bata University in Zlin, Czech Republic

ID 177  
Multiple Performance Optimization for Human-Robot Collaboration: A Translation Motion in a Tele-Sandblasting Maintenance System  
Ranon Jientrakul and Chumpol Yuangyai, King Mongkut's Institute of Technology, Ladkrabang, Bangkok, Thailand

ID 164  
Ergonomics as a Lean Manufacturing Tool for Improvements in a Manufacturing Company  
Rosnah Mohd Yusuff and Nor Suhada Abdullah, Universiti Putra Malaysia, Serdang, Selangor, Malaysia

ID 201  
Structure, Evaluation System, and Employee Resistance: Impediments to Horizontal Strategy Implementation in Diversified Corporations  
Pratima Verma, IIT Kanpur, UP, India

11:30 – 12:45, TUESDAY  
Data Analytics  
Mayang Sari II

Session Chair: Koorosh Mashhadizadeh Alizadeh, Sadjad University of Technology, Mashhad, Iran

ID 320  
Application of Text Mining for Classification of Textual Reports: A Study of Indonesia’s National Complaint Handling System  
Isti Surjandari, Chyntia Megawati, Arian Dhini and I.B.N. Sanditya Hardaya, Universitas Indonesia, Depok, Indonesia

ID 387  
In search of Malaysian companies with successful implementation of business intelligence initiatives  
Wong Kee-Luen and Chuah Min-Hooi, Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia

ID 538  
Crime Trend Analysis by Changes of Spatial Autocorrelation and Hot-spot  
Hohyun Lee and Dain Kim, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

ID 127  
Driving safety performance in the construction industry through safety induction and training – as a leading measure  
Natalie Skeepers and Charles Mbohwa, University of Johannesburg, South Africa

ID 429  
Building Information Modeling (BIM): A Study to Prioritize Applications, Risks and Challenges  
Koorosh Mashhadizadeh Alizadeh, Department of Industrial Engineering, Sadjad University of Technology, Mashhad, Iran Jalal Sani Bagijran, Day Company, Tehran, Iran

Ebrahim Rezaee Nik, Department of Industrial Engineering, Sadjad University of Technology, Mashhad, Iran

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<td>Case Studies</td>
<td>Mayang Sari III</td>
<td>Session Chair: Sanda Geipele, Riga Technical University, Latvia</td>
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<td>ID 329 Energy Efficiency Improvement Opportunities in Latvia as a Sustainable Development Indicator</td>
<td></td>
<td>Ineta Geipele, Linda Kauškale and Iveta Pukite, Riga Technical University, Latvia</td>
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<td>ID 498 A Build-or-Lease Case Study for a Potential New Warehouse Due To Increasing Storage Capacity Requirements</td>
<td></td>
<td>Denis Daus, Chiang Mai University, Lübbecke, NRW, Germany</td>
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<td>ID 567 The Impact of Lack in Occupational Health and Safety Implementation in Small Businesses</td>
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<td>Charles Mbohwa and Sebonkile Thaba, University of Johannesburg, South Africa</td>
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<td>ID 481 Financial Inclusion in Colombia: Evolution and Relative Efficiency</td>
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<td>Gloria Rodríguez-Lozano, Universidad Nacional de Colombia, Bogota, Colombia</td>
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<td>ID 359 Management of energy efficient processes in residential and public buildings at regional level: A Case Study of Latvia</td>
<td></td>
<td>Sanda Geipele, Institute of Civil Engineering and Real Estate Economics, Riga Technical University, Riga, Latvia</td>
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<td>Gita Actina, Institute of Physical Energetics, Energy Efficiency Center, Riga, Latvia</td>
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<td>11:30 – 12:45, TUESDAY</td>
<td>Transportation and Traffic</td>
<td>Mayang Sari IV</td>
<td>Session Chair: Yoichi Shimakawa, Salesian Polytechnic, Machida-shi, Tokyo, Japan</td>
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<td>ID 024 A Proposed Hybrid Scheme for Eliminating Road Transportation Waste</td>
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<td>Bernardo Villareal, Universidad de Monterrey, San Pedro Garza Garcia, Nuevo Leon, Mexico</td>
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<td>ID 042 A Two-stage Stochastic Programming Model for Districting and Transportation Lot-size of Sugarcane</td>
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<td>Kanchala Sudtachat, Suranaree University of Technologoy, Muange, Nakhon Ratchasima, Thailand</td>
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<td>ID 113 An investigation into the urban bus route performance using a modified DEA Model: A case study of Kolkata bus transport</td>
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<td>Arnab Adhikari and Sumanta Basu, Indian Institute of Management Calcutta, Kolkata, West Bengal, India</td>
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<td>ID 130 An Analytical Framework for Local Impacts of Road Pricing Policy: A Case Study of the Tokyo Metropolitan Area</td>
<td></td>
<td>Yoichi Shimakawa, Salesian Polytechnic, Machida-shi, Tokyo, Japan</td>
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<td>Hiroyuki Goto, Hosei University, Koganei, Tokyo, Japan</td>
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<td>Hirota Takahashi and Yasushi Sumitani, Dept. of Information and Management Systems Engineering, Nagaoka University of Technology, Nagaoka, Niigata, Japan</td>
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<td>1:00 pm –</td>
<td>Industry Keynote:</td>
<td>Starhill 4</td>
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<td></td>
<td>Dr. Anwar Ali Mohamed</td>
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<td>O.R. Freelance Consultant, Penang, Malaysia and Former Principal Engineer at Intel Malaysia</td>
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<td>Mayang Sari Grand Ballroom (Lunch Provided)</td>
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<td>2:00 pm –</td>
<td>Networking Break at Exhibition Hall</td>
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<td>2:30 – 3:45, TUESDAY</td>
<td>Global Engineering Education III</td>
<td>Starhill 4</td>
<td>Session Chair: Dr. Mohammad Yeakub Ali, International Islamic University Malaysia</td>
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<td></td>
<td>2:30 – 2:55: Dr. Alok Verma, Ray Ferrari Professor and Chair, Department of Engineering Technology, Old Dominion Univ., Norfolk, VA, USA</td>
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<td>2:55 – 3:20: Dr. Ramiro Jordan, Professor and Associate Dean of Engineering for International Programs, Department of Electrical and Computer Engineering, University of New Mexico</td>
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<td>3:20 – 3:45: Dr. Mohammad Yeakub Ali, Professor and Head, Department of Manufacturing and Materials Engineering, International Islamic University Malaysia</td>
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<td>2:30 – 3:45, TUESDAY</td>
<td>Industry Solutions III</td>
<td>Starhill 5</td>
<td>Session Chair: Kishor Kulkarni, Tata Technology, Pune, India</td>
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<td>3:20 – 3:45: Kishor Kulkarni, Sr. Project Engineer, Tata Technology, Pune, India</td>
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<td>2:30 – 3:45, TUESDAY</td>
<td>Lean Six Sigma Green Belt Workshop</td>
<td>Starhill 6</td>
<td>Dr. Joseph M. Ogundu, President and CEO – Emerald Global Consulting Inc., West Bloomfield, Michigan, USA</td>
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### Operations Management III
#### Starhill 7

**2:30 – 3:45, TUESDAY**

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<tr>
<td>ID 146</td>
<td>Resolution of Resource Contentions in the Critical Chain Project Management based on Simulated Annealing</td>
<td>Hiroyuki Goto and Hajime Yokoyama</td>
<td>Hosei University, Koganei, Tokyo, Japan</td>
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<td>ID 152</td>
<td>Performance Measurement System and Business Performance Measurement System: A Comparative Study</td>
<td>Shahyar Soroshian, Nor Mahirah Mustapha and Azlinna Azizan</td>
<td>Universiti Malaysia Pahang, Kuantan, Pahang, Malaysia</td>
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<tr>
<td>ID 263</td>
<td>Improvement of Master Production Planning in a Semi-Conductor Manufacturer</td>
<td>Waralak Maneefun and Parames Chutima</td>
<td>Chulalongkorn University, Bangkok, Thailand</td>
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<td>ID 272</td>
<td>Use of Interdiction Models to evaluate the Robustness of two Echelon Supply Chain for Minimum Service level</td>
<td>Priyank Sinha</td>
<td>IIT Kanpur, Kanpur, Uttar Pradesh, India</td>
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<td>ID 336</td>
<td>Competitive Revenue Management Model Using Dynamic Pricing for Theater Seats Management</td>
<td>Priyank Sinha</td>
<td>IIT Kanpur, Kanpur, Uttar Pradesh, India</td>
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**Session Chair:** Artie Ng, Hong Kong Polytechnic University

### Supply Chain Management III
#### Starhill 8

**2:30 – 3:45, TUESDAY**

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<tr>
<td>ID 419</td>
<td>Applying the Analytical Hierarchy Process to Determine Upstream Competitiveness for Wedding-Planning Industry</td>
<td>Grisna Anggadwita, Cut Irma Setiawati, Yuhana Astuti and Bayu Rachmadi</td>
<td>School of Economic and Business, Telkom Univ., Bandung, Indonesia</td>
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<tr>
<td>ID 463</td>
<td>“Performance Evaluation” &amp; “Problems Identification in Warehouses” of Third-Party Logistics</td>
<td>Ghulam Yasin Shaikh, Muhammad Aijazuddin, Abu Bakar, Shamir Ali, Muhammad Amir and Moin Khan</td>
<td>Mehran Univ. of Eng. and Technology, Jamshoro, Pakistan</td>
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<td>ID 505</td>
<td>Addressing Supply Chain Configuration Practices: Evidence from Italian Best Performer Valve Suppliers for the Oil &amp; Gas Industry</td>
<td>Guido Jacopo Luca Micheli, Enrico Cagno, Filippo S.P.M. Manzi and Yasmine Sabri</td>
<td>Politecnico di Milano, Italy</td>
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<td>ID 558</td>
<td>Assessing the effect of implementing a port community system platform in the response time of an international terminal: the case of a multi-cargo facility at the Colombian Caribbean coast</td>
<td>Rene Amaya, Adriana Moros, Guisselle Garcia and Carlos Paternina</td>
<td>Universidad del Norte, Barranquilla, Atlántico, Colombia</td>
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<td>ID 581</td>
<td>The development of a framework for Australian SMMEs collaboration in a global supply chain environment, Part 2: Genetic operators and a case study</td>
<td>Mohammad Rizal Firmansyah</td>
<td>University of South Australia, Mawson Lakes, Adelaide, South Australia, Australia</td>
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**Session Chair:** Mohammad Rizal Firmansyah, University of South Australia

### Manufacturing and Design
#### Bintang V

**2:30 – 3:45, TUESDAY**

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<td>ID 185</td>
<td>Improvement of Productivity Rate of JIT #262, Creams, Liquids, Lotions Department of a Cosmetics Company</td>
<td>Ezrha C. Godiano and Rachel C. Villanueva</td>
<td>Department of Industrial Engineering, Malaylan Colleges Laguna, Cabuyao Laguna, Philippines</td>
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<td>ID 175</td>
<td>Effect of Sintering Temperature on Hydroxyapatite Compact Scaffold Characteristics</td>
<td>Wassanai Wattanutchariya, Jidapah Ruennareenard and Anirut Chaijaruwanch</td>
<td>Department of Industrial Engineering, Chiang Mai Univ., Thailand</td>
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<td>ID 214</td>
<td>Social Network Analysis Based Evolutionary Algorithmic Approach to Identify the Influence of Hubs on Flexible Scheduling Problems</td>
<td>Vijayakumar Manupati and Ila Sharma</td>
<td>VIT University, Vellore, TamilNadu, India</td>
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<td>ID 223</td>
<td>System of decision-making assistance for the recycling manufactured products</td>
<td>Mickael Gardoni, ÉTS, Montréal, Canada</td>
<td>Gaye Khalifa, University Assane Seck of Ziguinchor, Senegal</td>
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<td>ID 317</td>
<td>Designing Laptop Based On Customer Preference Using ECQFD and TRIZ Methods</td>
<td>Amalia Suzianti, Irham Satria, Shabila Anjani and Indi Galih</td>
<td>Universitas Indonesia, Depok, Jawa Barat, Indonesia</td>
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**Session Chair:** Indi Galih, Universitas Indonesia

### Undergraduate Student Paper Competition sponsored by Siemens
#### Bintang VI

**2:30 – 3:45, TUESDAY**

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<td>ID 400</td>
<td>Optimization of Warehouse Operations for Logistics Company in the Philippines</td>
<td>Stephanie B. Duque, Maricar M. Navarro, Bernaliza O. Verrey, Jovale C. Vitao, Sherilyn M. Zantua</td>
<td>Rosalia F. Gabuya, Industrial Engineering Department, Technological Institute of the Philippines, Quezon City, Philippines</td>
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<td>ID 512</td>
<td>Developing a Multi-objective Model for Locating a New Warehouse for Bama's Chain Store</td>
<td>Maral Siahpour, Ferdowsi University, Mashhad, Khorasan Razavie, Iran</td>
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<td>ID 421</td>
<td>Consideration of economics and ergonomics aspects in the design and manufacturing of Hydraulic Floor crane</td>
<td>Abdul Wahid, Shakil Shaikh, Muhammad Ibrahim Khan, Shahzain Akram and Syed Muhammad Hassan</td>
<td>Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan</td>
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2:30 – 3:45, TUESDAY  Ph.D. Dissertation Research Presentation Competition  Bintang VII

Session Chair: Dr. Seifedine Kadry, American University of the Middle East in Kuwait

ID 100  Design of Single-Phase Grid-Connected Based on Dual-MPPT for Photovoltaic Generation Systems
Slamet Kasbi, Rasli bin Abd Ghani and Fuminori Kobayashi, Malaysia – Japan International Institute of Technology (MJIIT), University Teknologi Malaysia Kuala Lumpur, Kuala Lumpur, Malaysia

ID 134  Next Generation of Interactive contact centre for efficient customer recognition
Morteza Saberi, Curtin University of Technology, Perth, Australia
Omar Khadeer Hussain and Elizabeth Chang, UNSW Canberra, Australia

ID 323  A Hybrid Particle Swarm Optimization Algorithm and Support Vector Machine Model for Agricultural Statistic of Thailand Forecasting
Onuma Kosanan and Nantachai Kantanantha, Department of Industrial Engineering, Kasetsart University (Bangkhen Campus), Bangkok, Thailand

ID 677  Exploring Critical Success Factors for TQM Implementation Using Interpretive Structural Modelling Approach: Extract from Case Studies
Vimal Kumar, IIT Kanpur, India

ID 678  The Linkages between Horizontal Strategy, Person-Environment fit and Horizontal Fit: An Empirical study
Pratima Verma, IIT Kanpur, India

2:30 – 4:00, TUESDAY  Human Factors and Ergonomics  Mayang Sari I

Session Chair: Seiko Taki, Chiba Institute of Technology, Narashino, Chiba, Japan

ID 194  Fatigue from driving – a comparison between morning and afternoon tasks
Rida Zuraida, Bina Nusantara University, Jakarta Barat, DKI Jakarta, Indonesia
Hardianto Iridiastadi and Ifikar Z.Sutalaksana, Institut Teknologi Bandung, Jawa Barat, Indonesia

ID 243  Workplace Ergonomics and Employees’ Health: A Case Study at Automotive Manufacturer
Nor Hazana Abdullah, Alina Shamsuddin, Nor Aziati Abdul Hamid, Eta Wahab and Nor Kamariah Kamaruddin, Univ. Tun Hussein Onn Malaysia

ID 291  Ergonomic Risk Factors for Workers in Garments Manufacturing – A Case Study from Pakistan
Rene Estember, Kevin Kristoffer Balares and Ma. Janice Gumasing, Mapua Institue of Technology, Manila, Philippines

ID 343  Human Error in Multitasking Environments
Ali Ahmad, Northwestern State University, Natchitoches, LA, United States
Shatha Samman, Global Assessment, Inc., Orlando, Florida, USA

ID 376  Study on Life Log of Female Parent during Child Care in Japan
Seiko Taki, Chiba Institute of Technology, Narashino, Chiba, Japan

2:30 – 3:45, TUESDAY  Data Analytics  Mayang Sari II

Session Chair: Ainul Akmar Mokhtar, Universiti Teknologi Petronas, Malaysia

ID 150  Development of Effective Marketing Strategies for a Housing Equipment Company Based on Analysis of Sales Data and Sales Personnel
Kakunoshin Nishiyama, Graduate School of Business Administration, Keio University, Chuo-ku, Tokyo, Japan
Uschio Sumita, Keio University, Yokohama, Kanagawa, Japan

ID 151  Structural Analysis of Page Access Behaviors of Sessions at Website of a Housing Equipment Company
Uschio Sumita and Hiroaki Takagi, Keio University, Yokohama, Kanagawa, Japan

ID 254  Class-Time Utilization in Business Schools in Tunisia
Omar Ben-Ayed, Qatar University, Doha, Qatar
Hedia Lahmar and Raoudha Kammoun, College of Economics and Management (FSEGS), University of Sfax, Sfax, Tunisia

ID 488  Application of Logistic Regression in Resolving Influential Risk Factors Subject to Corrosion under Insulation
Ainul Akmar Mokhtar, Masdi Muhammad and Nurul Rawaida Ain Burhani and Mokhtar Che Ismail, Universiti Teknologi Petronas, Perak, Malaysia

2:30 – 3:45, TUESDAY  Construction Management  Mayang Sari III

Session Chair: Ineta Geipele, Riga Technical University, Latvia

ID 123  Improving health and safety in the construction industry through cultural transformation
Natalie Skeepers and Charles Mbohwa, University of Johannesburg, South Africa

ID 407  A Risk Management Framework for Selling a Mega Power Plant Project in a New Market
Negar Ganjouhaghighi and Amirali Dolatshahi, Mapna Group, Tehran, Iran

ID 534  Genetic Algorithms for Two-Phase Construction Dynamic Site Layout
Amr Fathy and Ibrahim Abotaleb, The American University in Cairo, Egypt
ID 448  Comparative Study of Procurement System between Industrialised Building System (IBS) and Conventional Construction
Natasha Dzulkalnine, Construction Research Institute of Malaysia (CREAM), Kuala Lumpur, Malaysia

ID 227  Influence of Economic and Real Estate Market Fluctuations on Real Estate Entrepreneurship in Latvia
Ineta Geipele and Linda Kauškale, Riga Technical University, Riga, Latvia

ID 247  Real Estate Investment Management and Macroeconomic Sustainability: Case of Latvia and International Experience
Ineta Geipele and Linda Kauškale, Riga Technical University, Riga, Latvia

2:30 – 3:45, TUESDAY  Transportation and Traffic  Mayang Sari IV

ID 324  A Multi Objective Robust Model for Capacity-Constraint Hub-Covering Flow Problem
Sogol Saremi, Industrial Engineering School, Iran University of Science & Technology, Tehran, Iran
Hani Shahmoradi-Moghaddam, Industrial Engineering Department, University of Tehran, Tehran, Iran
Armin Jabbarzadeh, Industrial Engineering School, Iran University of Science & Technology, Tehran, Iran

ID 548  Waiting Time Duration-Constrained Close-Open Mixed Vehicle Routing Problem with Semi Soft Time Window Solved by GA and Tabu Search
Mehdi SeliBarghy, Alzahr University, Tehran, Iran
Mojhgan Hafezinia, Qazvin, Iran

ID 026  Using Tolerated Risk for Solving Hazardous Material Routing Problem by Preemptive Goal Programming Approach
Abbas Mahmoudabadi, MehrAstan University, Astaneh Ashrafiieh, Gilan, Iran
Hassan Abdooos, Road Maintenance and Transport Organization, Tehran, Iran
Roobeh Azizmohammadi, Department of Industrial Engineering, Payame Noor University, Tehran, Iran

15:45 - Break

ID 156  Commercial Viability of Foldable Ocean Containers
Shao Hung Goh, SIM University, Singapore

4:00 – 5:15, TUESDAY  Global Engineering Education IV  Starhill 4

ID 717: Engineering Postgraduate Students' Perspective on Their Preparedness for the Job Market: Employability Attributes
Dr. Chan Chee-Ming, Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

4:00 – 5:15, TUESDAY  Industry Solutions IV  Starhill 5

ID 357  Optimization Model for Advertisement Decision a Case of Cooperative Dairy
Anubha Rautel, Nishith Mohan, S. K. Sharma and P. Bharadwaj, Indian Institute of Technology –BHU, Uttar Pradesh, India

ID 304  Can Resource Sharing Improve Disaster Response Effectiveness? Evidence from West Sumatra Earthquake
Eko Setiawan, Universitas Muhammadiyah Surakarta, Birmingham, West Midlands, United Kingdom

4:00 – 5:15, TUESDAY  Lean Six Sigma Green Belt Workshop  Starhill 6

ID 366  Performance Measurement in PT. XYZ Using the Balanced Scorecard - A Case Study of PT. XYZ
Ig Jaka Mulyana, Lien Tjiang, Martinus Edy and Van Gunawan, Industrial Engineering Department Widya Mandala Surabaya Catholic University, Surabaya, Indonesia

4:00 – 5:15, TUESDAY  Operations Management IV  Starhill 7

ID 369  Improving the quality of public transportation using Quality Function Deployment and Kano’s Model
Anjar Priyono, Universitas Islam Indonesia, Yogyakarta, Indonesia

ID 572  A new heuristic algorithm to solve product-service mix analysis in mobile bottleneck environments with shared resources based on GTBM method
Eldon Caldwell, University of Costa Rica, San Jose, Costa Rica

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**Session Chair:** Dr. D. Muruganandam, Production Engineering Department, Sri Sairam Engineering College, Chennai, India

ID 020 **Relating Supply Chain E-Integration to Organizational Strategy**  
Tesfaye Tolu Feyissa and R.R.K. Sharma, Indian Institute of Technology, Kanpur, UP, India

ID 039 **Optimization of Excess and Waste of Closed Loop Supply Chain System by Using Fuzzy Model**  
Reiam Basim Mohamed, Department of Mechanical Engineering, Engineering College, Baghdad University, Iraq  
Zuhair Issa Ahmed, Dean Bani University College, Baghdad, Iraq

ID 147 **Supply Chain Management of Thai Parboiled Rice for Export**  
Wassanai Wattanatuchrinya, Department of Industrial Engineering, Faculty of Engineering, Chiang Mai University, Thailand  
Roengchai Tansuchat, Faculty of Economics, Chiang Mai University, Thailand  
Jidapah Ruennareenard, Department of Industrial Engineering, Faculty of Engineering, Chiang Mai University, Thailand

ID 153 **Networked RFID based Supply Chain Process Analysis**  
Tatsuya Inaba, Kanagawa Institute of Technology, Atsugi, Kanagawa, Japan

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**Session Chair:** Sahil Nanda, Delhi Technological University, India

ID 363 **Improvement of the manufacturing process of the salicylic acid**  
Gerardo Avendano, Maritza Reyes and Baudilio Acevedo, Universidad EAN, Bogota, Cundinamarca, Colombia

ID 462 **Copper Sheet Resistance characteristics in the production staging time limitation study between Copper Seed and Copper Electroplating in Semiconductor Wafer Manufacturing**  
Mohd Razali Muhamad, Universiti Teknikal Malaysia Melaka, Malaysia  
Anuar Fadzil Ahmad, Silterra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia  
Zarifah Syazana Hashim, Universiti Teknikal Malaysia Melaka (UTeM), Kulim, Kedah, Malaysia  
Md Nizam Abdul Rahman, Universiti Teknikal Malaysia Melaka, Durian, Tunggal, Melaka, Malaysia

ID 480 **Investigation of surface integrity in high speed machining of Ti6Al4V alloy**  
Amir Rasti, Mohammad Hossein Sadeghi and Hamed Hassanpour, Tarbiat Modares University, Tehran, Iran

ID 526 **Grey fuzzy optimization of cutting parameters on Material Removal Rate and Surface Roughness of Aluminium**  
Sahil Nanda, Subhram Singhal, Rushil Batra and Ranganath M. Singari, Delhi Technological University, New Delhi, Delhi, India

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**Session Chair:** Md. Mizarun Rahman, Universiti Malaysia Sabah

ID 235 **Priority Determination of the Renewable Energies Using Fuzzy Group ViKOR Method; Case Study Iran**  
Mohammad Reza Feylizadeh and Mohammad Ali Dehghani, Islamic Azad University, Shiraz, Fars, Iran

ID 289 **Dynamic capabilities and their direct impact on firm’s Performance**  
Makhala M. Motebele and Charles Mbohwa, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 611 **The Impact on the Operational Performance of Manufacturing Implementation Strategies**  
Makhala Mpho Motebele and Charles Mbohwa, Department of Quality and Operations Management, University of Johannesburg, South Africa

ID 288 **Evaluate Performance of Earth – Air – Pipe System under Laboratory Condition**  
Md. Mizarun Rahman, Ling Leh Sung, Fadzila Mohd. Tamiri and Mohd Sufian Bin Misaran, Mechanical Engineering Program, Faculty of Engineering, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia

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<td>Ph.D. Dissertation Research Presentation Competition</td>
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**Session Chair:** Michael Mutingi, University of Botswana

ID 334 **A Framework for Improving Productivity of SMEs Economically**  
Suman Samanta, IIT Kanpur, Kanpur, Uttar Pradesh, India

ID 509 **Deployment of Virtualization Technology for Higher Engineering Education Data Communication Laboratory**  
Zulfiqar Ali, Royal Comission, Yanbu Al Sinayah, Madinah, Saudi Arabia  
Raed Althomali, Yanbu Industrial College-YIC, Yanbu Al Sinayah, Madinah, Saudi Arabia

ID 527 **Design, Connection, Configuration and Testing of a Mini Data Center for Higher Engineering Technology Institute Lab**  
Zulfiqar Ali, Royal Comission, Yanbu Al Sinayah, Madinah, Saudi Arabia

ID 576 **Solutions to ammoniacal nitrogen presence in CMP effluent from oxide process**  
Mohamed Ariff Shri Abdul Aziz, Muhammad Asyraf Said, Ahmad Termizi Awang and Sulong Mamat, SilTerra Malaysia Sdn Bhd, Kulim, Malaysia  
Abdul Taib Din, Universiti Teknikal Malaysia (UTeM), Durian, Tunggal, Melaka, Malaysia

ID 598 **Fuzzy heuristic approaches for healthcare staff scheduling**  
Michael Mutingi, University of Botswana, Gaborone, Botswana
### Human Factors and Ergonomics

**ID 569**  
Gripping Strength Distribution among Middle Eastern Teenage and Young Adults  
Abdalla Alrashan, Alfaisal University, Riyadh, Saudi Arabia  
Ali Mohamed, Prism Group Inc., Windsor, ON, Canada

**ID 599**  
Sonographer Ergonomics: Assessment and workplace redesign  
Anchal Patil, IIT Delhi, New Delhi, Delhi, India

**ID 651**  
The Relationship between Leadership Styles and Quality Management Practices in Johor Bahru Manufacturing Firms  
Shiau Wei Chan and Parit Raja, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

**ID 112**  
Car Drivers with Higher Perceived Safety Tend To Drive Their Vehicles with Higher Risk - A Unique Phenomenon on the Roads in Jakarta, Indonesia  
Hwi-Chie Ho and Dyah Lestari Widianingrum, Bina Nusantara University, Jakarta, Jakarta Raya, Indonesia

**ID 190**  
HR Practices and organizational commitment among SME employees which leads to retention  
Vimala Kadiresan, Mehrunishah Begum Bt vps Bathusha Hamind, Mohamad Hisyam Bin Selamat and Neeta Jayabalan, Faculty of Business, Accounting and Management (FOBAM), SEGI University, Kota Damansara, Petaling Jaya, Malaysia  
Shaheen Mansori, Faculty of Business, Communications and Law, INTI International University, Bandar Baru Nilai, Negeri Sembilan, Malaysia

### Decision Sciences

**ID 015**  
Framework for Decision Support Tool for Quality Control and Management in Botswana Manufacturing Companies  
Mogale Sabone, Botswana International University of Science and Technology, Gaborone, South East, Botswana

**ID 047**  
A Game-Theoretic Approach to Digital Marketing and Lead Generation for Duopoly Markets  
Antonio Grilo, Diogo Mota and Marta Faias, FCT-UNL, Alverca, Lisboa, Portugal

**ID 250**  
A Decision Support Model for Spare Parts Inventory in a Multi-Echelon Closed Loop Supply Chain  
Charlle Sy, De La Salle University, Manila, Philippines

**ID 269**  
FuzzyExtent Analysis: Comparison of Defuzzification Methods  
Kemal Kilic and Faran Ahmed, Sabanci University, Istanbul, Turkey

**ID 348**  
Manufacturing configuration selection under arduous working conditions: A multi-criteria decision approach  
Saber Darmoul, Industrial Engineering Department, King Saud University, Riyadh, Saudi Arabia  
Sonia Hajri-Gabouj and Souhir Ben Cheikh, INSAT, Tunis, Tunisia

### Engineering Management

**ID 198**  
Supporting Decisions on Industrial Plant Modularization: A Case Study Approach in the Oil and Gas Sector  
Mauro Mancini, Angelica Magagnini, Alessandro Bondi, Guido Jacopo Luca Micheli and Agnese Travaglini, Politecnico di Milano, Milan, Italy

**ID 009**  
From Traditional to Modern Manufacturing System: Case Study  
Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, South Africa

**ID 110**  
A Way Forward to Attain Lean Manufacturing Status through Transformational Leadership  
Syed Masood, International Islamic University, Islamabad, Pakistan

**ID 411**  
Implementation of computerized Preventive Maintenance in Sur construction PLC  
Rezene Kahsay Hagos, Mekelle University, Ethiopia

**ID 178**  
Analyzing Technical and Social Dimension in Knowledge Sharing Intention Behavior in E-learning System  
Ceicalia Tesavrita and Ike Mercia Yusuf, UNPAR, Bandung, West Java, Indonesia

### Technology Management

**ID 141**  
The Impact of ICT Usage on Collaborative Product Development Performance: A Conceptual Model and Industry Perspective  
Chathurani Silva and Sanjay Mthrani, Massey University, Albany, Auckland, New Zealand  
Nihal Jayamaha, Massey University, Palmerston North, Manawatu, New Zealand

**ID 394**  
Challenges of wastewater discharge and techniques for treatment: a review  
Zerinah Asmelash Samuel, Tilahun Seyoum Workneh and Cristina Trois, School of Engineering, University of KwaZulu-Natal, PMB, South Africa  
Fekadu Fufa Feyessa, Jimma Institute of Technology, Jimma University, Ethiopia

**ID 436**  
Key RFID implementation factors affecting “sourcing” decision of RFID systems in supply chain of manufacturing industry  
Niraj Kumar Vistvakarma Indian Institute of Technology, Kanpur Kanpur Uttar Pradesh India.  
R.R.K. Sharma Indian Institute of Technology Kanpur, UP, India

**ID 441**  
Firm’s Policy Management by using ERP system  
Thanyawan Soonthirbipat, Vorapoch Angkaith and Dhiranattha Rithmanee, King Mongkut's University of Technology Thonburi, Thailand

**ID 557**  
Noorliza Karia and Mohamed Soliman, Universiti Sains Malaysia, Penang, Malaysia

### Poster Session and IEOM Student and Professional Chapter Mixer
March 9, 2016 (Wednesday)

08:00 – 09:15, WEDNESDAY    Global Engineering Education V    Starhill 4
Session Chair: Dr. C. B. Gupta, Birla Institute of Technology and Science, Pilani (Raj.), India

08:00 – 08:25: Engr. Prof. Adagbonyin Moses O. Obiazi, Dean, Faculty of Engineering and Technology, Ambrose Alli University, Nigeria
08:25 – 08:50: Dr. C. B. Gupta, Professor, Department of Mathematics, Birla Institute of Technology and Science, Pilani (Raj.), India
08:50 – 09:15: Dr. Jafri Mohd Rohani, Head - Industrial Engineering Programme, Dept. of Materials, Industrial and Manufacturing Engineering, Universiti Teknologi Malaysia

08:00 – 09:15, WEDNESDAY    Industry Solutions V    Starhill 5
Session Chair: Md. Kawsar Ali, Comfit Composite Knit Ltd., Bangladesh

8:00 – 8:25 am: Arumugam Manikam, Silterra (M) Sdn.Bhd, Kulim, Kedah, Malaysia
ID 627 Yield Improvement of Wafer Edge Die Defocus (EDD) at Via Layer

8:25 – 8:50 am: Vivek Sundar Magesh, TVS Logistics Services Limited, Chennai, India
ID 218 Maximising Revenues in the “Tatkal” Category of Indian Railways

8:50 – 9:15 am: Md Kawsar Ali, Chief Operating Officer, Comfit Composite Knit LTD, Gorai, Mirzapur, Tangail, Dhaka, Bangladesh

08:00 – 09:15, WEDNESDAY    Operations Management V    Starhill 6
Session Chair: Makhala Mpho Motebele, University of Johannesburg, South Africa

ID 388 Proposed Performance Management System for Indonesian Ministry of Health Using Integrated Performance Management System
Indra Wirapraceka and Dermawan Wibisono, ITB, Bandung, Indonesia

ID 471 Enhanced Organizational Ambidexterity through the Automation of Production-Related Processes
Eva Bogner, Christopher Kaestle and Joerg Franke, Institute for Factory Automation and Production Systems, Friedrich-Alexander-University Erlangen-Nuremberg, Erlangen, Germany

ID 654 Awareness, Implementation, Effectiveness and Future Adoption of Operational Improvement Initiatives: Survey Results
Musli Mohammad, Noor Hamizah Yaakub, Mohd Shahir Yahya, and Nor Aziati Abdul Hamid, Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia

ID 647 Implementation of Fuzzy Inference System for Production Planning Optimisation
R. Ramlan, A. P. Cheng. S. W. Chan and Y. Ngadiman, Department of Production and Operation Management, Universiti Tun Hussein Onn Malaysia

ID 370 Identifying Organisational best practices redesign: skills, grading and wage systems for synthesizing findings on WCM
Makhala Mpho Motebele, University of Johannesburg, South Africa

08:00 – 09:15, WEDNESDAY    Lean and Six Sigma I    Starhill 7
Session Chair: Amjad Khalili, International Islamic University Malaysia

ID 121 Introducing Radio Frequency Identification into Lean Manufacturing; An application in garment industry
Michael Wahba, Lamia Shihata and Amr Talaat, German University in Cairo, Egypt

ID 319 Quality Improvement in Plastic Based Toy Manufacturer Using Six Sigma Method
Rahmat Nurcahyo and Dendi Ishak, Universitas Indonesia, Depok, Jawa Barat, Indonesia

ID 330 An Investigation of Lean Manufacturing Implementation in Textile Sector of Pakistan
Zahid Abbass Shah and Hadia Hussain, University of the Punjab, New Campus, Lahore, Pakistan

ID 386 Leaness Assessment for Adapting Lean Manufacturing Principles to Textile Processing
Abebayehu Abdela, School of Mechanical and Industrial Engineering, Ethiopia Institute of Technology-Mekelle, Mekelle University, Mekelle, Ethiopia

ID 491 A Critical Assessment of Prevailing Models for Measuring Lean Manufacturing
Amjad Khalili, Md Yusof Ismail, A.N.M.Karim, and Mohd Radzi Che Daud, International Islamic University Malaysia

08:00 – 09:15, WEDNESDAY    Supply Chain Management V    Starhill 8
Session Chair: Muhammad Rusman, Hasanuddin University, Makassar, Indonesia

ID 125 Minimizing fluctuation in commodity pricing using Dynamic Simulation
Madhupreetha Venkatesh, Confederation of Indian Industries, Chennai, Tamil Nadu, India

ID 580 The development of a framework for Australian SMMEs collaboration in a global supply chain environment, Part 1: A conceptual model and solution approach
Mohammad Rizal Firmansyah, University of South Australia, Mawson Lakes, Adelaide, South Australia, Australia

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<td>Reverse Logistics in Indian Pharmaceutical Industry</td>
<td>Jamal A Farooqie, Aligarh Muslim University (AMU), Aligarh, UP, India</td>
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<td>Disruption recovery of two-stage serial supply chain with consideration of carbon emission cost</td>
<td>Noraida Azura Darom and Hawa Hishamuddin, Universiti Kebangsaan Malaysia, Bandar Baru Bangi, Selangor, Malaysia</td>
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<td>Optimization Planning for Logistics distribution of rice commodities in South Sulawesi</td>
<td>Muhammad Rusman, Industrial Engineering, Hasanuddin University, Makassar, Sulawesi Selatan, Indonesia</td>
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08:00 – 09:30, WEDNESDAY  
**Manufacturing and Design**  
Bintang V  
**Session Chair:** Muhammad Akmal Johar, Universiti Tun Hussein Onn Malaysia

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| 468     | Applying Human Centered Design Process to Hitachi’s Integrated Plant Construction System | Eizaburo Takegami, Service Design Research Department, Hitachi, Ltd., Research & Development Group, Tokyo, Japan  
Ryota Nizeki, Service Design Research Department, Hitachi, Ltd., Research & Development Group, Tokyo, Japan  
Toshihiro Suzuki, Photovoltaic Power System Department, Hitachi, Ltd., Power Systems Company, Ibaraki, Japan  
Yasuki Yokosuka, Project Management Supporting Department, Hitachi, Ltd., Power Systems Company, Ibaraki, Japan |
| 550     | Application of Fuzzy Logic and Fuzzy Systems in Machining: A Literature Review | Sahil Nanda, Shubhham Singhal, Rushil Batra and Ranganath M. Singari, Delhi Technological University, New Delhi, Delhi, India |
| 523     | Build Up of Copper EDM Electrode by Using Galvanic Plating Process    | Hussain Mohammed Yousif, Central Tool Room Plant, Nasser State Company, Ministry of Industry & Mineral, Baghdad, Iraq  
Hijran Zainalabidin, Dep. of Production Engineering and Metallurgy, University of Technology, Baghdad, Iraq  
Niveen Jamal Abd Alkader, Dep. of Materials Engineering, University of Technology, Baghdad, Iraq |
| 435     | Study on Performance Evaluation of Self-propelled Reaper              | Jannatul Ferdows Nipa, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh |
| 087     | Evaluating Maintenance Strategies Effectiveness on Overall Equipment Utilization | Charles Mbohwa and Bupe Mwanza, University of Johannesburg, Gauteng, South Africa |
| 685     | Need for Deployment of RFID Technology in Indian Hospitals            | Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India |
| 690     | Transportation of Organs using UAV                                   | Nivedha Balakrishnan, Kannan Devaraj, Siranjiv Rajan and Girirprabhu Seshadri, Project Student, Sri Ramakrishna Engineering College, Coimbatore, India |
| 234     | The environmental impact of inputs used in the vitiviniculatural sector in Algeria | Kaddour El Heit, Université Mouloud Mammeri, Tizi Ouzou, Algeria  
Hamama Anderazak, University Tizi Ouzou, Algeria  
Mellak Abderrahmane, Boumerdes University – Algeria, Boumerdes, Algeria |

08:00 – 09:15, WEDNESDAY  
**Undergraduate Research Presentation**  
Bintang VI  
**Session Chair:** Mellak Abderrahmane, Boumerdes University – Algeria, Boumerdes, Algeria

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<td>Evaluating Maintenance Strategies Effectiveness on Overall Equipment Utilization</td>
<td>Charles Mbohwa and Bupe Mwanza, University of Johannesburg, Gauteng, South Africa</td>
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<td>685</td>
<td>Need for Deployment of RFID Technology in Indian Hospitals</td>
<td>Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India</td>
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<td>Transportation of Organs using UAV</td>
<td>Nivedha Balakrishnan, Kannan Devaraj, Siranjiv Rajan and Girirprabhu Seshadri, Project Student, Sri Ramakrishna Engineering College, Coimbatore, India</td>
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Hamama Anderazak, University Tizi Ouzou, Algeria  
Mellak Abderrahmane, Boumerdes University – Algeria, Boumerdes, Algeria |

08:00 – 09:30, WEDNESDAY  
**Reliability and Maintenance**  
Bintang VII  
**Session Chair:** Wilkistar Otieno, University of Wisconsin-Milwaukee, United States

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| 084     | Cost Based Failure Consequence Approach for Identifying Critical Components for Maintenance Support Decision | Pravin Tambe, Rcoem, Nagpur, Maharashtra, India  
Makarand Kul Karni, IIT Delhi, New Delhi, Delhi, India |
| 283     | Exergy Based Multi-State Reliability Model for a Stationary Gas Turbine | Tamiru Alemu Lemma, Fakhruddin Mohd Hashim and Mohd Amin Bin Abd Majid, Dept. of Mechanical Engineering, Universiti Teknologi Petronas |
| 284     | Gas Turbine Prognostics using Fuzzy Systems and Modified Bat Algorithm | Tamiru Alemu Lemma, Fakhruddin Mohd Hashim and Mohd Amin Bin Abd Majid, Dept. of Mechanical Engineering, Universiti Teknologi Petronas |
| 345     | Comparative Analysis of Offshore Pipeline Reliability Using Degradation Analysis and PF Interval Models | Ainul Akmar Mokhtar, Universiti Teknologi Petronas, Bandar Seri Iskandar, Perak, Malaysia |
| 555     | Research on BRT Driver Jakarta Fatigue Evaluation                      | Ketut Ayu, Nike Septivani and Rida Zuraida, Bina Nusantara University, Jakarta Barat, Indonesia  
Hardianto Iridiastadi, Institut Teknologi Bandung, Bandung, Jawa Barat, Indonesia |

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**ID 420  Warranty Optimization for Remanufactured Products**  
Wilkistar Otieno, University of Wisconsin-Milwaukee, United States

**08:00 – 09:15, WEDNESDAY  Human Factors and Ergonomics  Mayang Sari I**

Session Chair: Zahid Abbass Shah, University of the Punjab, Lahore, Pakistan

**ID 381  Anthropometric Data Variation Within Gari-frying Population**  
Taiwo Samuel, Dept. of Agricultural and Mechanical Engineering, Obafemi Awolowo University, Nigeria  
Olateju Aremu, Federal Institute of Industrial Research Oshodi (FIIRO), Lagos, Nigeria  
Olusankanni Ismaila, Federal University of Agriculture, Abeokuta, Nigeria  
Babatunde Adetifa, Dept. of Agricultural and Mechanical Engineering, Obafemi Awolowo University, Nigeria  
Livinus Onu, S.E. Adedigbe and A.A. Olokose, Federal Institute of Industrial Research Oshodi (FIIRO), Lagos, Nigeria

**ID 412  Association between Psychosocial factors with upper-musculoskeletal disorders: An academic review**  
Paras Behrani, UTP, Tronoh, Perak, Malaysia

**ID 422  Design of Human Cognitive Model in a Self-Optimizing Assembly Cell: A Case Study of Indonesian**  
Novie Susanto and Kharisma Panca Kumiai, Industrial Engineering Dept, Faculty of Engineering, Diponegoro University, Semarang, Indonesia

**ID 432  Musculoskeletal Disorders among Caregivers in Nursing Home**  
Hardianto Iridiastadi and Bayuardi Anggawisnu, Faculty of Industrial Technology, Institut Teknologi Bandung, Bandung, Jawa Barat, Indonesia  
Livinus Onu, S.E. Adedigbe and A.A. Olokose, Federal Institute of Industrial Research Oshodi (FIIRO), Lagos, Nigeria

**08:00 – 09:15, WEDNESDAY  Decision Analysis  Mayang Sari II**

Session Chair: Somayeh Khoshsoroor, Harbin Institute of Technology, China

**ID 356  Assessing Customer Requirements and Preferences for a Perishable Product: A Case of an Indian Cooperative Dairy**  
Anubha Raute, Vinayoshi Mishra, S. K. Sharma, P. Bhadwaj and Nishith Mohan, Indian Institute of Technology-BHU, Varanasi, India

**ID 474  Applying fuzzy-AHP and VIKOR method to evaluate the fitness of ERP systems**  
Li-Man Liao, Ching-Jen Huang and Po-Chih Kang, National Chin-Yi University of Technology (NCUT), Taichung, Taiwan

**ID 624  The Psychology of the Competition in High-Tech Industries**  
Ehsan Chitsaz, Harbin Institute of Technology, Harbin, Heilongjiang, China  
Liang Dapeng, School of Economy and Management, Harbin Institute of Technology, Harbin, Heilongjiang, China  
Somayeh Khoshsoroor, School of Economy and Management, Harbin Institute of Technology, China  
Hamid Shafizadeh, Texas A&M University College Station, Texas, United States

**ID 542  Evaluation of Innovative Product Development Practices in an Organization: A Case Study**  
Vinayak Kalluri, BML Munjal University, Gurgaon, Haryana, India

**ID 632  How Team Allocate the Resource - A Model of Escalation of Commitment in Competitive Situation**  
Somayeh Khoshsoroor, Liang Dapeng, Ehsan Chitsaz and Shahid Kalim, School of Economy and Management, Harbin Institute of Technology, Harbin, China

**08:00 – 09:15, WEDNESDAY  Engineering Management  Mayang Sari III**

Session Chair: Charles Mbohwa, University of Johannesburg, South Africa

**ID 010  A Cleaner Production (CP) Perspective for the Metal Industry Processes: Case Study**  
Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, Gauteng, South Africa

**ID 109  The impact of Process Improvement initiatives in manufacturing industry in South Africa**  
Mukondeleli Grace Kanakana Katumba, Tshwane University of Technology, South Africa  
Sydney Thoko, Automotive Industry Development Centre, Pretoria, South Africa

**ID 347  Problem-Solving, Decision Making and Managerial Skills of Engineer-Managers in Selected Small-To-Large Scale Enterprises in Laguna**  
Josephine Villamin, PIIE, and Laguna State Polytechnic University, Sta. Cruz, Laguna, Philippines

**ID 377  Globalization of Logistics and Supply Chain Management**  
Majid Baseer and Muhammad Arsalan, Sarhad University of Science and Information Technology, Peshawar, Pakistan

**ID 016  Cleaner Production to Optimize Resource Consumption and Reduce Effluent Waste in a Beverage Plant**  
Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, Gauteng, South Africa

**08:00 – 09:15, WEDNESDAY  Energy  Mayang Sari IV**

Session Chair: Mohammad Mahfujur Rashid, Ahsanullah University of Science and Technology, Dhaka, Bangladesh

**ID 170  Component Rating Optimization Methodology for the Protection of Photovoltaic Solar Power System Components from Shading Effect**  
Ayman El Hakea, American University in Cairo, Alexandria, Egypt  
Mohamed Amin, Cairo University, Giza, Egypt
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<th>ID</th>
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<th>Authors</th>
<th>Institution/University</th>
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<tr>
<td>ID 271</td>
<td>Development of an Expert System for the Feasibility Assessment of Renewable Energy Projects</td>
<td>M. Khurshid Khan, Farhan Qutab Siddiqui and Jasim Al-Dairi</td>
<td>University of Bradford, United Kingdom</td>
</tr>
<tr>
<td>ID 301</td>
<td>Renewable energy policy in Germany and Malaysia: Success factors</td>
<td>Md. Mizanur Rahman, Aminuddin Saat and Mazlan Abdul Wahid</td>
<td>Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia</td>
</tr>
<tr>
<td>ID 396</td>
<td>Aerodynamic Optimization of NACA64A410 Blade Aerofoil for Small Wind Turbine Application with Ansys Fluent</td>
<td>Mulu Bayray Kahsay, Mekelle University, Mekelle, Tigray, Ethiopia</td>
<td>Department of Mechanical Engineering, Faculty of Technology, Debre Tabor University, Debre Tabor, Ethiopia</td>
</tr>
<tr>
<td>ID 399</td>
<td>Tidal Energy and its Prospects in Bangladesh</td>
<td>Mohammad Mahfujur Rashid, Ahsanalhassan University of Science and Technology, Dhaka, Bangladesh</td>
<td></td>
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</table>

9:30 am – 10:15 am **Tuesday Morning Keynote:**

**Ir. Dr. Zuhairi Abd. Hamid**  
Executive Director - Construction Research Institute of Malaysia (CREAM)

10:15 am – 11:00 am **Tuesday Morning Keynote:**

**Mohammad Shaharudin bin Shamsudin**  
Head of Production Planning and Control, PROTON Holdings Berhad, Malaysia

### 11:30 – 12:45, WEDNESDAY  
**Global Engineering Education VI**  
Starhill 4

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<th>Session Chair</th>
<th>Speaker</th>
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<tr>
<td>11:30</td>
<td>Dr. Rosemary Seva</td>
<td>Dr. Alfredo Soeiro</td>
<td>University of Porto, Portugal, Past Academic Director in Civil Engineering Past Pro-Rector of the University of Porto for Continuing Education and Past President - European Society of Engineering Education</td>
</tr>
<tr>
<td>11:55</td>
<td>Dr. Asela K. Kulathunga</td>
<td>Dr. Rosemary Seva</td>
<td>Gokongwei College of Engineering, De La Salle University (DLSU), Manila, Philippines</td>
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### 11:30 – 12:45, WEDNESDAY  
**Industry Solutions VI**  
Starhill 5

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<tr>
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<th>Session Chair</th>
<th>Speaker</th>
<th>Institution/University</th>
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<tr>
<td>11:30</td>
<td>Farrah &quot;Nix&quot; A. Juban</td>
<td>Dr. Zain Tahboub</td>
<td>Chief Advisor-Director of Excellence &amp; Innovation, Dubai Aviation Engineering Projects (DAEP), UAE</td>
</tr>
<tr>
<td>11:55</td>
<td>Md Fauzi Ahmad</td>
<td>Dr. Asela K. Kulathunga</td>
<td>University of Peradeniya, Sri Lanka</td>
</tr>
<tr>
<td>12:20</td>
<td>Dr. Rosemary Seva</td>
<td>Farrah &quot;Nix&quot; A. Juban</td>
<td>Process Engineering Excellence &amp; Kaizen Service Program Manager for Assembly and Test Manufacturing, Intel Malaysia</td>
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### 11:30 – 12:45, WEDNESDAY  
**Operations Research**  
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<th>Speaker</th>
<th>Institution/University</th>
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<tbody>
<tr>
<td>11:30</td>
<td>Nurhadi Siswanto</td>
<td>Vural Aksakalli</td>
<td>Istanbul Sehir University, Uskudar, Istanbul, Turkey</td>
</tr>
<tr>
<td>11:55</td>
<td>R.K.K. Sharma and Priyank Sinha</td>
<td>Md Fauzi Ahmad and Wong Jing Ping</td>
<td>Indian Institute of Technology, Kanpur, UP, India</td>
</tr>
<tr>
<td>12:20</td>
<td>Nurhadi Siswanto</td>
<td>Phatcharee Thongrattana</td>
<td>Kasetart University, Chatuchak, Bangkok, Thailand</td>
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### 11:30 – 12:45, WEDNESDAY  
**Lean and Six Sigma II**  
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<tr>
<td>11:30</td>
<td>Muhammad Hamad Sajjad</td>
<td>Bernardo Villarreal and Andrea Lopez</td>
<td>Universidad de Monterrey, San Pedro Garza Garcia, Nuevo Leon, Mexico</td>
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<td>045</td>
<td>Applying the Principles of Lean Management to the Radiology Department</td>
<td>Demet Bayraktar, Hakan Butuner and Gözde Hatipoğlu, Business Administration Department, Faculty of Business and Management Sciences, Suleyman Sah University, Tuzla, Istanbul Turkey</td>
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<td>090</td>
<td>Design and assessment of lean handling buffers in forward-reserve model</td>
<td>Bhavin Shah and Vivek Khanzode, National Institute of Industrial Engineering, Mumbai, Maharashtra, India</td>
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<td>286</td>
<td>Value Chain Optimization in Overseas Procurement Using Lpp</td>
<td>Deepak Chandra, National Institute of Industrial Engineering, Mumbai, India, Aman Sinha, Mahle Behr India Private Limited, Pune, Maharashtra, India, Rohit Kumar Singh, SAP, Bangalore, Karnataka, India</td>
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<tr>
<td>063</td>
<td>Six Sigma Implementation</td>
<td>Muhammad Hamad Sajjad, Alfaisal University, Riyadh, Saudi Arabia</td>
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**11:30 – 12:45, WEDNESDAY**

**Supply Chain Management VI**

Session Chair: Shao Hung Goh, SIM University, Singapore

**ID 256**  
Reliability-based Robust Design Optimization of Dynamic Supply Chain Network  
Abdulaziz T. Almaktoom, Effat University, Jeddah, Mecca, Saudi Arabia  
Krishna Krishnan, Wichita State University, Wichita, KS, United States

**ID 265**  
Inventory Routing Problem for Deteriorating Items with Multi Tours  
Gede Agus Widyadana, Petra Christian University, Surabaya, Indonesia  
Takashi Irohara, Sophia University, Tokyo, Japan  
Syarif Daniel Budiman, Petra Christian University, Surabaya, Indonesia

**ID 525**  
Coordinating a Multi-echelon Apparel Supply Chain in the Presence of Supply and Demand Uncertainty  
Amr Adhikari, Operations Management Area, Indian Institute of Management Calcutta, Joka, Kolkata, India  
Amr Bisi, Decision Sciences and Information Systems Area, Johns Hopkins Carey Business School, Baltimore, Maryland, USA

**ID 128**  
Heterogeneous Vehicle Routing Problem in a Supply Chain  
Prabhas Bhardwaj and Anil Kumar Agrawal, IIT (BHU), Varanasi, Uttar Pradesh, India

**ID 158**  
A Price Review Framework for Maintenance, Repair and Operations Procurement Contracts in the Public Sector  
Shao Hung Goh, SIM University, Singapore

**11:30 – 12:45, WEDNESDAY**

**Manufacturing and Design**

Session Chair: Rubina Bahar, International Islamic University Malaysia

**ID 521**  
Investigation on Corrosion Behavior of the Al/SiC Nanocomposites in Sea Water  
Niveen Jamal Abdul kader, Materials Engineering, University of Technology, Baghdad, Iraq  
Hussain Mohammed Yousif, Central Tool Room Plant, Nasser State Company, Ministry of industry & mineral, Baghdad, Iraq  
Ahmed Ameed Zainalabdeen, Materials Engineering, University of Technology, Baghdad, Iraq

**ID 656**  
Various Techniques to Design Controllers for Single Link Flexible Arm  
Noshin Fatima and Farhan Hanif, Capital University of Science and Technology (CUST), Islamabad, Punjab, Pakistan

**ID 661**  
Relationship between Human Errors in Maintenance and Overall Equipment Effectiveness in Food Industries  
Yunos Ngadiman, Burairah Hussin, Nor Aziati Abd Hamid, Rohaizan Ramlan and Liew Kai Boon, Department of Production and Operation Management, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

**ID 505**  
Minimum Quantity Lubrication in Micromachining: A Greener Approach  
Rubina Bahar, Ahmad Syahmi Arham Bin Zulkifli and Tasnim Firdaus Ariff, International Islamic University Malaysia (IIUM), Kuala Lumpur, Malaysia

**11:30 – 12:45, WEDNESDAY**

**High School STEM Project Presentation**

Session Chair: Bhuvnesh Rajamony, UNIMAP, Malaysia

**ID 533**  
Composition Methodology for Optimal Portfolio and Performance Measures Considering Indian SENSEX  
Hohyun Lee, Hyunha Cho and Yuchan Han, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

**ID 539**  
Crime Trend Analysis by Changes of Spatial Autocorrelation and Hot-spot  
Hohyun Lee and Dain Kim, Data Science Lab, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

**ID 541**  
Selection of Optimal Portfolio Model by Comparing Mock Stock Trading  
Hohyun Lee, Youngjoo Lee, Minsung Kim and Taeheon Kim, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

**ID 545**  
Using Mathematical Programming for Investment Assessment and Optimal Investment  
Hohyun Lee, Jinwoo Lee and Myeonghun Ji, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

**11:30 – 1:00, WEDNESDAY**

**Reliability and Maintenance**

Session Chair: Joe Amadi-Echendu, University of Pretoria, South Africa

**ID 416**  
Reliability Analysis of a Motor Control Unit Used in Electric Vehicles  
Ting-Hao Kan, Hsin-Wei Huang and Wen-Fang Wu, National Taiwan University, Da’an Dist., Taipei City, Taiwan

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### TECHNICAL PROGRAM

#### March 8-10, 2016

**ID 425**  Availability Allocation Using Systems Engineering Principles  
Abraham Almaw Jigar, Cecilia Haskins and Mary Ann Lundteigen, Norwegian University of Science and Technology, Trondheim, Sør-Trøndelag, Norway

**ID 609**  An Investigation into Bearing Fault Diagnostics for Condition Based Maintenance Using Band – Pass Filtering and Wavelet Decomposition Analysis of Vibration Signals  
Joseph B Wood, Muhammad Ilyas Mazhar and Ian Howard, Curtin University: Department of Mechanical Engineering, Perth, Australia

**ID 371**  A Comparative Study of ANFIS and ANNs Models for Performance-Based Condition Monitoring of Industrial Gas Turbines  
Mohammadreza Tahan-Bouria, Masdi Muhammad and Z.A. Abdul Karim, Dept. of Mechanical Engineering, Universiti Teknologi Petronas, Malaysia

**ID 318**  Identifying the root causes contributing to defects in order to minimise scrap  
Zanele Mpanza, Transport Systems and Operations, CSIR, Pretoria, South Africa

**ID 592**  A bibliometric study on design, application and management of power transformers  
Joe Amadi-Echendu and Jacob Mafutsana, University of Pretoria, South Africa

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<td>Production Planning and Management</td>
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<td><strong>Mayang Sari I</strong></td>
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<tr>
<td></td>
<td>Session Chair: Ali Vatankhah Barenji, Eastern Mediterranean University, Turkey</td>
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| ID 068        | A Genetic Algorithm for Solving the Integrated Cell Formation, Layout and Scheduling Problem  
Sherif Fahmy, American University of the Middle East (AUM), Egaila, Kuwait |
| ID 102        | An Improved Analogy-based Demand Forecasting Method for Service Parts  
Masaru Tezuka, Satoshi Munakata and Shinji Iizuka, Hitachi Solutions East Japan, Ltd., Sendai, Miyagi, Japan |
| ID 105        | Measuring Production Floor Performance Using Systematic Approach - A Case Study of Hospital Beds Production  
Susanto Sudiro, Magister Teknik Mesin Universitas Pancasila Jakarta, Jakarta Pusat, Jakarta, Indonesia |
|               | Sha'rei Mohd Yusof, Razak School of Engineering and Advanced Technology, Kuala Lumpur, Malaysia |
| ID 132        | An Analysis of competitive Advantages of South African Manufacturing industries. A case study; Automotive Industries  
Mukondelezi Grace Kanakana Katumba and John Ikome, Tswana University of Technology, South Africa |
| ID 160        | Schedule Nervousness in Production Operations of an Airline Catering Company: The Challenge of an Effective Demand Response Program  
Narat Hasachoo and Ruedee Masuchun, Faulty of Engineering, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand |

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<td>11:30 – 1:00, Wednesday</td>
<td>e-Business and e-Commerce</td>
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<td><strong>Mayang Sari II</strong></td>
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<td>Session Chair: Eui H. Park, North Carolina Agricultural &amp; Technical State University, Greensboro, USA</td>
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| ID 028        | Influence of culture on E-commerce and vice versa  
Teklehaimanot Tadele Kidane and RRK Sharma, Indian Institute of Technology, Kanpur, Uttar Pradesh, India |
| ID 052        | Factors Affecting Consumers’ purchasing Decision through E-Commerce  
Teklehaimanot Tadele Kidane and RRK Sharma, Indian Institute of Technology, Kanpur, Uttar Pradesh, India |
| ID 168        | Understanding the Impulsiveness Effect of a Web Design on Online Fashion Stores  
Paulina Ariningsih, Marihot Nainggolan, Ignatius Sandy and Dhea Widiasri, Universitas Katolik Parahyangan, Bandung, West Java, Indonesia |
| ID 344        | Evaluating the Location of Effective Product Advertising on Facebook Ads  
Atya Aisha, Aulia Hadining and Dinmas Aji, Telkom University, Bandung, West Java, Indonesia |
| ID 655        | Sniping as a Rational Strategy on Ebay  
Farooq Sheikh, State University of New York (SUNY), Geneseo, NY, United States |
| ID 676        | Understanding Risk Perception Related to Trust and Bias in Cyberspace  
Emeka P. Idoye and Eui H. Park, Dept. of Industrial & Systems Engineering, North Carolina Agricultural & Technical State Univ., Greensboro, USA |

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<td>Facility Planning and Management</td>
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<td><strong>Mayang Sari III</strong></td>
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<td>Session Chair: Suman Samanta, IIT Kanpur, Kanpur, India</td>
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| ID 270        | Scheduling of Three FMS Layouts Using Four Scheduling Rules  
M. Khurshid Khan, Muhammad Arshad and Milana Milana, University of Bradford, West Yorkshire, United Kingdom |
| ID 032        | Modified Cluster Boundary Search Technique for Improved Layout Designs  
Mohammed Al-Saleh, Umm Al-Qura University, Makkah, Saudi Arabia |
|               | Musthaasen Mir, Ajman University of Science & Technology, UAE |
|               | Ahmed Hassanan, RWTH Aachen, Germany |
| ID 115        | Reliable capacitated facility location problem: SAA based approach  
Sumanta Basu, Megha Sharma and Partha Sarathi Ghosh, Indian Institute of Management Calcutta, Kolkata, West Bengal, India |
ID 340  Risk issues in facility layout design
Saber Darmoul, Industrial Engineering Department, King Saud University, Riyadh, Saudi Arabia
Sonia Hajri-Gabouj and Sana Kouki Amri, INSAT, Tunis, Tunisia
Henri Pierreval, Ifma, Clermont-Ferrand, France

ID 547  Multi-server Congested Location Allocation Problem with Multiple Objectives
Mehdi Seifbarghy and Mehrnaz Asgari, Department of Industrial Engineering, Alzahra University, Tehran, Iran

ID 333  A Modified ABC Algorithm with Genetic and Neighborhood Search for solving QAP
Suman Samanta and Deepu Philip, IIT Kanpur, Kanpur, Uttar Pradesh, India

11:30 – 12:45, WEDNESDAY  Energy  Mayang Sari IV
Session Chair: Dr. Mehran Doulat. University of Wollongong, Wollongong, NSW, Australia

ID 423  Conversion of Waste Plastics into Gasoline and Diesel
Saima A. Iqbal, Rafain Ahamed, Md. Mizanul Haque Mizan, and Mohammad Ezharul Foyez, Shahjalal University of Science and Technology, Sylhet, Bangladesh

ID 379  Enhancement of tube and tube Heat exchanger with semispherical hollow baffle for counter flow
Rajendra Patil, TSSMS PVPIIT Bavadhan Pune, Pune, Maharashtra, India

ID 646  Photosynthetic bioenergy utilizing CO2 from plant flue gas: an approach on microalgae based third generation biofuels production
Shamsuddin Ahmed, Department of Mechanical and Chemical Engineering, Islamic University of Technology (IUT), Dhaka, Bangladesh
M. Abdul Quader, Department of Mechanical Engineering, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia

ID 497  Performance Analysis of Different Controller for PEMFC Fed Adjustable Speed Drives
Hemachandran K, Dr.MGR Educational & Research Institute University, Chennai, Tamilnadu, India
3:00 – 3:30: Dr. Pal Pandi Ammavasi, Pal PandiAssociate Professor, Bharath Niketan Engineering College, Aundipatty, Tamlindu, India
3:30 – 4:00: Dr. Eldon Caldwell, Director, Industrial Engineering Department, Engineering School, University of Costa Rica
Using Robotics as Educational Framework Strategy in Industrial Engineering

2:30 – 3:45, WEDNESDAY  Global Engineering Education VII  Starhill 4
Session Chair: Dr. Eldon Caldwell, University of Costa Rica
2:30 – 3:00: Dr. Md. Mizanur Rahman, Senior Lecturer, Dept. of Thermo Fluids, Faculty of Mechanical Eng., University Technology Malaysia
Engineering education in energy technology: paradigm shift from technology-centred to multidisciplinary focused
3:00 – 3:30: Dr. Pal Pandi Ammavasi, Pal PandiAssociate Professor, Bharath Niketan Engineering College, Aundipatty, Tamlindu, India
3:30 – 4:00: Dr. Eldon Caldwell, Director, Industrial Engineering Department, Engineering School, University of Costa Rica
Using Robotics as Educational Framework Strategy in Industrial Engineering

2:30 – 3:45, WEDNESDAY  Industry Solutions VII  Starhill 5
Session Chair: Ms. Resh Plaha, Crystal Quality, UK

Panel Session on “Women in Industry and Academia”

Penalists

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

Dr. Chan Chee-Ming
Associate Professor and Deputy Dean (Academic and Research)
Centre for Graduate Studies
Universiti Tun Hussein Onn Malaysia
Batu Pahat, Johor, Malaysia

Dr. Mel Fong Chong
Professor, Faculty of Engineering
The University of Nottingham Malaysia Campus
Selangor Darul Ehsan, Malaysia

Prof. Christine Ennew
Christine Ennew 1Provost, University of Nottingham Malaysia Campus
Pro Vice Chancellor and Professor of Marketing
University of Nottingham Malaysia Campus
Selangor DE Malaysia

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

Dr. Stefanie Pillai
STEFANIE PILLAIDEan and Associate Professor
Faculty of Languages & Linguistics
University of Malaya
Kuala Lumpur, Malaysia

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2:30 – 3:45, WEDNESDAY    Operations Research    Starhill 6

Session Chair: Arnab Adhikari, Indian Institute of Management Calcutta, India

ID 197  An empirical study of competitiveness measurement methodology: A case study of the automotive manufacturing sector
Laseinde Opeyelu Timothy and Mukondeleli Grace Kanakana Katumba, Tshwane University of Technology, Pretoria, South Africa

ID 131  Performance Evaluation of an Exact Method for the Obstacle Neutralization Problem
Vural Aksakalli, Istanbul Sehir University, Uskudar, Istanbul, Turkey
Ali Fuat Aksaya, Dindar Oz and Ramazan Algın, Marmara University, Istanbul, Turkey
Elvan Ceyhan, Koc University, Istanbul, Turkey

ID 532  Capacitated Lot-Sizing and Scheduling with Sequence-Dependent setups in Petrochemical Plants
Sari Abdullah, Abdullah Ahmad Shamayleh and Mallick Ndiaye, Industrial Engineering Department, American University of Sharjah, Sharjah, UAE

ID 630  Investigation of Trade Credit Patterns in Effect with Bank Loan Availability
Jaleel Ahmed and Hui Xiaofeng, Harbin Institute of Technology, Harbin, Heilongjiang, China

ID 549  An Efficiency and Consistency Based Approach for Selecting the Best Cricket Team
Arnab Adhikari, Adria Majumdar and Gaurav Gupta, Indian Institute of Management Calcutta, Kolkata, West Bengal, India

2:30 – 3:45, WEDNESDAY    Lean and Six Sigma III    Starhill 7

Session Chair: Bernardo Villarreal, Universidad de Monterrey, San Pedro Garza Garcia, Nuevo Leon, Mexico

ID 097  Road Map for the Implementation of Lean production tools in SMEs
Amine Belhadi, Fatima Ezzahra Touriki and Said El Fezazi, Caddi Ayad University, High School of Technology Safi, Morocco

ID 139  Proposed Lean Sustained Factors
Sha’i Mohd Yusof, Razak School of Engineering and Advanced Technology, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia
Katsuki Aoki, Graduate School of Business Administration, Meiji University, Surugadai Campus, Tokyo, Japan

ID 195  Application of Lean Manufacturing Concepts to Reduce Manufacturing Lead Times within the Meatball Production Process
Jiratthavee Wejwitwarakul and Rungchat Chompu-inwai, Department of Industrial Engineering, Faculty of Engineering, Chiang Mai University, Muang, Chiang Mai, Thailand

ID 460  Effects of Value Stream Mapping in a Processing Industry
Shakil Shaikh, Muhammad Aqib, Hasnain Riaz, Umer Abdullah, Azmat Abbas and Usama Akbar, Mehran University of Engineering and Tech., Jamshoro, Pakistan

ID 022  Hybrid Schemes for Eliminating Road Transportation Waste
Bernardo Villarreal, Universidad de Monterrey, San Pedro Garza Garcia, Nuevo Leon, Mexico

2:30 – 3:45, WEDNESDAY    Supply Chain Management VII    Starhill 8

Session Chair: Elisa Kusrini, Universitas Islam Indonesia

ID 025  Relating Supply Chain Risks to Supply Chain Strategy
Teklehaimanot Tadele Kidane and RRK Sharma, Indian Institute of Technology, Kanpur, Uttar Pradesh, India

ID 413  Application System for Smart Supply Chain Management (SCM): Case Study of SMEs in Indonesia
Grisna Anggadwita, School of Economic and Business, Telkom University, Bandung, Indonesia
Cut Irma Setiawati, School of Communication and Business, Telkomsel University, Bandung, Indonesia
Yuhana Astuti, School of Economic and Business, Telkom University, Bandung, Indonesia
Dini Turipanam Alamanda, School of Economic and Business, Telkom University, Bandung, Indonesia

ID 626  Valued Supply Chain: The imminent Frontier for Improved Hospital Management
Abu Raihan Bhuiyan Albarune, Nazma Farhat and Farzana Afzal, AIMST University, Kedah, Malaysia

ID 648  Causal Linkage-based Strategic Map Design along the Robotics and Automation Supply Chain in Thailand
Kanda Boonsoonthonsatit, King Mongkut's University of Technology Thonburi, Thungkru, Bangkok, Thailand

ID 066  Using Multiple Criteria Approach to Evaluate Risks associated with Supply Chain Sustainability
Anirban Ganguly, O. P. Jindal Global University, Sonipat, Haryana, India
Debdeep Chatterjee, Schneider Electric, Bengaluru, Karnataka, India

ID 616  Designing performance measurement procedure for supply chain actors and regulator base on a modified model of balanced scorecard and Data Envelopment Analysis
Elisa Kusrini, Universitas Islam Indonesia, Sleman, Yogyakarta, Indonesia

2:30 – 3:45, WEDNESDAY    Automation and Control    Bintang V

Session Chair: Mohammed Bakkari, Faculty of Sciences and Technology of Fez, Fès, Morocco

ID 312  An investigation into the impact of advance manufacturing technologies implementation in SMEs manufacturing plastic packaging products- A case study of Pakistan
Tanweer Hussain, Shakil Shaikh, Muhammad Jumani, Jamil Khaliqddina and Intizar Ali, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan
### 2:30 – 3:45, WEDNESDAY  
#### Engineering Education  
**Session Chair**: Karl Hain, Technische Hochschule Deggendorf, Bavaria, Germany

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<td>Learning strategies of post-secondary students</td>
<td>Peter Toth, Obuda University, Budapest, Hungary, Hungary</td>
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<td>030</td>
<td>An Effective Organizational Structure to Implement Strategic Plans in Higher Education Institutions</td>
<td>Salih Duffuaa and Ahmed Elamin Haroun, King Fahd University of Petroleum &amp; Minerals, Dhahran, Saudi Arabia</td>
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| 200 | Application of Concurrent Engineering for Collaborative Learning and New Product Design | Muhammad Haris Aziz, Summyia Qamar, Ahsa Tayyab and Ahmad Wasi, University of Engineering and Technology, Taxila, Pakistan  
Khanal Saha, Binghamton University. Poughkeepsie, New York, United States  
Salman Hussain, University of Engineering and Technology, Taxila, Pakistan |
| 353 | Effect of Heating on the Impedance of NiPc based Organic Field Effect Transistor | Noshin Fatima, Capital University of Science and Technology (CUST), Islamabad, Punjab, Pakistan  
Khasan Karimov, GIKI, Topi, swabi, Pakistan  
M. Mansoor Ahmed, Capital University of Science and Technology (CUST), Islamabad, Punjab, Pakistan |
| 398 | Fostering creativity and innovation in engineering design education: A case study | Karl Hain and Christoph Rappf, Technische Hochschule Deggendorf, Bavaria, Germany |

### 2:30 – 3:45, WEDNESDAY  
#### Healthcare Systems  
**Session Chair**: Vivek Sundar Magesh, TVS Logistics, Chennai, India

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<td>Case Averaging as a Tool for Operational Efficiency in GI Endoscopy</td>
<td>Javad Taheri, North Carolina State University, Cary, NC, United States</td>
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<td>076</td>
<td>Capacity Planning For Diabetes Management -Indian Example</td>
<td>Vinayosh Mishra, Cherian Samuel and S K Sharma, Indian Institute of Technology -BHU, Varanasi, Uttar Pradesh, India</td>
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<td>Improving Indian Healthcare using Data Mining</td>
<td>Vivek Sundar Magesh, Beri Pradeep, Harinivas Bhaskaran, Sadhanand Lakshminarayanamurthy, Thomas Franco and Nishant Kumar, TVS Logistics, Chennai, India</td>
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### 2:30 – 3:45, WEDNESDAY  
#### Production Planning and Management  
**Session Chair**: Linda Kauškale, Institute of the Civil Engineering and Real Estate Economics, Riga Technical University, Latvia

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| 450 | Hidden Wastes in Overall Equipment Effectiveness (OEE) under the study of Maynard’s Operation Sequence Technique (MOST) | Puvanasvaran A. Perumal, Faculty of Manufacturing Engineering, Universiti Teknikal Malaysia Melaka, Melaka, Malaysia  
Teoh Yong Siang, Faculty of Manufacturing Engineering, Universiti Teknikal Malaysia Melaka, Melaka, Malaysia  
Teruaki Ito, Faculty and School of Engineering, The University of Tokushima, Minami, Jousanjima  
Nur Syafilla binti Mahamud, Faculty of Manufacturing Engineering, Universiti Teknikal Malaysia Melaka, Melaka, Malaysia |
| 466 | Semiconductor Fabrication Strategy for Cycle Time and Capacity Optimization: Past and Present | Kader Ibrahim, Chik MA and U. Hashim, Institute of Nanoelectronic Engineering, Universiti Malaysia Perlis, Perlis, Malaysia |
| 483 | Optimal Production-Inventory Control Policy for Manufacturing Systems Subject to Quality Deterioration | Kareem Dhouib, Department of Mechanical and Industrial Engineering, Faculty of Engineering, Riyadh, Saudi Arabia |
| 544 | Design Simulation and Information Dashboard for Manufacturing Control Using Systematic Approach: a Case Study of Hospital Beds Production | Susanto Sudiro, Magister Teknik Mesin Universitas Pencasa Jakarta, Jakarta Pusat, Jakarta, Indonesia  
Shahil Mohd Yusof, UTM, Jalan Sultan Yaya Petra Kuala Lumpur, Kuala Lumpur, Malaysia  
Revinio Revino, Post Graduate Program, Institut Sains dan Teknologi Nasional Jakarta, Jakarta Selatan, Jakarta, Indonesia |
| 615 | The Effect of Perceived Self-Efficacy and Product Comparisons on Outcome Expectancy of Portable Multi-Screens | Shahid Kalim Khan, Li Guoxin and Ehsan Chitsaz, School of Management, Harbin Institute of Technology, Harbin, China  
Naqash Ali and Ume Ammar, Department of Management Sciences, CIIT, Pakistan |
| 309 | The Strategic Management Analysis of Wood Manufacturing Companies in Latvia - Interdisciplinary Approach | Linda Kauškale, Kristine Fedotova and Sandra Geipele, Faculty of Engineering Economics and Management, Institute of the Civil Engineering and Real Estate Economics, Riga Technical University, Riga, Latvia |
2:30 – 3:45, WEDNESDAY Information Technology Mayang Sari II
Session Chair: Kannan Devaraj, Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu, India

ID 023 Business Intelligence and Analytics: Paving way for Operational Excellence in Indian Banks
Anil Kumar Saini, University School of Management Studies, New Delhi, India
Rekha Mishra, University School of Management Studies, Guru Gobind Singh Indraprastha University (GGSIPU), New Delhi, India

ID 096 Implementation of Mobile Event Monitoring Agents for Manufacturing Execution and Intelligence Systems Using a Domain Specific Language
Christoph Wunck, Jade University of Applied Sciences, Wilhelmshaven, Germany

ID 193 Developing Manufacturing Execution Software as A Service for Small and Medium Size Enterprise
Ali Vatankhah Barenji and Agedouton Olanrewaju Adetunla, Eastern Mediterranean University, Famagusta, Mersin, Turkey
Reza Vatankhah Barenji, Hacettepe University, Ankara, Baytape, Turkey

Suwilai Areejit, Bangkok Thonburi University, Taweewatana, Bangkok, Thailand

2:30 – 3:45, WEDNESDAY Financial Engineering Mayang Sari III
Session Chair: Javad Soroor, Shiraz University, Iran

ID 352 An Innovative Holistic Approach to Optimal Portfolio Management
Waleed Almonayir, Alpha Data, Abu Dhabi, United Arab Emirates
Galia Novak, Sofia University, Sofia, Bulgaria

ID 385 Use of Smokeless Tobacco by Low Socio-economic Populations and Risk Factors Associated with it
Md Shahjahan, Daffodil International University, Dhaka, Bangladesh

ID 531 Composition Methodology for Optimal Portfolio and Performance Measures Considering Indian SENSEX
Hohyun Lee, Hyunha Cho and Yuchan Han, Data Science Lab, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

ID 540 Selection of Optimal Portfolio Model by Comparing Mock Stock Trading
Hohyun Lee, Youngjoo Lee, Minsung Kim and Taehoon Kim, Data Science Lab, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

ID 613 Autonomic Learning Algorithm to Predict Stock Price at the Exchange via Metaheuristics-Based Optimization
Javad Soroor and Sahar Khaleghi, Shiraz University, Shiraz, Fars, Iran

2:30 – 3:45, WEDNESDAY Sustainability and Green Systems Mayang Sari IV
Session Chair: Asela Kulatunga, University of Peradeniya, Sri Lanka

ID 064 Income inequality and human capital as factors influencing economic development of region – case study of Latvia
Liga Kamola, Uldis Kamols and Svetlana Ivanova, Riga Technical University, Riga, Latvia

ID 095 Increasing the competitiveness of the city with energy efficiency measures – possibilities for Latvian cities
Liga Kamola, Uldis Kamols, Svetlana Ivanova and Tatjana Survilo, Riga Technical University, Riga, Latvia

ID 179 Relationships of Lean, Green Manufacturing and Sustainable Performance: Assessing the Applicability of the Proposed Model
Amjad Khalili, Md Yusof Ismail, A.N.M.Karim, and Mohd Radzi Che Daud, International Islamic University Malaysia, Kuala Lumpur, Malaysia

ID 439 Developing for Sustainable Lanna Cultural Tourism Area
Gulputt Dechvichankit, Vorapoch Angkasith and Dhirananta Rithmanee, King Mongkut's University of Technology Thonburi, Bangkok, Thailand

ID 117 Design and Development of Green Label Point Rating System to Promote SCP Concepts
Asela Kulatunga, Faculty of Engineering, University of Peradeniya, Peradeniya, Central, Sri Lanka
Gowynathan Jeyanthinathasamma, Faculty of Engineering, University of Peradeniya, Vavuniya, Northern, Sri Lanka

15:45 – Break

4:00 – 5:15, WEDNESDAY Global Engineering Education VIII Starhill 4
Session Chair: Dr. Abu Masud, Wichita State University, Kansas, USA

PANEL SESSION: Global Engineering Education

Panelists
Dr. Abu Masud, Boeing Global Engineering Professor, Professor of Industrial and Manufacturing Engineering, Wichita State Univ., Kansas, USA
Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFiEES), Executive Secretary of the Global Engineering Deans Council (GDEC) and Resident Scholar in Global Engineering at Marquette University
Dr. Funso Falade, Department of Civil & Environmental Engineering, University of Lagos, Nigeria and President, African Eng. Education Association
Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software, St. Louis, Missouri, USA
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<td>4:00 – 5:15</td>
<td>Lean and Six Sigma IV</td>
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<td>Yunos Ngadiman, Universiti Tun Hussein Onn Malaysia</td>
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<td>Supply Chain Management VIII</td>
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<td>Rene Amaya, Universidad del Norte, Barranquilla, Atlántico, Colombia</td>
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**Industry Solutions VIII: Women in Industry and Academia**

**Session Chair:** Dr. Stefanie Pillai, University of Malaya

- **4:00 – 4:25:** Ms. Priyadarshani Premaratne, Department of Sociology, Faculty of Arts, University of Peradeniya, Sri Lanka
- **ID 241:** Perception of female employees towards the Lean and work culture change in apparel industry in Sri Lanka
  - S. Sewwandi and H.D.P. Premaratne, Department of Sociology, Faculty of Arts, University of Peradeniya, Sri Lanka
  - I. Morawaka and A.K. Kulatunga, Dept. of Production Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

- **4:25 – 4:50:** Mahmmod Mahbub Alam Talikder, Accident Research Institute (ARI), Bangladesh University of Engineering and Technology, Dhaka
- **ID 610:** Burn Accident related Injuries and Disabilities among the RMG Women Workers: A Case Study of Tazreen Garments Tragedy

- **4:50 – 5:15:** Dr. Stefanie Pillai, Dean and Associate Professor - Faculty of Languages & Linguistics, University of Malaya, Kuala Lumpur, Malaysia

**Operations Research**

**Session Chair:** Amber Shafiq, KAIST, Deajon, Chaladong, Korea

- **ID 355:** Simulation of Extended Resource Constrained Scheduling Problem with a Soft Computed Priority Heuristic
  - Taiba Zahid, Michael Volker and Thorsten Schmidt, Technische universität Dresden, Deutschland, Germany

- **ID 438:** An Artificial Bee Colony Algorithm for the Vehicle Routing Problem with Backhauls and Time Windows
  - Krisada Asawarungruangkai and Naritsak Tuntitipwathan, Department of Industrial Engineering, King Mongkut’s University of Technology, Bangkok, Thailand

- **ID 529:** Optimal promotional policy for a new product in presence of firm’s goodwill in Segmented Market: A control theoretic Approach
  - Prabhneet Kaur Sethi and Prabhneet Kaur Sethi, Department of Applied Mathematics, Amity University, Sector-125, Noida, Uttar Pradesh, India

- **ID 589:** The Delphi technique: A credible research methodology
  - Charles Mbohwa, Jan Harm Christiaan Pretorius, Edoghogho Ogbeifun and John Agwa-Ejion, University of Johannesburg, Gauteng, South Africa

**Lean and Six Sigma IV**

**Session Chair:** Yunos Ngadiman, Universiti Tun Hussein Onn Malaysia

- **ID 245:** The Development of 5S-Kaizen and Service Excellence Measurement Framework for Malaysia Private Hospitals
  - Nor Azizati Abdul Hamid, Yunos Ngadiman and Nor Hazana Abdullah, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

- **ID 262:** Application of the Six-Sigma Concept to Time Reduction for Resin Recirculate Rinse in Demineralized Water Production
  - Thidarat Thanyarak and Parames Chutima, Chulalongkorn University, Bangkok, Thailand

- **ID 275:** Productivity Improvement of Cutting, Sewing and Finishing Sections through Value Stream Mapping - A Case Study
  - Abdullahil Azeem and Md. Moin Uddin, Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

- **ID 564:** Creating shared value: How to guide for the Royal Project area
  - Napassawan Tangamporn, Vorapoch Angkasith and Dirian Sinhamee, KMUTT, Thung Khru, Bangkok, Thailand

- **ID 417:** Critical Success Factors of Implementing Green Lean Six Sigma
  - Cherrafi Anass, Said El Fezazi, Khalid Benhida, Ahmed Mokhli and Fatima Zohra Elamrani, Cadi Ayyad University, Safi, Morocco

**Supply Chain Management VIII**

**Session Chair:** Rene Amaya, Universidad del Norte, Barranquilla, Atlántico, Colombia

- **ID 591:** A Framework for evaluating the performance of Thai Tourism Industry Supply Chain Management
  - Daraka Palang and Korrakot Yaibuathel Tippayawong, Chiang Mai University, Thailand

- **ID 585:** Two-level Supply Chain with Extended Warranty in Competitive Market Environment
  - Imam Baihaqi, Bagus Noval and Nani Kurniati, Department of Industrial Engineering, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

- **ID 621:** Supply chain management in Service Quality
  - Mahadi Hasan Miraz, Ferdoush Saleheen and Mashour Rahman, University Utara Malaysia, Sintok, Kedah, Malaysia

- **ID 582:** Intermediary agent in the holistic collaborative production distribution network model for SMMEs
  - Mohammad Rizal Firmansyah, University of South Australia, Mawson Lakes, Adelaide, South Australia, Australia

- **ID 021:** Relating E-integrated, Triple-A Supply Chain to Environmental Uncertainty, Market Competition and Firm Performance
  - Tesfaye Tolu Feyissa, Indian Institute of Technology, Kanpur, Uttar Pradesh, India
  - R.R.K. Sharma, Indian Institute of Technology, Kanpur, UP, India

- **ID 556:** Quick methodology based in the SCOR model for supply chains reengineering of international trade
  - Rene Amaya and Carlos Otero, Universidad del Norte, Barranquilla, Atlántico, Colombia
### Entreprenuership and Innovation

**4:00 – 5:15, WEDNESDAY**

**Session Chair:** Santiago-Omar Caballero-Morales, Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico

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Sari Wulandari, Telkom University, Bandung, Jawa Barat, Indonesia |
| 258 | Analyzing the Adoption of Malaysian Standards (MS) on SME Performances: The Mediating Effects of Innovation Adoption Factors | Fadhilur Rahim Azmi and Haslinda Musa, Universiti Teknikal Malaysia Melaka, Durian Tunggal, Melaka, Malaysia |
| 255 | New Service Development Process in Micro, Small and Medium Enterprises (MSMEs): An Indonesian Case Study | Ima Nurul Rachmania, Merlyn Rahmianar and Santi Setyaningsih, School of Business and Management, Institut Teknologi Bandung, Bandung, West Java, Indonesia |

### Engineering Education

**4:00 – 5:15, WEDNESDAY**

**Session Chair:** Hamid Parsaei, Texas A&M University at Qatar, Doha, Qatar

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Timothy Ferris, Cranfield University, Shrivenham, Oxfordshire, United Kingdom |
| 505 | The Challenges of Computational Thinking at Higher Secondary School in Mauritius | Canayah Cuniah, University of Technology, Port Louis, Moka, Mauritius |
| 506 | Students Attendance System in Faculty of Engineering at King Abdulaziz University | Sundus Balkhair, Khawlah Alharbi, Hanan Abdullah and Batool Bajkhaif, King Abdulaziz University, Jeddah, Mecca, Saudi Arabia |

### Healthcare Systems

**4:00 – 5:15, WEDNESDAY**

**Session Chair:** Michael Mutingi, University of Botswana

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Syahrul Nizam Kamaruzaman and Zairul Nisham Musa, University of Malaya, Kuala Lumpur, Malaysia |
| 555 | An Integrated Model for Chemotherapy Planning                          | Amr Eltawil, Egypt-Japan University for Science and Technology, New Borg El Arab, Alexandria, Egypt  
Mahmoud Heshmat, E-JUST, Borgelarab, Alexandria, Egypt |
| 556 | RTOG Criteria to Evaluate Acute Skin Reaction and its Risk Factors in Patients with Head and Neck Cancer Submitted to IMRT Radiotherapy | Khaldoon M. Radaideha and Laila M. Matalqahb, Department of Radiologic Technology, College of Medical Science Al- Qassim University, Saudi Arabia |
| 689 | Need for Deployment of RFID Technology in Indian Hospitals             | Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India |
| 597 | Fuzzy Multi-Criteria Simulated Evolution for Nurse Re-rostering      | Michael Mutingi, University of Botswana, Gaborone, Botswana |

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<td>Li-Man Liao, Ching-Jen Huang and Guan-Heng Lin, National Chin-Yi University of Technology, Taichung, Taiwan</td>
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<td>SeyedAmirhossein Alavifar and Viktor Makarovitch Zamyuk, Russian State University of Tourism and Service, Cherkizovo, Pushkinskij r-n, Moskovskaja oblast', Russia</td>
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<td>Pouyan Banishahabadi, Dept. of Mechanical and Manufacturing Engineering, Faculty of Engineering, University Putra Malaysia</td>
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<td>Ehsan Aliabadi, Chemical Engineering, Amirkabar Petrochemical Complex, Mahshahr, Iran</td>
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<td>Ifra Jamil, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), Islamabad, Pakistan</td>
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<td>A balanced approach to project management in partnering types of contract: a public private partnerships framework</td>
<td>Putu Mandiartha, University Malaysia Pahang, Kuantan, Pahang, Malaysia</td>
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<td>Colin F. Duffield, The University of Melbourne, VIC, Australia</td>
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<td>Asela Kulatunga, Mahanama Dharmawardhana and Malan Jayawickrama, Faculty of Engineering, University of Peradeniya, Sri Lanka</td>
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<td>Shanaka Karunarathna, University of Peradeniya, Kandy, Central, Sri Lanka</td>
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<td>An AHP Based Methodology to Evaluate Social Life Cycle of an Apparel Manufacturing Plant</td>
<td>M. I. Rashangani, H.M.M.M. Jayawickrama, A.K. Kulatunga and C. Chandrakumar, Dept. of Production Engineering, Univ. of Peradeniya, Sri Lanka</td>
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<td>H.D.P. Premaratne, Department of Sociology, University of Peradeniya, Sri Lanka</td>
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<td>Introducing of smart work – opportunity to increase economical development of municipalities in Latvia</td>
<td>Ilze Jutrupa, Riga Technical University, Riga, Latvia</td>
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<td>Vivek Sundar Magesh, TVS Logistics, Chennai, Tamil Nadu, India</td>
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<td>Increasing the competitiveness of the city with energy efficiency measures possibilities for Latvian cities</td>
<td>Liga Kamola, Uldis Kamols, Svetlana Ivanova and Tatjana Survilo, Riga Technical University, Riga, Latvia</td>
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7:00 – 10:00 pm (Wednesday)

CONFERENCE AWARD DINNER
Cultural Program by Cultural Academy of Kuala Lumpur
Mayang Sari Grant Ballroom

Award Keynote:
Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, SIEMENS PLM Software, St. Louis, Missouri, USA
### March 10, 2016 (Thursday)

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| 08:00 – 09:15 | Global Engineering Education IX              | Starhill 4 | Dr. Funso Falade, Dept. of Civil & Environmental Engineering, University of Lagos, Nigeria and President, African Engineering Education Association  
Dr. Amar Partap Singh Pharwaha, Dr. A.P. Singh Pharwaha, Professor Department of Electronics & Communication Engineering, Sant Longowal Institute of Engineering & Technology (SLIET)-Deemed University, Longowal, Sangrur, Punjab, India |

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| 08:00 – 09:15 | Industry Solutions IX                        | Starhill 5 | Masaru Tezuka, Manager - Research and Development Department, Hitachi Solutions East Japan, Ltd.  
ID 186: Importance of the Strategic Utilization of Information Technology in Small and Medium-Sized Food Manufacturers in Japan |

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| 08:00 – 09:15 | Quality Control and Management               | Starhill 7 | Galia Novakova Nedeltcheva, Sofia University, Bulgaria  
ID 183: A Bayesian LASSO Algorithm for Simultaneous Variation Fault Diagnosis in III Conditioned Multistage Manufacturing Processes |

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| 08:00 – 09:15 | Logistics Management I                       | Starhill 8 | Sirajuddin Sirajuddin, University of Indonesia  
ID 196: Assessment of Thai Check Point for Border Trade Operations |

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| 08:00 – 09:15 | Smart Manufacturing Workshop                  | Starhill 6 | Dr. Rupy Sawhney, Heath Fellow in Business and Engineering and Professor, Industrial and Systems Engineering, University of Tennessee, Knoxville, USA  
ID 249: A Practical Case Study of a Heterogeneous Fleet Vehicle Routing Problem with Various Constraints |

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<td>ID 397 Save water to save our next generation</td>
<td>Md. Mizarur Rahman, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia</td>
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<td>ID 508 The Influence of Industrial Engineering in Semiconductor Fabrication Factory Optimization</td>
<td>Mohd Razali Muhamad, Universiti Teknikal Malaysia Melaka, Malaysia</td>
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<td>ID 625 A Review on Operation Diagnosis and Identification of Operation Improvement</td>
<td>Edly Ferdin Ramly, follow by Mohd Shahir Yahya and Muslih Mohammad, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia</td>
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<td>Oludolapo A. Olanrewaju and Therese Van Wyk, Department of Industrial Engineering, Vaal University of Technology, Vanderbijlpark, South Africa</td>
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<td>ID 667 Applying Fuzzy Inference System Tsukamoto for Decision Making in Crude Palm Oil Production Planning</td>
<td>Abdul Talib Bon and Silvia Firda Utami, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia</td>
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<td>ID 485 Impact of Change Orders in Construction Sector in the West Bank</td>
<td>Ayham Jaaron, Mohammad Othman and Mujahed Staiti, An-Najah National University, Nablus, West Bank, Palestine</td>
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<td>ID 213 Using fuzzy set theory for determining toxicity thresholds of product</td>
<td>Nouara Ouazraoui, Rachid Nait Said and Mouloud Bourareche, Laboratory of Research in Industrial Prevention (LRIP), Health and Occupational Safety Institute, University of Batna, Batna 05000, Algeria</td>
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<td>ID 002 Facies Analysis and Permeability/porosity Prediction from well log data using the Non Parametric Regression with Multivariate Analysis and Neural Network in the Reservoirs of the Hassi R'Mel Southern Field (Algeria)</td>
<td>Baouche Rafik, University of Boumerdes, Algeria</td>
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<td>08:00 – 09:15, THURSDAY</td>
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<td>Healthcare Systems</td>
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<td>Md. Liakot Ali, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh</td>
<td>ID 202 Fabrication of Fracture Aid Using Rapid Prototyping</td>
<td>Gopu Govindasamy, Nivedha Balakrishnan, Saranya Sureshkumar and Suvitha Subramaniam, Sri Ramakrishna Eng. College, Coimbatore, India</td>
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<td>ID 554 A Discrete-Event and Agent-Based Hybrid Simulation Approach for Healthcare Systems Modeling and Analysis</td>
<td>Amr Eltawil, Mohammad Abdellagil and Sameh Abdou, Egypt Egypt-Japan Univ. for Science and Technology, New Borg El Arab, Alexandria, Egypt</td>
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<td>ID 607 Logistic tools for increased the level of opportunity in the intervention in patients with hip fracture at “Hospital Universitario Mayor Mederi” case</td>
<td>Valeria Mendoza Cortes, Universidad Del Rosario, Bogotá, Colombia</td>
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<td>ID 608 Inventory - A Tool to Improve Hospital Management</td>
<td>Valeria Mendoza Cortes, Universidad Del Rosario, Bogotá, Colombia</td>
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<td>ID 656 A Model of a Secured Smart e-Health System</td>
<td>Md. Liakot Ali, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh Mohammad Tauhidul Alam, Bangladesh Bank, Dhaka, Bangladesh</td>
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<td>08:00 – 09:15, THURSDAY</td>
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<td>Modeling and Simulation</td>
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<td>Andrew Abah, University of Nigeria</td>
<td>ID 499 Tolerance Analysis using an alternative to Monte Carlo simulation</td>
<td>Mohamed Gadallah, Cairo University, Giza, Egypt</td>
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<td>ID 587 Effect of Information Sharing and Capacity Adjustment on Healthcare Service Supply Chain: The Case of Flood Disaster</td>
<td>Ali Anjomshoae, Universiti Teknologi Malaysia, Johor, Johor Bahru, Malaysia</td>
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<td>ID 637 Placement of Solar-Wind Hybrid Power Plant in Iran with using AHP algorithm and technical and economic evaluations by HOMER software</td>
<td>Mehrdad Hajizadeh, Hormozgan Electric Power Distribution Company and Islamic Azad University of Semnan, Iran Faramarz Faghihi and Hamed Joorabli, Islamic Azad University of Semnan, Iran</td>
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<td>502</td>
<td>Predicting the Development Time of Platform for Multiple-Generation Product Using Artificial Neural Network</td>
<td>Amalia Suzianti, Nabila Priscandy Poetri and Nauli Dwi Fileinti, Universitas Indonesia, Depok, West Java, Indonesia</td>
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<td>358</td>
<td>Development of Facility Utilization Model for Use in Ajaokuta Steel Complex</td>
<td>Stephen Nwanya, Oluseyi Ajayi and Obafemi Olatunji, Covenant University, Cannanland, Ota, Ogun State, Nigeria Andrew Abah, University of Nigeria,Nsukka, Enugu State, Nigeria</td>
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### 08:00 – 09:15, THURSDAY

#### Reliability and Maintenance

**Mayang Sari II**

Session Chair: Maruf Hasan, University of New South Wales, Sydney, Australia

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<th>ID</th>
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<td>496</td>
<td>A New Software Reliability Growth Model with Introduction of New Defects in the Test Process</td>
<td>Zelong Yi, Shenzhen University, Shenzhen, Guangdong, China</td>
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<td>514</td>
<td>Reliability and Maintainability Parameters Estimation under Imperfect Repair and Maintenance by Genetic Algorithm</td>
<td>Mootaz Ghazy, Ahmed Farouk and Amr Hassien, Arab Academy for Science and Technology and Maritime, Alexandria, Egypt</td>
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<td>517</td>
<td>Determination of Safety instrumented level using Fuzzy Risk Graph method Case study: Heater of oil &amp; gas industry</td>
<td>Rabah Bilal and Tadjine Kamel, Department of Mechanical Engineering, Industrial risks laboratory, Badji Mokhtar University, Annaba, Algeria</td>
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<tr>
<td>511</td>
<td>The history and development of six sigma quality management</td>
<td>Maruf Hasan and Maxwell Chiu, University of New South Wales, Sydney, NSW, Australia</td>
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### 08:00 – 09:15, THURSDAY

#### Project Management

**Mayang Sari III**

Session Chair: Agnese Travaglini, Politecnico di Milano, Milan, Italy

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<tr>
<th>ID</th>
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<th>Authors</th>
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<tr>
<td>392</td>
<td>Project Management: A Complete Paradigm for Pakistani Public and Private Educational Institutions</td>
<td>Majid Baseer and Muhammad Arsalan, Sarhad University of Science and Information Technology, Peshawar, Pakistan</td>
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<td>470</td>
<td>The Role of Management Control System in ERP Project Implementation</td>
<td>Pratima Verma, IIT Kanpur, Kanpur, UP, India</td>
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<td>536</td>
<td>Personal Competency Assessment and Competence Building: A Study of Pakistani Project Management Scholars</td>
<td>Sara Siddique, Center for Advanced Studies in Engineering, Islamabad, Pakistan</td>
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<td>306</td>
<td>A Survey of Routing Protocols of Wireless Sensor Network with Mobile Sinks</td>
<td>Keerthika Asokan and Berlin Hency Victor, VIT University, Chennai, Tamilnadu, India</td>
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<td>365</td>
<td>Megaproject case studies: A stakeholder management perspective</td>
<td>Mauro Mancini and Agnese Travaglini, Politecnico di Milano, Milan, Italy Ivana Burcar Dunovic, University of Zagreb, Zagreb, Croatia</td>
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### 08:00 – 09:15, THURSDAY

#### Modeling and Simulation

**Mayang Sari IV**

Session Chair: Alessandro Navarra, Universidad Católica del Norte, Antofagasta, Chile

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<tr>
<td>126</td>
<td>Selecting the best layout for the container terminal using Modeling and Simulation Techniques</td>
<td>Asela Kulatunga, Faculty of Engineering, University of Peradeniya, Peradeniya, Central, Sri Lanka Chanjief Chandrakumar, Faculty of Engineering, University of Peradeniya, Badulla, UVA, Sri Lanka Gowrnathan Jeyanthinahasarma, Faculty of Engineering, University of Peradeniya, Sri Lanka Nadarasa Sanjeewan, University of Peradeniya, Vavuniya, Sri Lanka</td>
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<td>145</td>
<td>Temperature Distribution using Zone Models for Radiative Sections of Fired Process Heaters</td>
<td>Ali ElKamel, University of Waterloo, Waterloo, Ontario, Canada Rois Fatoni, Chemical Engineering Department, Universitas Muhammadiyah Surakarta, Indonesia Muhummad Bujwa, University of Waterloo, Waterloo, ON, Canada</td>
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<td>167</td>
<td>The dynamics of Indonesian rice supply chain</td>
<td>Alan Dwi Wibowo, Universitas Lambung Mangkurat, Banjarmasin, Kalimantan Selatan, Indonesia Armand Omar Moeis, Universitas Indonesia, Depok, Jawa Barat, Indonesia</td>
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<td>367</td>
<td>Sensitivity Analysis in Optimization of Multiple Cyclone Arrangements</td>
<td>Muhummad Fariz Failaka and Ali Elkamel, Department of Chemical Engineering, University of Waterloo, Ontario, Canada Fethi Bellamine, National Institute of Applied Science and Technology, Tunis Cedex, Tunisia</td>
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<td>133</td>
<td>Debottlenecking of Conventional Copper Smelters</td>
<td>Alessandro Navarra, Universidad Católica del Norte, Antofagasta, Chile Roberto Parra, Universidad de Concepción, Concepción, Bio Bio, Chile Boyd Davis, Kingston Process Metallurgy Inc., Kingston, Ontario, Canada Frank Mucciardi, McGill University, Montreal, Quebec, Canada Seng How Kuan, Universiti Tunku Abdul Rahman, Kajang, Selangor, Malaysia</td>
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**9:30 am - Thursday Morning Keynote:**

**Dr. Hans-Juergen Hoyer**

Secretary General of the International Federation for Engineering Education Societies (IFEES), Executive Secretary of the Global Engineering Deans Council (GEDC) and Resident Scholar in Global Engineering at Marquette University, USA - Mayang Sari

**Grand Ballroom**
### TECHNICAL PROGRAM

**March 8-10, 2016**

**Thursday Morning Keynote:**
**Prof. Dr. Noraini Kaprawi**
Director of Strategic and Quality Management Office, Faculty of Technical and Vocational Education, University of Tun Hussein Onn Malaysia - Mayang Sari Grand Ballroom

**11:00 – Networking Break – Exhibition Hall**

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<td>11:30 – 12:45</td>
<td><strong>Global Engineering Education X</strong></td>
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<td><strong>Session Chair:</strong> Dr. S. C. Naik, National Institute of Technology, Rourkela, Odisha, India</td>
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<td>11:30 – 11:55</td>
<td>Kamel Hawwash, Professor in the School of Civil Eng., University of Birmingham, UK and Immediate Past President of SEFI &amp; Member of the European Engineering Deans Council</td>
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<td>11:55 – 12:20</td>
<td>Dr. Charles Mbohwa, Professor and Vice-Dean Postgraduate Studies, Research and Innovation, Faculty of Engineering and the Built Environment (FEBE), University of Johannesburg’s (UJ), South Africa</td>
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<td>12:20 – 12:45</td>
<td>Dr. S. C. Naik, Professor, Former Head of Chem Engg and Dean, National Institute of Technology, Rourkela, Odisha, India and Past President, The Institution of Engineers and Past Vice-President, The Federation of Engineering Institutions in South &amp; Central Asia</td>
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**11:30 – 12:45, THURSDAY**

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<td>Industry Solutions X</td>
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<td><strong>Session Chair:</strong> Resh Plaha, Crystal Quality UK Ltd</td>
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<tr>
<td>11:30 – 12:20:</td>
<td>Mr. Takenori Kabeya, Senior Engineer and IT Specialist of Production, Sales and Inventory Solution Department, Business Solution Division, Hitachi Solutions East Japan, Ltd.</td>
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**Designing demand and supply operation tailored to industry sector and business category**

| 12:20 – 12:45:  | Ms. Resh Plaha, Crystal Quality UK Ltd |

**Publication of BS EN ISO9001:2015 Quality Management Systems, its Global significance to Organisations**

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<th>Smart Manufacturing Workshop</th>
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<tr>
<td><strong>Dr. Rupy Sawhney</strong></td>
<td>Healt Fellow in Business and Engineering and Professor, Industrial and Systems Engineering, University of Tennessee, Knoxville, USA</td>
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<th>Quality Control and Management</th>
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<tr>
<td><strong>Session Chair:</strong> Vimal Kumar, Indian Institute of Technology Kanpur, India</td>
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**ID 322 Multi-Attribute Control Chart Design for Bronze Pipe Fittings Production**
I.B.N. Sanditya Hardaya, Aditya Putra Setyana, Istri Surjandari and Arian Dhini, Universitas Indonesia, Depok, Indonesia

**ID 628 Improvement of Test Cell Utilization Using Six Sigma Methodology**
S.P. Srinivasan, Mechanical Engineering, Rajalakshmi Engineering College, Chennai, India
P. Malliga, Industrial Engineering, Anna University, Chennai, India

**ID 638 A Model to Assess Quality of Disaster Relief Efforts**
Manoj Pokkiyarath, Amrita Vishwa Vidyapeetham University, Bangalore, India
Bishnu Ramaratnam, Department of Mechanical and Materials Engineering, University Of Nebraska-Lincoln, Nebraska, USA

**ID 639 Development of Root Cause Analysis Tool for Control Chart**
Hari Agung Yuniarto, Industrial Engineering, Universitas Gadjah Mada, Sleman, Yogyakarta, Indonesia
Wilhelmus Abisayya Paranta, PT ASTRA Daihatsu Motor, North Jakarta, DKI Jakarta, Indonesia

**ID 217 Relating Left/Right Brained Dominance Types of Leaders to TQM Focus: A Preliminary Study**
Vimal Kumar, Indian Institute of Technology Kanpur, Uttar Pradesh, India

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<td><strong>Session Chair:</strong> Mandy Taha, Alexandria University, Egypt</td>
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**ID 056 Transforming green logistics practice into benefits - A case of 3PLs**
Noorliza Karia and Muhammad Hasmi Abu Hassan Aasaari, Universiti Sains Malaysia, USM, Penang, Malaysia

**ID 092 The Analysis of Airport Operational Performance Case Study: Chiangmai International Airport, Thailand**
Tipawee Suwanwong, Chiang Mai University, Muang District, Chiang Mai, Thailand

**ID 295 Model and Simulation Design of Stacking Rules in Container Terminal with Discrete Event Simulation Approach**
Armand Omar Moeis and Muhammad Harisuddin, Universiti of Indonesia, Depok, West Java, Indonesia

**ID 629 Near Optimal Solution for Green Vehicle Routing Problem**
Mandy Taha, Production Engineering Department, Alexandria University, Alexandria, Egypt
Amr madkour, Military Technical College, Kobry Elkobbah, Cairo, Egypt
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<td>11:30 – 12:45, THURSDAY</td>
<td>Inventory Management</td>
<td>Bintang V</td>
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<td>Deepak Chandra, National Institute of Industrial Engineering, Mumbai, India</td>
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<td>11:30 – 12:45, THURSDAY</td>
<td>Artificial Intelligence</td>
<td>Bintang VI</td>
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<td>Lean and Six Sigma</td>
<td>Bintang VII</td>
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| ID 106 | A Study of Green Procurement Practices: A Case Study of the Computer Parts Industry in Thailand | Pornwasin Sirisawat and Tossapol Kiatcharoenpol, Department of Industrial Engineering, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand
Ninlawan Choomrit and Pliada Wangphanich, Department of Industrial Engineering, Srinakharinwirot University, Bangkok, Thailand |
| 11:30 – 12:45, THURSDAY | Sustainable Manufacturing | Mayang Sari II |
| Session Chair: Ahmad Mubin, University of Muhammadiyah Malang, Jawa Timur, Indonesia |
| ID 431 | FSMER – Systematic Approach for Modeling of Energy- and Resource-Efficient Factories | Hendrik Hopf and Egon Müller, Technische Universität Chemnitz, Germany, Chemnitz, Germany |
| ID 452 | Enabling CMOS 0.13µm technology at 0.18µm equipment platform on 200nm Semiconductor Manufacturing Industry | Thung Beng Joo and Kader Ibrahim, Silterra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia
Nurulfajar Bin Abd Manap and Faizul) Binti Salehuddin, Universiti Teknikal Malaysia Melaka, Durian Tunggal, Melaka, Malaysia |
| ID 645 | Sustainable Suppliers’ Selection in Ready-Made Garments: Toward Sustainable Manufacturing | Maha Morssi, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Alexandria, Egypt |
| ID 455 | Development of Comprehensive WIP Performance Monitoring Systems for Semiconductor Fabrication Foundry | Ahmad Mubin, University of Muhammadiyah Malang, Jawa Timur, Indonesia |
| ID 578 | The Role of Service Providers on Cloud Computing Technology for a Sustainable Computer Network | Christopher Backhouse, Loughborough University, Loughborough, Leicestershire, United Kingdom
Ayham Jaaron, An-Najah National University, Nablus, West Bank, Palestine |
| ID 588 | Developing KPIs for organizations with similar objectives | Ramesh Chandra Rath, Einstein Academy of Technology and Management, Khordha, Bhubaneswar, Odisha, India |
| ID 598 | D-Optimal Equivalent-Estimation Second-Order Strip-Strip-Plot Designs for Three Multi-Stage Processes | Prapassorn Tantiphanwadi and Prapaisri Sudasna na Ayudthya, Kasetsart University, Chatuchak, Bangkok, Thailand |
| ID 456 | Network Management and Bandwidth Resource Allocation in Educational Institutions | Prapaisri Sudasna na Ayudthya, Kasetsart University, Chatuchak, Bangkok, Thailand |
| ID 339 | Application of Monte Carlo Analytic Hierarchical Process (MCAHP) in the Prioritization of Theme Park Service Quality Elements | Lindley Bacudio, Mc Joren Banzon and Michael Angelo Promentilla, De La Salle University, Manila, Philippines |
| ID 373 | History matching of the PUNO-S3 reservoir model using proxy modeling and multi-objective optimizations | Berhun Mamo Negash, Universiti Teknologi Petronas, Bandar Seri Iskandar, Perak Darul Ridzuan, Malaysia |
| ID 404 | Numerical Modelling and Optimization of Square Microneedle Array for Efficient Transdermal Drug Delivery | Raja Rajeswari Nachiappan, Saveetha Engineering College, Anna University, Chennai, TamilNadu, India |
| ID 493 | Impact of the geometrical parameters of labyrinth seal on the efficiency of gas pumping unit | Bellaouar Abderrahmane, University of Laghouat, Laghouat, Algeria, Algeria
Volodimir Kopey, Ivano-Frankivsk National Technical University of Oil and Gas, Ivano-Frankivsk, Ukraine
Mokhtar Aouissi, Mechanical Engineering Laboratory, Amar Telidji University of Laghouat, Laghouat, Laghouat, Algeria |
| ID 440 | Statistical Analytical Study of Traffic Accidents and Violations in the State of Kuwait and its Social and Economic Impact on the Kuwaiti Society | Basel Aleideh, Kuwait University, Showaikh, Kuwait City, Kuwait |

1:00 pm Thursday Lunch Keynote: Rajiv Ghatikar, Vice President and General Manager, Siemens PLM, ASEAN/Australasia
Mayang Sari Grand Ballroom

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### Global Engineering Education XI
**Starhill 4**

**2:30 – 3:45, THURSDAY**

**Session Chair:** Dr. Hamid Parsaei, Texas A&M University

- **2:30 – 2:55:** **Professor Khedidja Allia**, Research Laboratory of Science in Industrial Process Engineering (LSGPI), USTHB - FGMGP, Bab-Ezzouar, Algiers-Algeria
  
  **ID 546: Trends in engineering education: Programs’ content, implementation to meet current challenges.**

- **2:55 – 3:20:** Shri. *Mahesh Anant Kakade*, Controller of Examinations, Shivaji University, Kolhapur, and Chairman, Indian Society for Technical Education, Maharashtra- Goa Section, India

- **3:20 – 3:45:** Dr. *Hamid Parsaei*, Professor of Industrial and Systems Engineering, Texas A&M University (College Station) and Professor of Mechanical Engineering and Director of Academic Outreach, Texas A&M University Qatar

### Industry Solutions XI
**Starhill 5**

**2:30 – 3:45, THURSDAY**

**Session Chair:** Johann Ong, SilTerra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia

- **2:30 – 2:55:** Parth *Rashmikant Patel*, Executive Director, Apollo Techno Equipments Limited, Ahmedabad, Gujarat, India

- **2:55 – 3:20:** Johann Ong, SilTerra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia

  **ID 457: Eliminate Salicide Residues in Wafer Fabrication Front-End Pre-Metal Layer Cleaning Process**

  Johann Ong and Bee Hoon Tan, SilTerra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia

- **3:20 – 3:45:** Dr. D. *Muruganandam*, Production Engineering Department, Sri Sairam Engineering College, Chennai, India

### Smart Manufacturing Workshop
**Starhill 6**

**2:30 – 3:45, THURSDAY**

**Dr. Rupy Sawhney**

Heath Fellow in Business and Engineering, Professor, Industrial and Systems Engineering, Univ. of Tennessee, Knoxville, USA

### Reliability and Maintenance
**Starhill 7**

**2:30 – 3:45, THURSDAY**

**Session Chair:** Joe Amadi-Echendu, University of Pretoria, Gauteng, South Africa

**ID 005 Optimized Measures to Improve TAT in Product Maintenance**

Vinay V Kabadi, Lokesha, R. and Tanoy Kumar Paul, DF&PD, Siemens, Bangalore, India

**ID 050 Development of a condition index matrix to support technical feasibility of life extension in the offshore oil and gas industry**

Mahmood Shafiee and Isaac Animah, Cranfield University, Bedford, Bedfordshire, United Kingdom

**ID 058 Prediction of Failures by Using Crow/AMSAA Model in Microsoft Excel**

Masdi Muhammad, Tahir Raza and Mohd Amin Bin Abd Majid, Universiti Teknologi Petronas, Tronoh, Perak, Malaysia

**ID 080 An empirical case study of engineering asset management decision making in an electrical utility**

Joe Amadi-Echendu and Ouma Bosaletsi, University of Pretoria, Gauteng, South Africa

### Entrepreneurial Mindset: Opportunity Recognition & Value Proposition Workshop
**Starhill 8**

**2:00 – 8:00, THURSDAY**

**Professor Donald M. Reimer**

Director of Entrepreneurial Programs, College of Engineering, Lawrence Technological University, Southfield, Michigan, USA

### Sustainable Manufacturing
**Bintang V**

**2:30 – 3:45, THURSDAY**

**Session Chair:** Mohd Nizam Ab Rahman, Universiti Kebangsaan Malaysia

**ID 266 Augumenting Excellence in Manufacturing: A Strategic Dynamic Approach**

Mridula Sahay, Amrita Business School, Amrita Vishwa Vidhyapeetham, Coimbatore, Tamil Nadu, India

**ID 303 Identification of Energy Efficiency Measures during Factory Planning Processes**

Manuela Krones and Egon Müller, Technische Universität Chemnitz, Chemnitz, Saxony, Germany

**ID 428 ProSET: A Decision Support System for Sustainability Performance Evaluation**

Muhammad Zameri Mat Saman, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

Mohd Fakhir Hassan, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

Safian Sharif, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia

**ID 495 The Challenge in Malaysian Industries in Implementing Design of Experiment**

Mohd Nizam Ab Rahman, Haris Jamaluddin, Jaharah A. Ghani and Baba Md Deros, Universiti Kebangsaan Malaysia / National Univ. of Malaysia

**ID 623 Waste management for sustainable development in industrial parks. A case study of Wadesville industrial area, Johannesburg**

Tatenda T Chingono and Charles Mbohwa, Department of Quality and Operations Management, FEBE, University of Johannesburg, Johannesburg, South Africa

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## 2:30 – 3:45, THURSDAY
### Computer and Computing
**Bintang VI**
**Session Chair:** Hanane Zermane, Batna 2 University, Algeria

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<td>Hanane Zermane and Hayet Mouss, Batna 2 University, Batna, Algeria</td>
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### Systems Engineering
**Bintang VII**
**Session Chair:** Nouara Ouazraoui, University of Batna-Algeria, Batna, Algeria

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<td>Michael Mutungi, School of Engineering, Namibia University of Science &amp; Technology, Windhoek, Namibia, and Faculty of Engineering and the Built Environment, University of Johannesbourg, Johannesbourg, South Africa</td>
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## 2:30 – 3:45, THURSDAY
### Engineering Economy
**Mayang Sari I**
**Session Chair:** Thabit Sultan Mohammed, Dhofar University, Oman

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<td>Hohyun Lee, Jinwoo Lee and Myeonghun Ji, Data Science Lab, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea</td>
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<td>Aliya Abdulameer, Abdurrahim Shamayleh and Malick Ndiaye, Industrial Engineering Department, American University of Sharjah, Sharjah, UAE</td>
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## 2:30 – 3:45, THURSDAY
### Sustainability and Green Systems
**Mayang Sari II**
**Session Chair:** Liga Kamola, Riga Technical University, Latvia

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<td>Muhamad Zameri Mat Saman, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia</td>
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<td>Abdul Rahman Hemdi, Universiti Teknologi Mara, Pematang Pauh, Pulau Pinang, Malaysia</td>
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<td>Safian Sharif, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia</td>
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<td>Salwa Mahmood, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia</td>
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<td>Comparing the cost of subcontracting and trading option to assess carbon footprint across supply chain</td>
<td>Nidhi. M B, Department of Mechanical Engineering, Mar Baselios College of Engineering and Technology, Trivandrum, Kerala, India, V. Madhusudanan Pillai, Department of Mechanical Engineering, NIT Calicut, Kozhikode, Kerala, India</td>
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<td>On-Grid Solar Power Systems with Net Metering and Solar Irradiance in Pakistan</td>
<td>Hafsa Qamar, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, KPK, Pakistan</td>
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ID 069  Introducing of smart work – opportunity to increase economical development of municipalities in Latvia
Ilze Judrupa, Riga Technical University, Riga, Latvia

ID 472  Ontology-Based User Guidance for Energy Efficiency Optimization Measures
Markus Brandmeier and Joerg Franke, Friedrich-Alexander-University Erlangen-Nuremberg, Erlangen, Bavaria, Germany

ID 077  Income inequality and human capital as factors influencing economic development of region – case study of Latvia
Liga Kamola, Ulris Kamols and Svetlana Ivanova, Riga Technical University, Riga, Latvia

2:30 – 3:45, THURSDAY  Statistics and Optimization  Mayang Sari III
Session Chair: Albert Luguterah Uds, Navrongo, Upper East Region, Ghana

ID 331  An Analysis on Process Parameters of Solder Jet Bonding to Increase the Shear Strength of Solder Joint in HGA
Krisada Asawarungsangkungl and Jakawat Deeying, Department of Industrial Engineering, King Mongkut’s University of Technology, North Bangkok, Bangkok, Thailand

ID 476  optimization of the acid catalyst concentration for synthesis of anti-cancer agent gamavuton-0 by using mathematical and statistical software
Sabtanti Harimurti, Hari Widada, Ismanurrahman Hadi and Didy Putra Wijaya, Universitas Muhammadiyah Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia

ID 501  Aircraft Ground Movement Delay: A Descriptive Statistical Analysis at Kuala Lumpur International Airport
Jafri Rohani, Mohd Izuddin Md Itnhan and Iasat Fasurrazi Nusiyrwan, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

4:00 – 5:15, THURSDAY  Global Engineering Education XII  Starhill 4
Session Chair: Nidhi M B, MarBaselios College of Engineering & Technology (MBCET), Thiruvananthapuram, Kerala, India

4:00 – 4:30:  Nidhi M B, HoD Mechanical Engineering Department, MarBaselios College of Engineering & Technology (MBCET), Thiruvananthapuram, Kerala, India and National Executive Council Member ISTE
Enhancing outcome Based Education through Self awareness

4:30 – 5:00:  Dr. P. Muredzi, Dean – School of Engineering & Technology, Harare Institute of Technology, Zimbabwe

4:00 – 5:15, THURSDAY  Industry Solutions XII  Starhill 5
Session Chair: Mehran Doulat Abadi, UTM Razak School of Engineering and Advanced Technology

4:00 – 4:25 pm (Thursday)
Dr. Mehran Doulat Abadi
Senior Research Fellow, Research Management Center (RMC), University Technology Malaysia (UTM), Johor Bahru, Malaysia
Quality Improvement Initiatives in UAE: a case study of Dubai Cable Company (DUCAB)

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### TECHNICAL PROGRAM

**4:00 – 5:15, THURSDAY**  
**Smart Manufacturing Workshop**  
*Starhill 6*

Heath Fellow in Business and Engineering, Professor, Industrial and Systems Engineering, Univ. of Tennessee, Knoxville, USA

**Dr. Rupy Sawhney**

**4:00 – 5:15, THURSDAY**  
**Operations Excellence**  
*Starhill 7*

Session Chair: Rajendra K. Patil, TSSM’s Padmabhooshan Vasantadatta Patil Institute of Technology, Bavdhan, Pune, India

ID 693  
**Green Supply Chain Management: Do They Improves Operational Efficiency and Operational Performance**
Raja Zuraidah Rasi, Md Fauzi Ahmad and Siti Sarah Omar, Department of Production and Operations Management, Univ. Tun Hussein Onn Malaysia

ID 702  
**Investigating Software Detection Methods**
Kiran Khatter, School of Engineering & Technology, Ansal University, Gurgaon, India  
Arvind Kalia, Department of Computer Science, Himachal Pradesh University, Shimla, India

ID 709  
**Design of a Crushing and Propagation Screw Mechanism for Progressive Pelletising in Food Waste**
R. Masike, W. Mutenhabundo and R. Muchadenyika, Harare Institute of Technology, Box 277, Ganges Road, Belvedere, Harare, Zimbabwe

ID 716  
**A relationship framework and Critical application in between strategy and operational plans for manufacturing industry**
John M. Ikome, Department of Industrial Engineering, Faculty of Engineering, Tshwane University of Technology, Pretoria, South Africa  
Martha M. Ikome, Technology Transfers and Innovation (TTI), Vaal University of Technology, Vanderbijlpark, South Africa

ID 675  
**Design and Development of Drilling Jig for Spinning Rings used in Textile Industry**
Rajendra K. Patil, Shivam C. Shinde, Suraj Madhukar Takale and Bhawarlal Choudhary, Dept. of Mechanical Engineering, TSSM’s Padmabhooshan Vasantadatta Patil Institute of Technology, Bavdhan, Pune, India

**4:00 – 8:00, THURSDAY**  
**Entrepreneurial Mindset: Opportunity Recognition & Value Proposition Workshop**  
*Starhill 8*

Professor Donald M. Reimer  
Director of Entrepreneurial Programs, College of Engineering, Lawrence Technological Univeristy, Southfield, Michigan, USA

**4:00 – 5:15, THURSDAY**  
**Case Studies**  
*Bintang V*

Session Chair: Tan Chan Sin, University Malaysia Perlis

ID 252  
**Setup Time Reduction Using SMED in a Manufacturing Industry: A Case Study**
Rajdeep Singh, Department of Mechanical Engineering, CGC College of Engineering, Landran, Mohali, Punjab, India  
Uponder Dhull, Mechanical Engineering, National Institute of Technology, Kurukshetra, Haryana, India

ID 682  
**Occupational Health & Safety Issues Affecting Worker Performance in Omani Industries**
Mohammad Khadem, Department of Mechanical and Industrial Engineering, Sultan Qaboos University, Muscat, Oman

ID 622  
**Creating shared value in South Africa. A case study of Rustenburg and Emalahleni regions**
Charles Mbowna university of Johannesburg, South Africa  
Tatenda Talent Chingono, University of Johannesburg, South Africa

ID 661  
**Diverse Possibility of Fit Manufacturing Principle into Value Stream Mapping (VSM) and Its Impact: A Review**
Tan Chan Sin, Gwee Wan Theng, Rosmaini Ahmad, Hussain. M.I., and C.C. Lee, School of Manufacturing Engineering, University Malaysia Perlis

**4:00 – 5:15, THURSDAY**  
**IFEES Meeting – Board of Directors**  
*Mayang Sari I*

International Federation of Engineering Education Societies (IFEES) Meeting - Board of Directors

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5:30 pm, Thursday: Closing Mixer

### Posters

| ID 006 | Industrial Data Communication- PLC and External Application |
|        | Tanoy Kumar Paul and Manoj B., Siemens, Bangalore, India |

| ID 007 | Measurement and Prediction of Condensate Gas Hydrates Formation Conditions – A Study Case |
|        | Mimoun Hadji, Laboratory of Hydrocarbons technology, Dept. of Chemistry, Faculty of Hydrocarbons & Chemistry, University Mhamed Bouguerra of Boumerdes, Algeria.  
Samer Said, Laboratory of Materials Science (LCMVAR), Dept. of Chemistry, Faculty of Science, University Hadj Lakhdar of Batna, Algeria  
Otmanine Ghazi, Laboratory of Hydrocarbons Technology, Dept. of Chemistry, Faculty of Hydrocarbons & Chemistry, Univ. Mhamed Bouguerra of Boumerdes, Algeria  
Belloum Mohamed, Laboratory of Materials Science (LCMVAR), Dept. of Chemistry, Faculty of Science, University Hadj Lakhdar of Batna, Algeria |

<p>| ID 036 | Microstructural and Electrical properties of Screen-printed N+ Emitter of P-type Monocrystalline Silicon Solar cell |
|        | Chel-Jong Choi, Chonbuk National University, Jeonju-si, Jeollabuk-do, Korea |</p>
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<td>Masatoshi Kitaoka, Kanagawa University, Yokohama city, Japan</td>
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<td>Santiago-Omar Caballero-Morales, Universidad Popular Autónoma del Estado de Puebla, Puebla, Mexico</td>
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<td>Your Opinion Matters: A Cross-Sectional Study on Happiness among Older Adults in Siberia</td>
<td>Ekaterina Taran, Galina Barysheva and Elena Frolova, Tomsk Polytechnic University, Tomsk, Russian Federation</td>
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ID 276  Mix Maker Ants: Inspiration for Multiple Objective Optimization
Hassan Soltan, Mansoura University, Mansoura 35516 Egypt
Sherif Mostafa, University of South Australia, Adelaide, SA 5000 Australia

ID 279  Project Investment Decision Considering Background Risks
Yao Zhang and Xin Guan, School of Business Administration, Northeastern University, Shenyang, China

ID 282  Heat transfer through fire fighter’s protective clothing exposed to thermal radiation.
Zaina Norhalls Zainol and Masine Md Tap, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

ID 293  Determination of Burn-in Period Based on Reliability Target for Product Failure Time with Weibull Distribution
Innain Dominique Puertollano and Michelle Joy Macapuno, Mapua Institute of Technology, Manila, Philippines
Ying Che Chien, Chung Yuan Christian University, Taiwan

ID 316  Stochastic Dynamic Optimization of Engineering Processes
Fethi H. Bellamine, The National Institute of Applied Science and Technology in Tunis, Centre Urbain Nord, Tunis Cedex, Tunisia
Muhamad Fariz Failaka and Ali Elkamel, Department of Chemical Engineering, University of Waterloo, Waterloo, Ontario, Canada

ID 341  Automatic Screening Unqualified Result in Emotional Quotient Test
Suwilai Areejit, Bangkok Thonburi University, Taweewatana, Bangkok, Thailand

ID 364  An alternative approach to criticality analysis of industrial risks
Nouara Ouazraoui, University of Batna-Algeria, Batna, Algeria

ID 378  Quantitative Optimization of Nurses in Emergency Department of Teaching Hospital: A case study
Ali Mouseli, Health Care Management, Research Center for Health Services Management, Institute of Futures Studies in Health, Kerman Univ. of Medical Sciences, Iran
Mohammad Hosein Mehrorhasani, Research Center for Health Services Management, Institute of Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran, Mechanical and Industrial Engineering
Zahra Mastaneh, Department of Health Information Management and Technology, School of Paramedicine, Hormozgan Univ. of Medical Sciences, Bandar-Abbas, Iran
Leila Vall, Environmental Health Engineering Research center, Kerman University of Medical Sciences, Kerman, Iran

ID 380  Reduction of chatter vibrations by management of the cutting tool
Bourdim Abdelghfour, University of Tiemcen, Tiemcen, Algeria
Bourdim Mokhtar, University Center of Relizane, Tiemcen, Algeria

ID 434  Identifying Factors Affecting Entrepreneurial Sustainable Development (Case Study: Knowledge-Based Start-Ups of Science and Technology Park of Tehran University)
Niloofar Tavakoly Nabavy, Babak Zia and Shiva Vosoughi, Tehran, Iran

ID 446  Implementation in-situ auto polishing rate optimization for chemical mechanical planarization process in semiconductor fabrication industry
Mohamed Arif Shri Abdul Aziz and Mohamad Zambri Mohd Darudin, Silterra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia
Samad Ramlan, Mohamed Arif Shri Abdul Aziz and Mohamad Zambri Mohd Darudin, Silterra Malaysia Sdn. Bhd., Kulim Hi-Tech Park, Kulim, Kedah, Malaysia
Muhammad Hafidz Fazli Md Fauadi and Mohd Razali Muhamad, Faculty of Manufacturing Engineering, Universiti Teknikal Malaysia - Melaka, Malaysia

ID 482  Using several intelligences for complex industrial process monitoring: detection and diagnosis
Hayet Mouss, Nafissa Rezki, Okba Kazar, Laid Kahloul and Djamil Rezki, Batna 2 University, Batna, Algeria

ID 489  Assessment of Business Processes in Consolidated Patient Account Centers
Shaiju Eapen, Department of Veterans Affairs USA, Shelby Township, Michigan, United States

ID 520  Optimal Pricing Strategy for Multi-generations Durable Products with a Trade-in Program
Hui-Chiung Lo, Tamkang University, New Taipei City, Taiwan

ID 528  Analytical Study of Pecking Order Theory of Capital Structure; Evidence from Malaysia
Hamed Emami, Project Management Office, ZK Co., Esfahan, Iran
Maryam Rahimi Tehrani, Finance Division, DejDis Sepahan, Esfahan, Iran

ID 530  A study on the Profitability Analysis of Power Grid Corporation of India Ltd
Prabhneet Kaur Sethi, Department of Applied Mathematics, Amity University, Noida, Uttar Pradesh, India
Surbh Gupta, Amity University, Noida, Uttar Pradesh, India
Prabhneet Kaur Sethi, Amity University, Noida, Uttar Pradesh, India
Mohit Gupta, Power Grid Corporation of India Ltd., Delhi, India

ID 562  Contour Approach for Analysis of Minimum Regions for the Economic Statistical Design of X-bar Control Charts
Abdur Rahim, University of New Brunswick, Fredericton, New Brunswick, Canada
Santiago-Omar Caballero-Morales, Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico

ID 563  A Review of Models for Optimal Bio-products Syntheses from Oil Palm Empty Fruit Bunch (EFB)
Ali Elkamel, University of Waterloo, Ontario, Canada
Rois Fatoni, Chemical Engineering Department, Universitas Muhammadiyah Surakarta, Jawa Tengah, Indonesia
Abdulahim Abdulrazik and Mahyar Abolhallaj, University of Waterloo, ON, Canada

ID 571  The Effects of Lean Production Tools and Techniques Implementation at Malaysian Manufacturing and Service Industries: A Case Study Review
Musli Mohammad, Badrul Omar, Mohd Shahir Yahya and Edly Ferdin Ramly, Universiti Tun Hussein Onn, Johor, Malaysia

ID 574  Crystallization kinetics and thermal behaviors of nanoclay dispersed jute reinforced composite
Sazib Mollik, IIUM, Gombak, Selangor, Malaysia
### IEOM Kuala Lumpur Conference TECHNICAL PROGRAM March 8-10, 2016

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<td>Model of Logistics Management of the Supply Chain (LMSC) to Improve the Production Sector of Perishable Food Integrated by Small and Medium Enterprises in Mexico</td>
<td>Gladys Bonilla Enriquez, Universidad Popular Autonoma del Estado de Puebla, Mexico</td>
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<td>Cano Olivos, Universidad Popular Autónoma de Estado de Puebla, Mexico</td>
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<td>Amar Benmounah and Ammar Chebouba, Dept. of Transport and Equipment of Hydrocarbons, Faculty of Hydrocarbons and Chemistry, UMBB, Boumerdes, Algeria</td>
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<td>ID 660</td>
<td>Desalination of Seawater Research Project on the Basis of the Positive Results of Water Treatment by Magnetic Field</td>
<td>Abderrahmane Bellouar, Department of Process Engineering, Amar TelidjiUniversity of Laghouat, Laghouat, Algeria</td>
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<td>Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India</td>
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<td>Mohammad Anwar Rahman, Manufacturing &amp; Construction Management, Central Connecticut State University, New Britain, Connecticut, USA</td>
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<td>Ahad Ali and Gomanth Duvvuru, Lawrence Technological University, Southfield, Michigan, USA</td>
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<td>Ehsan Teymourian, School of Mechanical, Industrial, and Manufacturing Engineering, Oregon State University, Corvallis, USA</td>
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<td>Vahid Kayvanfar, Department of Industrial Engineering, Amirkabir University of Technology, Tehran, Iran</td>
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<td>Endang Soeryana Hasbullah, Department of Mathematics, Faculty of Mathematics and Natural Sci., Universitas Padjadjaran Bandung - Indonesia</td>
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<td>Applications De Brujin Graphs of Hamiltonian and Eulerian Cycles to Fault Tolerant Networks</td>
<td>Nur Fadhilna bt Abdul Halim, School of Informatics and Applied Mathematics, Universiti Malaysia Terengganu, Malaysia</td>
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<td>ID 721</td>
<td>Model Predictive Control for Automobiles</td>
<td>F. Sukono, Endang Rusyaman and Sudrajat Supian, Dept. of Mathematics, Universitas Padjadjaran, Bandung – Indonesia</td>
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<td>ID 722</td>
<td>Quadrature Analysis Using Simulink</td>
<td>Mohamad S. Ait Kadi, Samira Abbasgholizadeh Rahimi and Angel Ruiz, Université Laval, Quebec, QC, Canada</td>
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<td>Water Quality Improvement of Ganga</td>
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#### Senior Design Project / Final Year Project (FYP) Poster Presentation Competition

| ID 310 | Optimization of Warehouse Operations for Logistics Company in the Philippines                                                          | Stephanie B. Duque, Maricar M. Navarro, Bernaliza O. Verrey, Joyvale C. Vlao, Sherlyln M. Zantua and Rosalia F. Gabuya, Industrial Engineering Department, Technological Institute of the Philippines, Quezon City, Philippines |
| ID 461 | Investigation of Propagation and Permeability Modification of Grafted Bentonite Particles in Porous Media                             | Nurul Hanisah Alauddin, Nur Asyraf Md Akhir and Abdulazim Abass, Universiti Teknologi Petronas, Bandar Seri Iskandar, Perak, Malaysia |
| ID 504 | Prioritization of Patients with Communication Disorders                                                                             | Daoud Ait Kadi, Samira Abbasgholizadeh Rahimi and Angel Ruiz, Université Laval, Quebec, QC, Canada |
| ID 683 | Designing Personalized Tourism Packages for Oman Tourism Industry                                                                     | Abdulwahab M., Amur M., Rashid H. and S. Piya, College of Engineering, Sultan Qaboos University, Oman |

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### IEOM Detroit Conference at Lawrence Tech - September 23-25, 2016

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

**KEYNOTE SPEAKERS:**

*Opening Keynote: Carlo Materazzo*, Head of World Class Manufacturing (WCM), FCA – Global, Fiat Chrysler Automobiles

*Dr. Helmhut Ludwig*, Executive VP, Digital Enterprise Realization and Chief Manufacturing Officer, SIEMENS PLM, USA

*Dr. Jeffrey Abell*, GM Technical Fellow, Lab Group Manager, Manufacturing Systems Research, General Motors

*Dr. Jay Lee*, Ohio Eminent Scholar, L.W. Scott Alter Chair Professor and Distinguished University Professor, University of Cincinnati, Ohio, USA and Founding director of NSF I/UCRC on Intelligent Maintenance Systems

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Meeting Rooms Layout

Lower Level3 Mayang Sari Ballrooms & Meeting Layout

Mayang Sari Grand Ballroom ceiling height is 19.8 feet

Stage ceiling height is 12 feet

Bintang Meeting Rooms

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08:00 – 08:25 (Tuesday)
Ali Massaeli
National Iranian Gas Company, Tehran, Iran

ID 267 Developing Productivity Monitoring System in a governmental organization with multi-performance objectives: A case study in National Iranian Gas Company

Ali Massaeli Ali is a Senior Expert in Industrial Inspection Department of National Iranian Gas Company, Tehran, I.R. of IRAN. He earned B.Sc. in Chemical Engineering from Azad University of South Tehran; M.Sc. in Industrial Engineering – System Management and Productivity from Azad University of Qazvin. He has several research activities such as publishing internal journal of IGU (International Gas Union) and international conference papers. He has several industrial training courses in Chem. and Industrial Engineering and co-authoring and the editor of process engineering in oil and gas industry. He was one of the senior experts in SOCE integrating executive committee of Petroleum Ministry of I.R. of IRAN. In the IEOM 2012(Istanbul-Turkey) he received Outstanding Industry Awards. He is one of the members Industrial Committee of IEOM since 2012 till now. Also he is member of jury team of International Management Conference since 2010 in managerial experience section.

08:25 – 08:50 (Tuesday)
Saeed Salimi Beni
National Iranian Gas Company, Tehran, Iran

ID 268 Index Selection of Monitoring Technical Inspection Department in National Iranian Gas Company

Saeed Salimi Beni is a Mechanical Supervisor, and Head of Mechanical assessment Crew for Manufacturer Facilities, Equipments in Gas Industrial, National Iranian Gas Company. He earned B.S. in Mechanical Engineering from Petroleum Institute of Technology, Ahvaz, Iran.

08:50 – 09:15 (Tuesday)
Dr. Ari Maunuksela
Director/Principal, TEAK Ltd. – A Center for Vocational Training and Education, Teuva, Finland

Dr. Maunuksela works as a director/principal with TEAK Ltd. TEAK is a Center for Vocational Training and Education. Core competences of TEAK include wood and carpenter training programs, robotics and automation, CAD/CAM/CNC/3D technologies, upholstery, interior decorations, surface treatment. TEAK has extensive experience as a leading training & education company on wood industries, robotics and automation. We provide both hands-on training and web-based education. Ari Maunuksela holds a Ph.D. in Industrial Management from University of Vaasa. Prior to joining TEAK he has worked in director positions in R&D and product management within international telecommunications industry companies. He has also experience from start-up companies with new technologies. Before moving to industry Dr. Maunuksela worked in academia as a researcher and teacher. He has published articles in refereed scientific journals and international conferences, especially related with innovation and product development. Currently he is also working as a board member of small and medium sized companies. Dr. Maunuksela has given presentations and speeches in several international conferences.

11:30 – 11:55 (Tuesday)
Dr. Adibah Shuib
Professor, Faculty of Computer and Mathematical Sciences of the Universiti Teknologi MARA (UiTM)

Dr. Adibah Shuib is an Associate Professor in the Faculty of Computer and Mathematical Sciences of the Universiti Teknologi MARA (UiTM), Malaysia. She received her Bachelor of Science degree in Mathematics and Master of Science in Computational & Applied Mathematics from the Old Dominion University, USA. She received her PhD in Mathematics and Statistics from the University of Birmingham, United Kingdom. Assoc. Prof. Dr. Adibah Shuib is currently the Head of Strategic Planning at the Centre for Strategic Planning and Information of UiTM. Her main responsibilities include implementing the university’s strategic initiatives and the achievement of the University’s KPIs. She is also the Director for the Integrated Programme Management of the UiTM’s Transformation Programme. Her research interests are in the areas of mathematical modelling and optimisation. Her research include those on vehicle routing problems, emergency medical services particularly on ambulance routing and ambulance location and relocation, cross docking management, diet plan optimisation, airport revenue optimisation, vehicle scheduling and portfolio investment. She has also published widely in international journals and conferences. Assoc. Prof. Dr. Adibah Shuib is now the Acting President of the Management Science and Operations Research Society of Malaysia (MSORSM). Being a Council Member of the MSORSM since 2009, where she has held the position of Secretary, then the Vice President, has given her the opportunity to be involved with many companies and universities through many activities and also meeting with individuals of various career backgrounds in industries as well as the academia.

11:55 – 12:20 (Tuesday)
Professor Chong Mei Fong
The University of Nottingham Malaysia Campus - Selangor Darul Ehsan, Malaysia

Professor Chong Mei Fong is actively engaged in both academic and industry as a leading researcher and practitioner. She is also a practising Professional Engineer registered with the Board of Engineers Malaysia (BEM) and a member of The Institution of Engineers Malaysia (IEM). By committing her lifetime research in the area of renewable energy and wastewater treatment for a better environment, she has recorded her research findings in more than 60 journal publications including ISI-indexed journals, a book (LAP Lambert Acad. Publ.) and two book chapters (Woodhead Publishing Limited and Springer). Besides, her contributions have also been well recognised by various national and international bodies through several awards. She is the founding chair and past chair for Women in Science Engineering and Technology (WinSET) working group. WinSET is a working set up at The University of Nottingham to promote gender equality and worklife balance within the campus. She is now the Executive Director of Nottingham Green Technologies S/B, a spinoff company of the University of Nottingham to commercialise green technologies.
Session III: Industry Solutions - Room – Starhill 5
Chair: Kishor Kulkarni, Tata Technology, Pune, India

2:30 – 2:55 (Tuesday)
Reza Mesgarian
Head of Process Engineering, National Iranian Gas Company, Tehran, Iran

ID 251: Use of Low Heating Value Natural Gas by Blending With Fuel Gas

2:55 – 3:20 (Tuesday)
Dr. Hakan Butuner
IMECO Industrial Management & Engineering Co., Istanbul, Turkey

ID 008: Systematic Competency Based Training Needs Analysis

Dr. Hakan Butuner received his B.Sc. in Industrial Engineering from Middle East Technical University; MBA from Bilkent University; and Ph.D. in Engineering Management from the University of Missouri-Rolla. He has been active both in academic and professional fields for several years as a project manager in overseas; as a strategic planning and business development director; and as an operations improvement program manager. During the same periods, he has been lecturing in the Business Schools and/or Industrial Engineering Departments of well-known Universities. Currently, he is lecturing as a part-time faculty in Business Schools, plus acting as the affiliates of several US companies in industrial management and engineering consulting and training fields. Additionally, he is the president of Institute of Industrial Engineers – Turkish professional chapter; and board member of Institute of High Performance Planners in Kansas City. During his career path, he has participated in several projects. Plus, he has several publications and books (especially in Operations Management and Improvement and Strategic Planning).

3:20 – 3:45 (Tuesday)
Kishor Kulkarni
Sr. Project Engineer, Tata Technology, Pune, India

Kishor Kulkarni is Sr. Project Engineer in Tata Technology, Pune with 4 years for experience in automotive interiors, expertise in manufacturing, validation & development of plastic interior parts of luxury cars. He has completed MBA from Karnataka State Open University in 2013 and B.E. (Industrial Production) from Vishvesharaya Technical University, Belgaum in the year 2011. Presently, he is pursuing PhD in Automobile Engineering. He has been working in Tata Technologies for more than 4 years. He is a part of computing as an innovation, business and sales strategy. He has been working in Tata Technologies for more than 4 years. He is a part of computing as an innovation, business and sales strategy. He has applied patent for Low Cost POP fixtures & welding nests for prototype production. The fabrication cost reduced by 99% and lead time reduced by 99.5%. He has presented research paper at GSCSR 2015 (Global summit on corporate social responsibilities) New Delhi titled “Challenges & opportunities for CSR in India”. He also published a research paper titled “Sweeping Jet Flushing for EDM” in International Journal of Research & Scientific Innovation.

Session IV: Industry Solutions - Room – Starhill 5 - 4:00 – 7:00 pm (Tuesday)
Big Data in Manufacturing and Service Industry

Dr. Andrew Kusiak
Intelligent Systems Laboratory
Professor, Department of Mechanical and Industrial Engineering
The University of Iowa, Iowa City, Iowa, USA

Dr. Andrew Kusiak is a Professor in the Department of Mechanical and Industrial Engineering at The University of Iowa, Iowa City. His current research interests include applications of computational intelligence and big data in automation, energy, manufacturing, product development, sustainability, and healthcare. He is the author or coauthor of numerous books and hundreds of technical papers published in journals sponsored by professional societies, such as the Association for the Advancement of Artificial Intelligence, the American Society of Mechanical Engineers, Institute of Industrial Engineers, Institute of Electrical and Electronics Engineers, and other societies. He speaks frequently at international meetings, conducts professional seminars, and consults for industrial corporations. Dr. Kusiak has served in various editorial roles of over forty journals. Professor Kusiak is a Fellow of the Institute of Industrial Engineers and the Editor-in-Chief of the Journal of Intelligent Manufacturing. Besides his academic appointment at the University of Iowa, he holds Distinguished Adjunct Professorship at King Abdulaziz University, Jeddah, Saudi Arabia. His past academic appointments, include the Technical University of Nova Scotia (now Dalhousie University) and the University of Manitoba in Canada, as well as visiting positions at University of Lion, Institut National Polytechnique de Grenoble, University of Nancy, France, and the University of Hong Kong, Hong Kong. His graduate students have assumed prominent positions in academia and industry. Dr. Kusiak has co-advised PhD students at University of Munich, Germany and Institut National Polytechnique de Grenoble, France.

Wednesday (March 9, 2016)

Session V: Industry Solutions - Room – Starhill 5
Chair: Md Kawsar Ali, Comfit Composite Knit LTD, Dhaka, Bangladesh

08:00 – 08:25 (Wednesday)
Arumugam Manikam
Silterra (M) Sdn.Bhd, Kulim, Kedah, Malaysia

ID 627: Yield Improvement of Wafer Edge Die Defocus (EDD) at Via Layer

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IEOM Industry Solutions  
March 8-10, 2016  
Kuala Lumpur, Malaysia

8:25 – 8:50 am  
**Vivek Sundar Magesh**  
TVS Logistics Services Limited, Chennai, India

*ID 218  Maximising Revenues in the “Tatkal” Category of Indian Railways*

Vivek Sundar Magesh is an MBA from the Indian Institute of Management at Tiruchirappalli, India. He is presently employed at TVS Logistics Services Limited. His interest areas are in developing better public systems and tackling global problems using techniques from Management Science. He also has an Electrical Engineering degree from the prestigious National Institute of Technology at Tiruchirappalli, India. As an Engineer he has published papers on optimization using heuristics. He looks forward to researching about improving public systems to tackle global challenges by joining a doctoral program in a reputed global business school.

08:50 – 09:15 (Wednesday)  
**Md Kawar Ali**  
Chief Operating Officer, Comfit Composite Knit LTD  
Gorai, Mirzapur, Tangail, Dhaka, Bangladesh

Md. Kawar Ali is a well-known expert and mentor in the garment industries of Bangladesh. He has twenty years of professional experiences in RMG sector. He has worked in different capacities in leading companies like Beximco, Square, Orion and DBL. He has got strong communication, interpersonal relations, mentoring, negotiation and cross-cultural organizational skills, and has demonstrated such over the years with utmost productivity and reputation. He is also expert in Total Quality Management, Lean manufacturing, Kaizen, Leadership and self-development courses like Meditation and Yoga. Mr. Kawar has completed his graduation from Khulna University of Engineering and Technology (KUET) also obtained an MBA degree from Dhaka University. He has participated in many workshops, seminars and training sessions in Bangladesh and abroad.

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**Session VI: Industry Solutions**  
Room – Starhill 5  
Chair: **Farrah “Nix” A. Juban**, Intel Corporation, Penang, Malaysia

11:30 – 11:55 (Wednesday)  
**Dr. Zain Tahboub**  
Chief Advisor-Director of Excellence & Innovation  
Dubai Aviation Engineering Projects (DAEP), United Arab Emirates (UAE)

Dr. Zain Elabideen Tahboub is Chief Advisor of Director of Excellence and Innovation of Dubai Aviation Engineering Projects, UAE. He got his Ph.D. and M.Sc. in Industrial and Systems Engineering from Ohio State University. Immediately after, he joined hands with three colleagues to form the Industrial Engineering department at the University of Jordan in 1987. He lead the M.Sc. program in Engineering Management for several years where it came became a leading program for the University of Jordan. The graduates of the department became among the most respected and demanded professionals in many positions, Dubai is no exception where a number of IE’s are among the top decision makers of the Executive Council and many other government entities. At the same time, he was working with industry in many important programs; he was the Corporate Adviser for Royal Jordanian Airlines 1994-1998 where he helped in the recovery of the Airline to become profitable again. During his work at the University of Jordan, he assumed several roles to bring industry and academia together; he was the director of the Outreach Program, the chairman of the National Committee on Relationship between Academia and Industry which lead to forming new partnership and models in new universities. In 2005, he left the University of Jordan to be the Dean of Majan University College in Oman. In 2009, he joined Dubai Aviation Engineering Projects as Specialist Adviser, then assuming other roles and responsibilities including strategy, research, knowledge management and innovation where he is working on building new concepts and models for innovation. Recently, Zain was an active member in developing Dubai Plan 2021.

11:55 – 12:20 (Wednesday)  
**Md Fauzi Ahmad**  
Production and Operation Department  
Universiti Tun Hussein Onn Malaysia (UTHM), Batu Pahat, Johor, Malaysia

*ID 692 Critical Success Factors of Six Sigma Implementation in Malaysian Manufacturing Industry*  

Md Fauzi Ahmad, Wong Jing Ping, Nor Azati Abdul Hamid, Shiah Wei Chen, Universiti Tun Hussein Onn Malaysia (UTHM)  
Josu Takala, Department of Engineering Science and Industrial Management, University of Vaasa, Wolfinhte, Finland

Md Fauzi Ahmad is an academic staff at UTHM. His undergraduate studies was in Electrical & Electronic Engineering from Muroran Institute of Technology (MIT), Japan and Post Graduate studies in Total Quality Management (TQM) from Universiti Teknologi Malaysia (UTM). His majoring research is in TQM of Japanese companies and actively publishing international and local journals. He embarked his career as Quality Engineer at Sharp Corporation in 1999 and has been assigned at various departments which include Product Quality Assurance (PQA), Quality Control (QC), Product Planning and Sales Department. He has working experience for 12 good years in quality and marketing management. He is a Certified Quality Engineer (CQE) from Federation Manufacturing Malaysia (FMM) and Sharp Corporation Japan. He also participated in On Job Training (OJT) for quality, reliability management and data analysis at Sharp Corporation, Japan under Association of Overseas Technical Scholarship (AOTS). He also contributed in establishing company strategy for improving customer satisfaction and other major improvement projects. He has working with Japanese companies for more than 12 years.

12:20 – 12:45 (Wednesday)  
**Farrah “Nix” A. Juban**  
Process Engineering Excellence & Kaizen Service Program Manager for Assembly and Test Manufacturing  
Intel Corporation, Penang, Malaysia

*When Change is Good The Kaizen Way in Intel Vietnam Assembly and Test Factory’s (VNAT)*

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Panelists

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 and continuous professional development. Resh is a registered 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. Chan Chee-Ming
Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies
Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

Chee-Ming Chan is an Associate Professor with the Civil Engineering Technology Department, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia. She is presently holding the office of Deputy Dean in Academic and Research at the Centre for Graduate Studies in the University. Her area of expertise includes geo-materials, engineering education and higher education improvement. More recently, Dr. Chan’s current work on dredged materials from Malaysian waters has gained momentum and support from the Ministry of Science, Technology and Innovation and Department of Marine, Malaysia. She is also involved in professional bodies, including the Society for Engineering Education Malaysia (SEEM), Malaysian Geosynthetics Society (MyIGS), Institution of Engineers Malaysia (IEM), Board of Engineers Malaysia (BEM), and an education quality auditor for the Malaysian Qualification Agency (MQA). From 2009-11, Dr. Chan served as a Postdoctoral Research Fellow at the Port and Airport Research Institute (PARI), Japan.

Dr. Mei Fong Chong
Professor, Faculty of Engineering
The University of Nottingham Malaysia Campus, Selangor Darul Ehsan, Malaysia

Professor Chong Mei Fong is actively engaged in both academic and industry as a leading researcher and practitioner. She is also a practising Professional Engineer registered with the Board of Engineers Malaysia (BEM) and a member of The Institution of Engineers Malaysia (IEM). By committing her lifetime research in the area of renewable energy and wastewater treatment for a better environment, she has recorded her research findings in more than 60 journal publications including SCI-indexed journals, a book (LAP Lambert Acad. Publ.) and two book chapters (Woodhead Publishing Limited and Springer). Besides, her contributions have also been well recognised by various national and international bodies through several awards. She is the founding chair and past chair for Women in Science Engineering and Technology (WinSET) working group. WinSET is a working set up at The University of Nottingham to promote gender equality. She is now the Executive Director of Nottingham Green Technologies S/B, a spinoff company of the University of Nottingham to commercialise green technologies.
Prof. Christine Ennew  
Provost, University of Nottingham Malaysia Campus and  
Pro Vice Chancellor and Professor of Marketing  
University of Nottingham Malaysia Campus  
Selangor DE Malaysia

Christine Ennew is Provost and CEO of the University of Nottingham Malaysia Campus and Pro Vice Chancellor at the University of Nottingham. Christine graduated from Cambridge University and completed her PhD at Nottingham. She was appointed to lead UNMC in January 2013 and is responsible for the Nottingham’s first international campus which is located to the south of Kuala Lumpur and is home to almost 5000 students and around 650 staff. She was previously Dean of Social Sciences and has been Pro Vice Chancellor since 2008. She serves on a number of advisory boards internationally and is the University’s Manager for the Universitas21 network.

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. Stefanie Pillai  
Dean and Associate Professor, Faculty of Languages & Linguistics  
University of Malaya, Kuala Lumpur, Malaysia

Dr. Pillai is an Associate Professor at the Department of English Language, Faculty of Languages and Linguistics, University of Malaya (UM). Her main areas of research interest are the segmental and prosodic features of spoken Malaysian English, and the revitalisation of Malacca Portuguese Creole or Cristang. His initial work on the Creole was funded by, and has been archived in, the Endangered Languages Archive. Dr. Pillai is currently the Dean of the Faculty of Languages and Linguistics. He was the Deputy Dean for Postgraduate Studies of the Faculty from August 2014, and previously headed the University’s Centre for Industrial Training and Relations, which later expanded to become the Centre for Community and Industry Relations.

Session VIII: Woman in Industry and Academia - Room – Starhill 5

Chair: Dr. Stefanie Pillai, University of Malaya, Kuala Lumpur, Malaysia

4:00 – 4:25 (Wednesday)

Ms. Priyadarshani Premarathne  
Department of Sociology, Faculty of Arts, University of Peradeniya, Sri Lanka

ID 241 Perception of female employees towards the Lean and work culture change in apparel industry in Sri Lanka  
Sewwandi and H.D.P. Premarathne, Department of Sociology, Faculty of Arts, University of Peradeniya, Sri Lanka  
Morawaka and A.K. Kulatunga, Dept.of Production Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

4:25 – 4:50 (Wednesday)

Mahmmad Mahbub Alam Talikder  
Accident Research Institute (ARI), Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

ID 610 Burn Accident related Injuries and Disabilities among the RMG Women Workers: A Case Study of Tazreen Garments Tragedy

4:50 – 5:15 (Wednesday)

Dr. Stefanie Pillai  
Dean and Associate Professor, Faculty of Languages & Linguistics  
University of Malaya, Kuala Lumpur, Malaysia

Dr. Pillai is an Associate Professor at the Department of English Language, Faculty of Languages and Linguistics, University of Malaya (UM). Her main areas of research interest are the segmental and prosodic features of spoken Malaysian English, and the revitalisation of Malacca Portuguese Creole or Cristang. Her initial work on the Creole was funded by, and has been archived in, the Endangered Languages Archive. Dr. Pillai is currently the Dean of the Faculty of Languages and Linguistics. She was the Deputy Dean for Postgraduate Studies of the Faculty from August 2014, and previously headed the University’s Centre for Industrial Training and Relations, which later expanded to become the Centre for Community and Industry Relations.
Thursday (March 10, 2016)

Session IX: Industry Solutions - Room – Starhill 5
Chair: Masaru Tezuka, Hitachi Solutions East Japan, Ltd.

08:00 – 08:25 (Thursday)
Masaru Tezuka
Hitachi Solutions East Japan, Ltd., Sendai, Miyagi, Japan

Masaru Tezuka is the Manager of the Research and Development Department at Hitachi Solutions East Japan, Ltd. He received a BE and ME in bio-physical engineering from Osaka University, Japan, and a PhD in systems and information engineering from Hokkaido University, Japan. He is a certified Systems Analyst and a certified Application Systems Design Engineer. He served in Malaysia as a short-term expert in operations research of the Japan International Cooperation Agency in 1998. His research interests include nonlinear optimization, evolutionary computation, computational intelligence, computational statistics, risk analysis, and their industrial application. He is a member of the Information Processing Society of Japan.

ID 186: Importance of the Strategic Utilization of Information Technology in Small and Medium-Sized Food Manufacturers in Japan
Masaru Tezuka and Junko Miyazaki, Hitachi Solutions East Japan, Ltd., Sendai, Miyagi, Japan
Masaki Fujiwara and Miyuki Koriki, Miyagi University, Kurokawagun, Miyagi, Japan

08:25 – 08:50 (Thursday)
Dr. Jalaluddin Harun
Director General
Malaysian Timber Industry Board (MTIB)

08:50 – 09:15 (Thursday)
Prof. Dr. Bhuvenesh Rajamony
School of Manufacturing Engineering, University Malaysia Perlis UnMAP, Perlis, Malaysia

The challenges or issues that Malaysian industries are facing in order to implement and successfully sustain the lean manufacturing processes

Prof. Dr. Bhuvenesh Rajamony received B.Eng. in Mechanical Engineering from the University of Madras, in 1974 and M.Sc.Eng. in Mechanical Engineering with Machine Tools Engineering from the University of Madras in 1976. He received his Ph.D degree in Mechanical Engineering with Manufacturing Technology from the University of Bombay, India, in 1986. After Doctoral received additional post graduate D.I.E. in Industrial Engineering in 1991 from the University of Bombay. He is one of the recognized Research Guide in the field of Production, Mechanical and Industrial Engineering by different universities. He has more than 40 years of teaching and research experience with different higher ranking Universities like University of Madras, University of Bombay, University of Sheffield, Uitm and USM. He is currently with the Unimap as Professor of Manufacturing Engineering from 2004. Dr. Bhuvenesh is a Life Fellow member of the Institution of Engineers F.I.E. India, a Fellow member of the Institution of Plant Engineers F.I.P.E, Life member of Indian Society of Manufacturing Engineers M.I.S.M.E., and a Senior Life member of Indian society for technical education M.I.S.T.E. and Charted Engineer C. Eng. and Member of IEOM. Dr. Bhuvenesh works in multiple areas of Advanced Manufacturing: Computer Integrated Manufacturing, Flexible Manufacturing Systems, CNC machines, Industrial engineering and Ergonomics. He has provided consultancy for many companies like Larsen & Toubro, Voltas, Mahindra, PAL, Telco and Tata in his specialist areas of Special purpose Machines, Advanced Manufacturing, Quality Management and Industrial Engineering. He has written and published more than 100 technical papers and reports in these areas in the international, national journals and conference proceedings. He has been the principal investigator of many manufacturing projects with CNC machines, metal cutting and industrial engineering projects with different industries and Universities. In Unimap, responsible for setting up the Advanced Manufacturing Laboratory with Robotics, Material Handling and the Ergonomics laboratory. He has also completed two funded research projects, one for Science Fund and another for Fundamental Research Grant from the Ministry of Science & Technology, MOSTI, Malaysia.

Session X: Industry Solutions - Room – Starhill 5
Chair: Ms. Resh Plaha, Crystal Quality UK Ltd

11:30 – 12:20 (Thursday)
Mr. Takenori Kabeya
Senior Engineer and IT Specialist of Production, Sales and Inventory Solution Department
Business Solution Division, Hitachi Solutions East Japan, Ltd.

Designing demand and supply operation tailored to industry sector and business category

Takenori Kabeya is a Senior Engineer and IT Specialist of the PSI (Production-Sales-Inventory) Solution Department at Hitachi Solutions East Japan, Ltd. He earned a master’s degree in chemical engineering at the Graduate School of Engineering, Kyoto University, Japan. He has developed and provided supply chain planning (SCP) tools and systems such as production planning systems, demand forecasting tools, demand planning systems, and inventory analysis tools with the international development team based in Japan, India and the U.S. His customer list covers various types of businesses, including material manufacturers, assembly manufacturers, finished manufacturers, and wholesalers in Japan, Malaysia, Indonesia, Thailand, and so on. These customers are spread across a wide business area encompassing home appliances, car audio systems, chemicals, pharmaceuticals, consumer packaged goods (CPG), metals, beverages, and so on. His current task is to design optimal system architecture for SCP solutions.
Session XI: Industry Solutions - Room – Starhill 5
Chair: Johann Ong, SilTerra Malaysia Sdn Bhd., Kulim, Kedah, Malaysia

2:30 – 2:55 (Thursday)
Parth Rashmikant Patel, Executive Director, Apollo Techno Equipments Limited, Ahmedabad, Gujarat, India

Parth Patel is an Executive Director at Apollo Techno Equipments Limited, Gujarat, India. Previously, He was working as Quality Engineer at Satkhi Automotive Group USA. He was a Master of Science student in Industrial Engineering Program at Lawrence Technological University, USA. He holds a Bachelor Degree in Mechanical Engineering from Vivesvaraya Technological University, Bangalore, India. He has attained an industrial experience working as a Mechanical Engineer at Apollo Construction Equipments Private Limited, India. He completed his training on Industrial Hydraulics at Rexroth Bosch Group, India. He has knowledge of ANSYS, AutoCAD, and Minitab. His expertise lies in CNC Programming, CIM Modeling and Arena. His research interest includes Manufacturing Process, Quality, and Six Sigma. He has a positive energy and a dream of manufacturing world-class facility that can contribute to the growth of his country.

2:55 – 3:20 pm
Johann Ong, SilTerra Malaysia Sdn Bhd., Kulim, Kedah, Malaysia

Ong Johann works as a Principle Engineer in SilTerra Malaysia Sdn Bhd. He earned B. (Hons) in Computer Aided Engineering from South Bank University, London, UK and Master Sc. in Information Technology in Business. Currently he is pursuing his PhD in Manufacturing Engineering Faculty, University Teknikal Malaysia, Melaka.

ID 457 Eliminate Salicide Residues in Wafer Fabrication Front-End Pre-Metal Layer Cleaning Process
Johann Ong and Bee Hoon Tan, SilTerra Malaysia Sdn Bhd., Kulim, Kedah, Malaysia

3:20 – 3:45 pm
Dr. D. Muruganandam, Production Engineering Dept. Sri Sairam Engineering College, Chennai, India

Dr. D. Muruganandam, In the midst of a healthy and intellectual upbringing, he obtained his Bachelor Degree in Mechanical Engineering from Madras University, in 1997. Subsequently, he obtained his M.E. in Computer Aided Design from Sathyabama University, Chennai, in 2002. Besides having a strong technical expertise and analytical skills, he acquired his Ph.D degree from Sathyabama University, Chennai, he has contributed to the areas of Welding, Engineering Design with his 49 research publications. A technical and education management expert, Dr. Muruganandam, believes that Science, Engineering and Technology are advancing at a fast pace and obsolescence of physical infrastructure, skills and competence takes place rapidly. He is keen on taking steps to improve the existing infrastructure, investment and intellectual strength wherever they exist and network them so as to utilize them effectively and optimally for meeting the changing needs. Not only does he profess the values of Indian culture but also does he practice many of the fundamental principles of humanity and society. While dedicating himself to the cause of creating a world class infrastructure, he has undertaken many community service activities in various parts of India out of his quest to contribute more to society. He is member in SAE, MISTE, MISNT, MINOR, SIAISE, IRED, IAENF, IMS, IWS, IW, IPoR, and he has authored two books for budding Engineers. He is awarded with team building award in SAE NSS award Resource person for IRC Currently, Dr. Muruganandam is the Professor of Production Department of the internationally leading and highly advanced technical College - Sri Sairam Engineering College and he is known for his virtues as a wise mentor, friendly teacher, innovative administrator, and visionary leader.

Session XII: Industry Solutions - Room – Starhill 5
Chair: Mehran Doulat Abadi, UTM Razak School of Engineering and Advanced Technology

2:30 – 3:45 pm (Thursday)
Mehran Doulat Abadi BSc. , MEM, MQM, EFQM, PhD.
Senior Research Fellow, Research Management Center (RMC) University Technology Malaysia (UTM), Johor Bahru, Malaysia

Mehran Doulat Abadi is currently a Visiting Senior Research Fellow at University of Technology Malaysia (UTM). He has special interest in examination issues relating to Multi Criteria Decision Making (MCDM), Engineering Management and business excellence including the use of the European Foundation for Quality Management (EFQM) Excellence Model. He holds double Master’s Degrees in Engineering Management with specialization in Quality Management and a Graduate Certificate in Project Management from University of Wollongong, New South Wales, Australia. He has written numerous papers on the topic of quality management and business excellence based on his research and consultative works. His papers have been published in referred scientific journals as well as international conferences. He is a Registered Professional with Australian Organization for Quality (AOQ) and a senior member of the American Society for Quality (ASQ). He is a Certified European Excellence Assessor in Dubai Quality Award (DQA) program since 2007. He was recently engaged as a senior project coordinator in the Mystery Shopper Service Excellence Project under the directive of Prime Minister’s Office (PMO) in Dubai, UAE.
Dr. Joseph M. Ogundu is an experienced corporate executive and lean management and six-sigma consultant that brings fresh knowledge and perspectives to employers, government agencies and corporate clients. This executive and coach who works in the oil and gas, automotive and non-automotive industries has hands on experience in development and implementation of strategic management solutions based on lean business process, six-sigma and total quality management principles. Dr. Ogundu has helped several companies develop, implement and improve their business process excellence, quality improvement, operational efficiency, cash flow and profitability using strategic business performance score cards to measure performance. He helped several companies to save millions of dollars through lean implementation and continuous improvement execution.

Dr. Ogundu has worked with companies in the oil and gas, automotive and non-automotive industries to develop and execute turnaround and restructuring strategies including reengineering of business processes for maintaining competitive advantage and sustainability of organizational viability. Dr. Ogundu was an employee or consultant for the following companies; General Motors Corporation, Ford Motor Company, Chrysler Corporation, Daimler Chrysler AG, Country Coach Inc., ESTG Inc., Park Ohio, General Aluminum Company, Argo Inc, Suncor Energy Inc, Nobel Automotive, Finer Cabinetry & Woodwork, Bend River Sash Door Company, Morgan Fine Finishing, Magna Corporation, Axis Manufacturing, Trim-X Technologies, Oakland University and Lawrence Tech University.

Dr. Ogundu is an expert in the areas of technical and business innovations, Lean Manufacturing Management, Lean Business Processes, Lean Six-Sigma, Total Quality Management, ISO/TS 16949, Supply Chain Management, Operations and Business Performance Score Cards. He has over 27 years of experience that span across several industries that included oil and gas, automotive, Recreational Vehicles, Manufacturing which included work in United States, Austria, Korea, Canada, Mexico, Germany and Nigeria. He has been adjunct professor at Lawrence Tech University and Oakland University. Dr. Ogundu directed and managed organizations and led diverse teams of corporate executives, engineers, managers and union workers. He has participated in development and construction of facilities and major infrastructure projects. He has coached and trained business executives and owners on the utilization of lean principles, six-sigma and business process excellence as strategic philosophies for improving profitability and for organizational viability. Dr. Ogundu holds a Doctor of Engineering in Manufacturing Systems from Lawrence Technological University, Master of Business Administration (MBA) from Lawrence Technological University, Master of Science in Manufacturing Engineering from Wayne State University and Bachelor of Science Industrial/Systems Engineering from University of Tennessee, Knoxville. Dr. Ogundu served on the board of the following Profit and Non-Profit organizations: Lawrence Technological College of Management Alumni, Chrysler African American Network, Institute of Industrial Engineers South Eastern Michigan/Ohio Zone, Finer Cabinetry and Woodwork Inc., World Igbo Congress, Rivers State Foundation.
Entrepreneurial Mindset: Opportunity Recognition & Value Proposition

March 10, 2016 (Thursday), 2:00 pm – 8:00 pm

The ability to recognize an opportunity is a key ingredient in developing an entrepreneurial mindset. Engaging the customer is a significant component of this process. An exploratory seminar and discussion will be held on this subject at the Orlando IEOM Conference on Friday, September 11. You are invited to attend and participate in “painstorming” exercises that will focus on fostering opportunity recognition and engaging the customer. This dynamic process will lead to developing and delivering meaningful “value proposition” for the customer.

SPEAKER
Professor Donald M. Reimer
Director of Entrepreneurial Programs, College of Engineering
Lawrence Technological University, Southfield, Michigan, USA

Donald M. Reimer is currently a fulltime senior lecturer on entrepreneurship and serves as the Director of Entrepreneurial Programs in College of Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kern Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs’ Organization. Mr. Reimer serves as a Kern Fellow of The Kern Family Foundation, Co-Director 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.

Mr. Reimer has served as an adjunct faculty member at Lawrence Technological University for over twenty-years. He has operated his own consulting company – The Small Business Strategy Group for 23 years. He published numerous articles on small business, entrepreneurship and strategic thinking. Mr. Reimer conducted workshops and seminars for trade associations, chamber of commerce organizations and private companies. 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.

The International Journal of Industrial Engineering and Operations Management (IJIEOM) aims to publish primary high quality research work in the field of industrial engineering and operations management (IEOM) for academics, researchers and practitioners to advance the theory and practice as well as to identify major trends in industrial engineering and operations management. The journal is expected to foster worldwide IEOM communities publishing in-depth research oriented papers with wide variety of problems related on real-life applications and research which affect in international levels.

IJIEOM covers academic research and industrial issues / applications related on fundamentals of industrial engineering and operations research, supply chain management, logistics, systems and service engineering, reliability and quality, modeling, simulation and optimization, and artificial intelligence. The application areas include manufacturing, healthcare, energy, transportation, financial, and business operations. Articles must have scientific research contribution with state-of-the-art review.

IJIEOM is a flagship journal of IEOM Society.

A Special Issue of IJIEOM will be published from the selected papers of IEOM Detroit Conference, September 23 – 25, 2016.
# Committee Members

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<th>Affiliation</th>
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<tbody>
<tr>
<td>Aamenah Bashir</td>
<td>BSc. Computer Engineering, MSc. Engineering Systems Management, ITIL Certified IT Specialist Office of Academic Computing American University of Sharjah United Arab Emirates (UAE)</td>
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<tr>
<td>Dr. Chan Chee-Ming</td>
<td>Associate Professor and Deputy Dean (Academic and Research) Universiti Tun Hussein Onn Malaysia Johor, Malaysia</td>
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<td>Dr. Ilham Kissani</td>
<td>Faulty of Engineering &amp; Management Science Al Akhawayn University Ifrane, Morocco</td>
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<td>Ms. Resh Plaha</td>
<td>Crystal Quality, UK Chair</td>
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<tr>
<td>Dr. Mey Goh</td>
<td>Associate Professor in Product Design Loughborough University, UK</td>
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<tr>
<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. Adibah Shuib</td>
<td>Head of Strategic Planning (Monitoring) Centre for Strategic Planning Universiti Teknologi MARA (UiTM)</td>
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<td>Vanessa Victoire</td>
<td>University of Mauritius Mauritius</td>
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<tr>
<td>Dr. Vanajah Siva</td>
<td>Chalmers University Sweden</td>
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<tr>
<td>Prof. Soumaya Yacout</td>
<td>École Polytechnique de Montréal Canada</td>
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### Exhibitors

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<td>Malaysian Timber Industry Board (MTIB)</td>
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<td>SilTerra Malaysia Sdn Bhd</td>
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### Exhibition at INFORMS Philadelphia Meeting

Once again, the IEOM Society was represented at the annual INFORMS Annual Conference. This year the event was held at the Philadelphia International Conference Center. Dr. Ahad Ali and Professor Don Reimer represented the IEOM Society with a well-placed booth near the main entrance of the exhibit hall. The conference provided an opportunity to interact with INFORMS members and several officers. We promoted IEOM and its mission as well as the upcoming Kuala Lumpur and Detroit conferences.
In a survey conducted by U.S. Black Engineer & Information Technology (USBE&IT) magazine, Siemens has been named a top supporter of Historically Black Colleges and Universities (HBCU) for the twelfth straight year.

Siemens provides in-kind software grants to HBCU Engineering and is the only supplier of Product Lifecycle Management (PLM) software among this year’s list of companies. Siemens’ support is part of the company’s focus on STEM (science, technology, engineering and mathematics) education and diversity initiatives that help drive manufacturing revitalization efforts throughout the U.S.

Siemens’ recent $85 million in-kind software grant to Florida A&M is just one example of its commitment to HBCUs. This software will allow engineering students to train using the same technology as major manufacturers around the world.

“We’re committed to leading the industry in diversity initiatives and STEM education support,” said Chuck Grindstaff, president and CEO of Siemens PLM Software. “We will continue to work closely with the HBCU community to develop highly qualified and recruited engineers and technologists. www.siemens.com

Answers for industry.

Represented by: Rajiv Ghatikar, Vice President and General Manager, Siemens PLM, ASEAN/Australasia
Huias King, Director, Diversity, Professional Affiliations & Global Community Relations at Siemens PLM Software
Partner Universities

Sabancı Üniversitesi

University of Peradeniya
Sri Lanka

Lawrence Technological University

Universiti Teknologi Petronas

UNB
University of New Brunswick

UTHM
Universiti Tun Hussein Onn Malaysia

UTeM
Universiti Teknikal Malaysia Melaka

UTM
Universiti Teknologi Malaysia

Corporate Partner

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Hitachi Solutions East Japan, Ltd.
The International Federation of Engineering Education Societies (IFiEEs)
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 to 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, and United Arab Emirates, and will meet ... in Italy and France in 2015.

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 (IFiEEs). It also has relationship 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 (IFiEEs) 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 Global Diversity Award – PACE

IEOM Society presented its first IEOM Global Diversity Award at the IEOM Orlando Conference on September 11, 2015 (Rosen Plaza Hotel). This award recognized PACE (Partners for the Advancement of Collaborative Engineering Education) for its outstanding support of diversity among Historically Black Colleges and Universities and for their continued support of providing cutting-edge software and hardware to engineering students around the globe. Hulas King of SIEMANS accepted the award and thanked the Society for recognizing its efforts in promoting diversity.
IEOM Student Chapters

IEOM Student Chapter can help students in the development or enhancement of their core 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 the long 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 – The chapter can sponsor workshops and seminars that focus on industrial engineering and operations management. Panel discussions featuring subject matter experts could be featured by industry segments: manufacturing, health, hospitality, education, chemical and plastic, food processing, etc.

Industry Speakers – Chapters could sponsor events in which experience industrial engineers and operations managers present current issues faced by industry. This may also provide an opportunity for chapters to engage their alumni. This type of an event can also provide an opportunity to network and learn about potential employment.

Plant Tours – Chapter members should participate in various industry plant visits. This activity will expose students to industrial engineering and operations management in factory by industry and organizations.

Communication Development – Chapter may consider an activity that focuses on professional communication development – oral and written. Effective communication skills are an important success factor in the engineering and management disciplines. Enhancing the communication skills of chapter members adds value to their membership and their future.

Career Development – The chapter should also focus on career development by reaching out to Industrial Engineering and Operations Management alumni who can provide ideas and tips on engaging employers. Industry human resources managers also may provide insight into the career opportunities. The chapter should also promote the value of internships and co-ops.

Networking – The chapter should do everything possible to encourage its members to build a network of individuals who may be able to assist in opening doors in the future. These contacts are critical to the long term growth and career success.

Poster and Paper Contest – Chapter can sponsor a poster contest that has an industrial engineering and operations management focus. Posters provide an opportunity to display senior design projects and as well as research. The chapter can encourage students to write papers that may be presented in the Annual International IEOM Conference.

Fund Raising – Chapters should engage in fund raising activities including picnic and outdoor activities. This is necessary to support the various chapter events.

Membership Building – Chapters must continue to recruit new members. The IEOM Society will recognize the outstanding chapter membership growth each year at its annual conference.

Community Outreach – Chapters should engage in promoting industrial engineering and operations management as an outstanding career opportunity. This activity could focus on high school students. In addition, the members of the chapter could provide industrial engineering consulting to not-for-profit organizations.

Alumni Relations – Chapter should considering establishing an alumni IEOM chapter. It is important to maintain and build relationship with alumni.

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. Islamic University of Technology (IUT), Bangladesh
6. Jessore University of Science and Technology, Bangladesh
7. Kathmandu University, Nepal
8. Khulna University, Bangladesh
9. Khulna University of Engineering and Technology, Bangladesh
10. King Abdulaziz University, Saudi Arabia
11. Lawrence Technological University
12. Mehran Univ. of Engineering and Tech., Jamshoro, Sindh, Pakistan
13. National Univ. of Science and Technology in Windhoek, Namibia
14. Pandit Dendayal Petroleum University, Ahmedabad, Gujrat, India
15. Sultan Qaboos University, Oman
16. Tribhuvan University, Nepal
17. Universiti Utara Malaysia
18. University of Costa Rica
19. University of Indonesia
20. University of Peradeniya, Sri Lanka
21. Vellore Institute of Technology, India
22. Vidya Jyothi Institute of Technology, Hyderabad, India

Establish Your Institution IEOM Student Chapter

Visit IEOM Website for details: www.ieomsociety.org

IEOM Professional Chapters

Australian IEOM Society: https://sites.google.com/site/ieomaustralia/


IEOM Society of Bangladesh: http://www.ieombd.org/

Nigerian IEOM Society: http://ieomsociety.org/ieom/nigerian-ieom-society/

Join IEOM Society - Be a Professional or Student Member

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<td>Be part of the Diverse Industrial Engineering (IE) and Operations Management (OM) Profession</td>
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IEOM Student Chapter at University of Peradeniya, Sri Lanka

IEOM Student Chapter at Khulna University of Engineering and Technology (KUET), Bangladesh

IEOM Student Chapter at Vidya Jyothi Institute of Technology, Hyderabad, India

CALL FOR PAPERS AND PRESENTATIONS
INDUSTRIAL ENGINEERING AND OPERATIONS MANAGEMENT
Lawrence Technological University, Southfield, Michigan, USA
www.ieomsociety.org/ieomdetroit/

Achieving and Sustaining Excellence in Quality, Reliability, Service, and Operations

ONLINE SUBMISSION
Presentations may be given with an abstract. Full papers are optional. Participants may present theoretical and applied research with abstracts. All full papers will be subjected to double peer review. Accepted papers will be published in the USB Proceedings and indexed in INSPEC and EBSCO.

STUDENT COMPETITIONS
Certificates and cash prizes will be awarded to the first, second, and third place winners in each category:
Undergraduate Student Paper
Undergraduate Research Presentation
Senior Capstone Design Project
Graduate Student Paper
Siemens PLM Student Design
Poster Presentation

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DEADLINES
Review Feedback: June 30, 2016
Registration: July 15, 2016

EXPERIENCE AMERICA’S GREATEST INNOVATIONS IN AUTOMOTIVE MANUFACTURING TOURS:
Ford Rouge Factory, Henry Ford Museum, Greenfield Village, Detroit River (USA/Canada border)

CONFERENCE CHAIRS
Dr. Ahad Ali, Lawrence Technological University
Steven Sibrel, Harman International and Chair-Elect, ASQ Greater Detroit
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Seventh International Conference
on Industrial Engineering and Operations Management (IEOM)

APRIL 11–13, 2017

Conrad Istanbul Bosphorus Hotel
Istanbul, Turkey

CONFERENCE CHAIRS
Dr. Ahad Ali, Lawrence Technological University, USA
Dr. Gündüz Ulusoy, Sabancı University, Turkey

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