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: Speaker from PROTON Automobile - 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

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 (IFiEES), 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
14:00 – 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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African Engineering Education Association (AEEA)

International Federation of Engineering Education Societies (IFoEES)

Organizer

IEOM Society

“Achieving and Sustaining Operational Excellence”

www.ieomsociety.org
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>Global Engineering Education</td>
<td>Industry Solutions</td>
<td>Lean 6σ Green Belt Workshop</td>
<td>OM I</td>
<td>SCM I</td>
<td>Material Flow Cost Accounting</td>
<td>UG Student Paper Competition</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 Dalimin, 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>UG Student Paper Competition</td>
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<td>Human Factors and Ergonomics</td>
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<td>Case Studies</td>
<td>Transportation and Traffic</td>
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<td>Industry Keynote: Dr. Anwar Ali Mohamed, O.R. Freelance Consultant, Penang, Malaysia and Former Principal Engineer at Intel Malaysia (Boxed Lunches Provided) - Mayang Sari Grand Ballroom</td>
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<td>Manufacturing and Design</td>
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<td>16:00</td>
<td>Global Engineering Education</td>
<td>Big Data in Mfg/Service 4:00-7:00pm</td>
<td>Lean 6σ Green Belt Workshop</td>
<td>OM IV</td>
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<td>Doctoral Dissertation Competition</td>
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March 9, 2016 (Wednesday)

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<td>Lean and Six Sigma I</td>
<td>SCM V</td>
<td>Manufacturing and Design</td>
<td>Undergraduate Research Presentation</td>
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<td>09:30</td>
<td>Wednesday Morning Keynote: Ir. Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia (CREAM) - Mayang Sari Grand Ballroom</td>
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**Tentative Program - IEOM 2016 Kuala Lumpur**

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<td><strong>High School STEM Project Presentation</strong></td>
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<td>13:00</td>
<td><strong>Wednesday Lunch Keynote: Dr. Rupy Sawhney</strong>, Heath Fellow in Business and Engineering, Professor, Industrial and Systems Engineering, <strong>University of Tennessee, Knoxville, USA</strong> (Boxed Lunches Provided) - Mayang Sari Grand Ballroom</td>
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<td><strong>Lean and Six Sigma IV</strong></td>
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<td><strong>SCM VIII</strong></td>
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<td><strong>Entrepreneurship and Innovation</strong></td>
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<td>19:00-22:00</td>
<td><strong>Conference Award Dinner</strong> and Cultural Program by Cultural Academy of Kuala Lumpur** - Mayang Sari Grand Ballroom</td>
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<td><strong>Award Keynote - Hulas King</strong>, Director, Diversity, Professional Affiliations &amp; Global Community Relations, <strong>Siemens PLM Software</strong></td>
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**March 10, 2016 (Thursday)**

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<td><strong>IE/OM in Asia</strong></td>
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<td><strong>Artificial Intelligence</strong></td>
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<td><strong>Healthcare Systems</strong></td>
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<td>09:30</td>
<td><strong>Thursday Morning Keynote: Dr. Hans-Juergen Hoyer</strong>, Secretary General of the International Federation for Engineering Education Societies (IFeES), Executive Secretary of the Global Engineering Deans Council (GEDC) and Resident Scholar at Marquette University, USA</td>
<td>Starhill 4</td>
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<td>10:15</td>
<td><strong>Thursday Morning Keynote: Prof. Dr. Noraini Kaprawi</strong>, Director of Strategic and Quality Management Office, Faculty of Technical and Vocational Education, University of Tun Hussein Onn Malaysia - Mayang Sari Grand Ballroom</td>
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<td><strong>Thursday Lunch Keynote: Rajiv Ghatikar</strong>, Vice President and General Manager, Siemens PLM, ASEAN/Australasia (Boxed Lunches Provided) - Mayang Sari Grand Ballroom</td>
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<td><strong>Entrepreneurship Workshop: 2:00 – 8:00 pm</strong></td>
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<td><strong>Operations Excellence</strong></td>
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<td><strong>OPEN</strong></td>
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<td><strong>IFeES Meeting</strong></td>
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<td><strong>Closing Mixer</strong></td>
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Sixth International Conference on Industrial Engineering and Operations Management (IEOM)

JW Marriott Hotel
Kuala Lumpur, Malaysia
March 8 – 10, 2016

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

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 (twice), IIE Transactions on Design and Manufacturing Best Paper Award (twice), 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 (Boxed 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 practiced OR (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 1988, 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 (FIEM). He sits in many committees as construction industry advisor to UTM, UTHM, UTP, UPNM and UiTM. He is a fellow of the Institution of Engineers Malaysia (F.I.E.M). 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

Speaker from PROTON Automobile - Malaysia

Wednesday Lunch Keynote (March 9, 2016): 1:00 - 2:00 pm

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

Rupy Sawhney is a Professor & Heath 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, IIE Lean Teaching Award, Reuben Harris Award, and Accenture Teaching Excellence Award).

Conference Award Keynote, 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

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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 (IFCES) and the Professional Business Leadership Council. He travels extensively within the Americas, Europe, the Middle East and Asia Pacific, speaking at various technical seminars in support of Global Opportunities in PLM.

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

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

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 (IFCIES)
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 (IFCIES), 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, 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 133 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 of the Inter American 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 Editorial Committee of the Argentinian Journal of Engineering Education, Science 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

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. (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 revived 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 Exhibition (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

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. 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.
Partner Universities

Submission received from the following countries and territories

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IEOM Society addresses the issues of Global Engineering Education. There are different levels of readiness of engineering graduates from various parts of the world. One of the main themes of this series is how to reduce the readiness gap around the world. The special focus is given to Industrial Engineering and Manufacturing Engineering including Engineering Management. Are the engineering graduates ready to take on the challenges of the current global economy? With the great success of Global Engineering Education Series of last IEOM conferences, IEOM 2016 KL 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.

Power point presentations/abstracts will be published in the conference proceeding and summary of the talk and bio of the speakers will be printed in the conference program.

**Readiness and Competence of Engineering Graduates**

**Global Engineering Education Chairs**

Dr. Funso Falade, Professor at University of Lagos, Nigeria and President, African Engineering Education Association  
Dr. Abu Masud, Interim Dean of Graduate School and Boeing Global Engineering Professor, Wichita State University, Kansas, USA

Contact: info@ieomsociety.org
March 8, 2016 (Tuesday)
07:00 – 17:00 Registration
08:00 – 09:15 Session I:
Dr. C. Chitharanj, Professor of Mechanical Engineering and State Project Coordinator (TEQIP), Directorate of Technical Education, Chennai, Tamil Nadu, INDIA
S. Indra Devi, Senior Lecturer, Department of Languages, Centre for Languages and Human Development, Universiti Teknikal Malaysia Melaka
Ahmed E. Haroun and Salih O. Duffuaa, Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, KSA
09:30 – 10:00 Welcome Address – VC UTMH
10:00 – 11:00 Opening Keynote: Dr. Ron Askin, Professor of Industrial Engineering and Director of the School of CIDSE, Arizona State University.
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, Wilnhemshaven, 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 Ferrari 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, University of New Mexico, USA and ISTEC founder, IFEES ExCom
Dr. Mohammad Yeakub 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. Ayham Jaaron, Asst. Prof. in IE, Director of Quality Assurance Unit, Director of ABET Centre, An-Najah National University, Nablus, West Bank, Palestine
Prof. Dr. Gunduz Ulusoy, Faculty of Engineering and Natural Sciences, Sabanci University, Istanbul, Turkey
17:30 – 18:00 POSTER SESSION and Student Chapter Mixer
March 9, 2016 (Wednesday)
07:00 – 17:00 Registration
08:00 – 09:15 Session V:
Dr. Adagbonyn Moses Obizai, Dean, Faculty of Engineering and Technology, Ambrose Alli University, Nigeria and President, African Engineering Deans Council
Dr. C. B. Gupta, Professor, Department of Mathematics, Birla Institute of Technology and Science, Pilani (Raj.), India x
Dr. Jafri Mohd Rohani, Head - Industrial Engineering Programme, Department of Materials, Industrial & Manufacturing Engineering, Universiti Teknologi Malaysia
09:30 – 10:15 Keynote: Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia (CREM), 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 Soeiro, 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. Rupy Sawhney, Heath Fellow in Business and Engineering, Professor of Industrial and Systems Eng., University 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 Ammavasi, Associate Professor, Bharath Niketan Engineering College, Kundipatty, Tamlilnadu, 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. Jafri Mohd Rohani, Head - Industrial Engineering Programme, Department of Materials, Industrial & Manufacturing Engineering, Universiti Teknologi Malaysia
Dr. Furso Falade, Professor of Industrial and Manufacturing Engineering, University of Lagos, Nigeria and President, African Engineering Education Association
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. Kairiyah Mohd Yusof, Director, Centre for Engineering Education (CEE), Universiti Teknologi Malaysia, Johor Bahru, Malaysia
Dr. Amar Partap Singh Pharwaha, Professor, Sant Longowal Institute of Engineering & Technology (SLIET)-Deemed University, Longowal, Sangrur, Punjab, India
Dr. Furso Falade, Department of Civil & Environmental Engineering, University of Lagos, Nigeria and President, African Engineering Education Association
09:30 – 10:15 Keynote: Dr. Hans-Juergen Hoye, Secretary General of the International Federation for Engineering Education Societies (IFlEES)
10:15 – 11:00 Keynote: Prof. Dr. Noraini Kaprawi, Dean-Centre for Graduate Studies, Faculty of Technical and Vocational Education, University of Tun Hussein Onn Malaysia
11:00 – 11:30 Break
11:30 – 12:45 Session X:
Dr. Kamal Hoowah, Professor in the School of Civil Engineering, University 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 Technology, Rourkela, India and Past President, The Institution of Engineers
13:00 – 14:00 Keynote: Rajiv Ghatkari, Vice President and General Manager, Siemens PLM, ASEAN/Australasia
14:00 – 14:30 Break
14:30 – 15:45 Session XI:
Professor Khedidja ALLIA, Research Laboratory of Science in Industrial Process Engineering (LSGPI), USTHB - FGMGP, Bâb-Ezzouar, Algiers- Algeria
S. Indra Devi, Senior Lecturer, Department of Languages, Centre for Languages and Human Development, Universiti Teknikal Malaysia Melaka
Ahmed E. Haroun and Salih O. Duffuaa, Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, KSA
16:00 – 17:45 Session XII:
Nidhi M B, A/HoD Mechanical Engineering Department, MarBaseilos College of Engineering & Technology (MBCET), Thiruvananthapuram, Kerala, India
Dr. P. Muredzi, Dean – School of Engineering & Technology, Harare Institute of Technology, Zimbabwe
17:30 – 19:00 Closing Mixer
DISTINGUISHED SPEAKERS

Tuesday (March 8, 2016)

Session I: Global Engineering Education
8:00 – 9:15 am - Room Starhill 4
Session Chair: S. Indra Devi, Universiti Teknikal Malaysia Melaka

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. 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.

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 Malaya, 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.

Ahmed E. Haroun and Salih O. Duffuaa
Systems Engineering Department
KFUPM, Dhahran, KSA

An Effective Organizational Structure to Implement Strategic Plans In Higher Education Institutions
Session II: Global Engineering Education
11:30 am – 12:45 pm - Room Starhill 4

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

11:30 – 11:55 (Tuesday)

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

**Bio:** Professor Mushtak 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 (FIMechE) 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
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, and as a 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 Industrial Engineering
- Distributed Manufacturing Execution Systems, Multi-Agent Systems, Data Science, Manufacturing Intelligence
- IT Governance and Security in Operations and Supply Chain Management

Prof. Dr. Wunck is well connected in his field. He serves in the management of conferences and is a reviewer for conference papers and books. He is a member of IEEE Industrial Electronics Society, IEOM, INFORMS, ISCA, ISACA and VDI.
Session III: Global Engineering Education
2:30 – 3:45 pm (Tuesday) - Room Starhill 4
Session Chair: Dr. Mohammad Yeakub Ali, International Islamic University Malaysia

Dr. Alok Verma
Ray Ferrari Professor and Chair
Department of Engineering Technology
Old Dominion University
Norfolk, Virginia, USA

Bio: 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 program 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. He was PI on several funded projects from National Shipbuilding Research Program (NSRP), (NSF) and Department of Education (DOE). He is well known internationally and has been invited to deliver keynote addresses at several national and international conferences on Lean/Agile manufacturing. Dr. Verma has 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 SNAME. Dr. Verma continues to serve the Hampton Roads community in various leadership positions.

Dr. Ramiro Jordan
Professor and Associate Dean of Engineering for International Programs
Department of Electrical and Computer Engineering
University of New Mexico
ISTEC founder, IFEES ExCom

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 (ICEE) and advisor to the Institute of Electrical and Electronics Engineers (IEEE) Latin America Region, IEEE Senior member. He 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, IIDB). 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, INEE-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.
Bridging the Gap between IE Qualifications and Employers Requirements: lessons from Palestinian IE Programs

Abstract: It is evident that due to fierce global competition and rapid manufacturing technological changes many industrial engineers lag behind in various production, quality, and manufacturing technologies. This has caused a problem to manufacturing firms as they are not easily able to find highly skilled engineers, especially industrial engineers, to satisfy their technological and managerial needs. The aim of this presentation is to report on the case of the Palestinian Industrial Engineering programs to illustrate how these programs were able to reduce the readiness gap of their industrial engineering graduates to satisfy Palestinian manufacturing sector priorities operating under Israeli occupation restrictions. The presentation discusses the benefits of involving industrial engineering programs stakeholders, especially employers from the manufacturing sector, which is of two-fold. First, the involvement of these employers will help identify their ever evolving general and technical training needs that educational institutions can offer to close training needs gap. Second, their involvement is of significant importance in the process of customizing curriculum of Industrial Engineering programs to help reduce readiness gap of graduates for manufacturing firms’ requirements. The presentation highlights the benefits of the requirements of international Accreditation Board for Engineering and Technology (ABET) in the process of readiness gap reduction.

Biography: 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**

Faculty of Engineering and Natural Sciences
Sabancı 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 Sabancı 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.


He is a founding member of the Informatics Foundation, Science Center Foundation, and Scientific and Technical Research Foundation. During 1994–2000 he served on the Board of Elginkan Foundation. He was the Chairman of the National Quality Award Committee during 1998-2002. He is a member of INFORMS, Turkish Quality Society, Turkish Machine Design and Manufacturing Society, and Turkish Operational Research Society.
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, Edos University, supervised by the renowned Engr. Prof. Philip Kuale. Prof. Obiazi started his working career in the Federal Polytechnic University, Auchi in 1985 after his NYSC in Sokoto State. In the quest for higher levels of engagement, Engr. Obiazi joined the services of then Bendel State University, Ekpo (now, Ambrose Alli University) in 1987 where he has risen through the ranks from Graduate Assistant to his current status as a Professor of Electrical Engineering and Dean of the Faculty of Engineering and Technology. He was the Head of Department of Electrical/Electronics Engineering [1997-1999], Sub-Dean of the Faculty of Engineering and Technology, Member of the University Senate and Member/Chairman of over 40 University committees/panels. He is currently serving as the Chairman of the Central Bank intervention Projects in Ambrose Alli University.

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

In May 2013, Engr. Prof OBIAZI was appointed the National Secretary of the Committee set up by COREN [Council for the Regulation of Engineering in Nigeria] to develop COREN Minimum Benchmarks for the training of Engineers in Nigerian Universities. In 2006, Shell Petroleum Development Company (SPDC) appointed Engr. Obiazi as a research advisor on 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, Uesen (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.
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 he 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 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 Allègre, entitled the University without Walls, 1998.

Dr. Soeiro has helped the creation of the center of eLearning in the University of Porto between 1999 and 2002 including the edition of continuing education programmes at the Department of Materials, Industrial and Manufacturing Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia. He was a member of the American Society for Quality (ASQ) and Human Factor Society of Malaysia.

Dr. Soeiro has helped the creation of the center of eLearning in the University of Porto between 1999 and 2002 including the edition of continuing education programmes at the Department of Materials, Industrial and Manufacturing Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia. He was a member of the American Society for Quality (ASQ) and Human Factor Society of Malaysia.

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Dr. A.K. Kulatunga currently works 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 bachelors and Masters level in University of Peradeniya and some other universities. He holds a doctoral degree in Industrial Engineering from University of Technology, Sydney, Australia and a Bachelor’s degree in Production Engineering from University of Peradeniya, Sri Lanka.

Dr. A.K. Kulatunga has served the scientific community by publishing more than fifty publications in leading peer-reviewed international conferences and journals and several books/ book chapters 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.

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

Bio: 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.
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 referred 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

Abstract: Industrial engineering evolve, as formal science and as practice, in a world experiencing a faster technological revolution that gave birth to the late nineteenth century. The “core study object” of this discipline is still what I call “the complex production system”, which is present in contexts as diverse as the services sector, the goods producing sector, government organizations and public and private social organizations. One of the main features of these new complex production systems, is undoubtedly cognitive ability in dynamic and chaotic environments so robotic applications appear as a technological factor. Analyzing the experience at the University of Costa Rica, this conference focuses on how robotics can be used to address collaborative learning, learning through projects and also developing teamwork skills, cognitive skills of abstract conceptualization, computer programming skills and design skills in concurrent environments. Implementing some changes in the curriculum and the didactic strategies, robotics give more pedagogical benefits when we use their principles in order to develop a “pragmatic, statistic, strategic, systemic and frugal” thinking. A preliminary model is presented in this lecture.

Bio: Eldon Caldwell, is full professor/Cattedraticus 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 Suma 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 Dr. Ed. Program at University of Costa Rica, receiving the Academic Excellence Award 2013.

Dr. Caldwell served as Operations Manager at MASECA, CA; Lean Manufacturing Project Manager at Eaton Corp. Costa Rica, General Manager at Quirós & Cia-Bandag Inc. and General Manager at Lean Systems Intl., 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
Professor of Industrial and Manufacturing Engineering
Wichita State University, Kansas, USA

Bio: 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 (2009-2013), coordinator, college ABET affairs (2006-2008), associate dean, college of 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 (IUCCE). 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
and
President, African Engineering Education Association

Bio: Falade Funso Alphonsus is a Nigerian and a Professor of civil engineering at University of Lagos, Nigeria. He earned Diploma in Quantity Surveying at Yaba College of Technology, Nigeria, in 1978. He completed his M.Sc (Civil Engineering) at the Moscow Institute of Civil Engineering in the USSR in 1984 and obtained PhD in Civil Engineering, from University of Lagos in 1998. Prof. Falade has authored over 70 articles on innovative construction materials and engineering education published in locally and internationally reputable journals as well as in proceedings of learned conferences. He has also made contributions to two (2) textbooks. In February, 2014, he made public presentation of a book titled ‘Strengthening of Distressed Buildings’. He has researched into the structural properties of bamboo and developed the technology for its successful incorporation as replacement of steel reinforcement in some structural elements. He has also researched extensively on Foamed Aerated Concrete. Prof. Falade has presented over 45 papers at workshops and seminars on such topics as Project Management, Quality Control, Maintenance of Facilities, and Contract Procurement Processes etc.

Prof. Falade is a member of some professional bodies both locally and internationally, including Fellow, The Nigerian Academy of Engineering, Fellow, Nigerian Society of Engineers, Fellow, African Engineering Education Association, Registered Engineers, Council for the Regulation of Engineering in Nigeria etc. He is a promoter of engineering education. He was the initiator of African Regional Conference on Engineering Education and the Chairman, Organizing Committee and the Editor of the Proceedings of the 1st, 2nd and 5th African Regional Conference on Engineering Education that were held at University of Lagos in 23rd – 25th September, 2002, 20th – 22nd September, 2004 and 9th -12th September, 2013 respectively. He is the President of the African Engineering Education Association (AEEA) and former Vice-President, international Federation of Engineering Education Societies (2009-20012). He was appointed UNESCO Consultant in 2005.
Hulas is responsible for the strategy and operational leadership of Siemens PLM Software Global Diversity Council. He also leads Professional Affiliations & Global Community Relations Teams, driving innovation and digitalization value for youth, displaced workers, strategic customers and business partners. Mr. King is a decorated Vietnam veteran, a Certified Manufacturing Engineer and a Certified NC Manager. He was inducted into the African-American Biographies Hall of Fame for outstanding contributions in Business and Engineering. He represents SIEMENS on several professional boards including the Institute of Industrial Engineers, the Society of Manufacturing Engineers, Advancing Minorities' Interest in Engineering, the Stone Soup Foundation, the Accreditation Board for Engineering & Technology (ABET), the International Federation of Engineering Education Societies (IFiEES) and the Professional Business Leadership Council. He travels extensively within the Americas, Europe, the Middle East and Asia Pacific, speaking at various technical seminars in support of Global Opportunities in PLM.

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

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

Thursday (March 10, 2016)

Session IX: Global Engineering Education
8:00 – 9:15 am (Thursday) - Room Starhill 4

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

Abstract - With the advent of interactive multimedia programming languages and the world-wide-web (www), it has now become possible to build virtual laboratories that can be accessed globally. Virtual laboratory facilitates to offer experiment-oriented problems without the overhead incurred when establishing a complete hardware-based laboratory. Based on these considerations, the present work reports the development of a new type of Virtual Instrument (VI) for monitoring process parameters, which may also be used as an educational tool. The proposed VI is designed using fourth generation object-oriented programming technology. The executed user-interactive VI fulfills the requirements of efficient data acquisition, management and presentation. It is designed as an integrated system using five different virtual instruments. Each of the five virtual instruments was designed as an independent standalone system to serve a particular application. These dedicated virtual instruments were examined independently for their performance. Ultimately, these VIs were integrated to synthesize the proposed VI for versatile applications of transducer modeling including estimation of static-nonlinearity of transducers, transducer linearization, self-compensation in transducers and fault detection in transducers based systems. Such applications are required frequently in Data Acquisition System (DAS) connected Transducers in computer based instrumentation.

**Bio:** 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 Electronics & Communication Engineering), Head (Department of Electrical & Instrumentation Engineering) and Professor & Joint Director at Yadavindra College of Engineering, Punjab 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.

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**

11:30 am – 12:45 pm (Thursday) - Room Starhill 4

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

Kamel Hawwash  
**BSc, MSc, MAPM, FHEA**  
Professor in the School of Civil Engineering  
University of Birmingham, UK  
Immediate Past President of SEFI  
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 is a Fellow of the Higher Education Academy and a Member of the Association of Project Management. Professor Hawwash received MSc in Civil Engineering from UMIST in 1987 and BSc (Hons) in Civil Engineering from UMIST in 1985.

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

**Bio:** 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 Technology, Rourkela, India
Past President, The Institution of Engineers
Past Vice-President, The Federation of Engineering Institutions in South & Central Asia

"Engineering Education and Environment"

Dr. Naik was a President of The Indian Institution of Engineers, one of the largest professional bodies in the world, a Vice President of The Federation of Engineering Institutions of South & Central Asia and a Council Member of The Indian Institute of Chemical Engineers. He is a well-known writer in his own mother tongue, Odiya and has published several social novels, a book with one hundred poems and several articles for which he has been felicitated by his State Literature Academy and his name has found place in Central Literature Academy. Dr. Naik is associated with many Committees at the State and Central levels. Professor Naik has a deep involvement in social service for which he has been even appreciated by a world-based organization. For his achievements, he has been awarded and appreciated by Regional, State, Central and Global organizations.

Session XI: Global Engineering Education
2:30 – 3:45 pm (Thursday) - 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
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

3:20 – 3:45 (Thursday)
Dr. Hamid Parsaei, PE
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

Bio: 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 (ASEE). He has published over 200 articles in peer-refereed archival journals and conference proceedings. He has also served as editor/co-editor in chief for four academic journals and five book series. His research, in excess of $22 million, has been funded by numerous government and private institutions.

Enhancing outcome Based Education through Self awareness

Prof. Nidhi M B is currently working as Assistant Head of dept. Mechanical Engineering Dept. of Mar Basielos College of Engineering and Technology, Thiruvananthapuram, 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. 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.
Dr. P. Muredzi
Dean – School of Engineering & Technology
Harare Institute of Technology
Zimbabwe

Perkins Muredzi is currently the Executive Dean of the School of Industrial Sciences and Technology and School of Engineering and Technology at the Harare Institute of Technology, Harare, Zimbabwe and a 2015 Global CIMA Award winner in “education Leadership” conferred at the 2015 World Education Congress, Mumbai, India. He graduated with a BSc, MSc in Food Processing Engineering from Krasnodar Institute in the Russian Federation in 1991 and obtained a Master’s degree in Intellectual Property from Africa University in 2009 before attainment of his PhD qualification. Dr Muredzi teaches Food 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) IUFOST, EFFoST, 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.Muredzi currently sits on Editorial Boards of the following Journals:

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

4:50 – 5:15 (Thursday)
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Dr. Eui H. Park, North Carolina A&T State University, USA
Dr. Md. Mizanur Rahman, Universiti Malaysia Sabah (UMS), Kota Kinabalu, Sabah, Malaysia
Dr. T. Ramayah, School of Management, Universiti Sains Malaysia
Dr. Raja Zuraidah Raja Mohd Rasi, Universiti Tun Hussein Onn Malaysia
Dr. Bhuvenesh Rajam, Professor of Manufacturing Engineering, University Malaysia Perlis (Unimap), Malaysia
Dr. Mohd Abdur Rashid, University Malaysia Perlis (Unimap), Malaysia
Dr. Syed Asif Raza, Qatar University, Qatar
Dr. Nubia Milena Velasco Rodriguez, Universidad de Los Andes, Colombia
Dr. P. Sanjeevikkumar, Dublin Institute of Technology, Ireland
Dr. Mahmood Shafliee, Cranfield University, Bedfordshire, United Kingdom
Dr. Abdussalam Shibani, Coventry University, UK
Dr. Sarbjit Singh, National Institute of Technology, Jalandhar, Punjab, India
Dr. Shahryar Sorooshian, University Malaysia Pahang, Malaysia
Dr. Jayakanth Srinivasan, MIT Sloan School of Management
Dr. Gopalan Srinivasan, University of New Brunswick, Canada
Dr. Zuraidah Sulaiman, Universiti Teknologi Malaysia (UTM), Johor, Malaysia
Dr. Balan Sundarakani, University of Wollongong in Dubai, UAE
Dr. Theodore B. Trafalis, University of Oklahoma, USA
Dr. Vladimir I. Tsurkov, Russian Academy of Sciences, Moscow, Russia
Dr. Hui-Ming Wee, Chung Yuan Christian University, Taiwan
Dr. Yong Yin, Yamagata University, Japan
Dr. Norzaidahwati Zaidin, Universiti Teknologi Malaysia, Johor, Malaysia
Dr. Shahryar Sorooshian, University Malaysia Pahang, Malaysia
Dr. Linda L. Zhang, IESEG School of Management, Lille-Paris, France

STUDENT COMMITTEE
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Seyed Amir Hossein Alavifar, Moscow State University of Service, Russia
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Darwinah Mohd Darwin Lim, Universiti Utara Malaysia
Behnam Malmir, Department of Industrial and Manufacturing Systems Engineering, Kansas State University, Manhattan, USA
Abroon Qazi, Department of Management Science, Strathclyde Business School, University of Strathclyde, Glasgow, UK
Wan Nuraini Rahim, Universiti Teknologi MARA, Malaysia
Umol Syamsyul Rakiman Universiti Tun Hussein Onn Malaysia
IEOM Women in Industry and Academia Forum

Committee Members

Aamenah Bashir
BSc. Computer Engineering, MSc. Engineering Systems Management, ITIL Certified
IT Specialist
Office of Academic Computing
American University of Sharjah
United Arab Emirates (UAE)

Dr. Chan Chee-Ming
Associate Professor and Deputy Dean (Academic and Research)
Universiti Tun Hussein Onn Malaysia
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Dr. Ilham Kissani
Faulty of Engineering & Management Science
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Ifrane, Morocco

Dr. Mey Goh
Associate Professor in Product Design
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American University of Sharjah
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Dr. Stefanie Pillai
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Chalmers University
Sweden

Vanessa Victoire
University of Mauritius
Mauritius

Prof. Soumaya Yacout
Ecole Polytechnique de Montréal
Canada

Ms. Resh Plaha
Crystal Quality, UK
Chair
IEOM Industry Solutions
JW Marriott Kuala Lumpur Hotel
March 8 – 10, 2016

IEOM Industry Solutions sessions will showcase the industrial case studies and their impacts of the industrial solutions using IE / OM tools and techniques (lean, six sigma, FMEA, simulation, design of experiments, optimization, TOC, PLM, CAE, statistical analysis, etc.) IEOM 2015 Dubai Conference will have a dedicated session for the Industry Solutions where distinguished practitioners provide their presentations including their experiences and journey to be successful. Thirty six featured speakers will be from various part of the world to address industrial challenges and opportunities for continuous improvement and sustainability.

IEOM Industry Solutions Chairs
Majid Abab, The Boeing Company, USA
Masaru Tezuka, Hitachi Solutions East Japan, Ltd., Japan

Distinguished Industry Speakers

Tuesday, March 8, 2016

Session I: Industry Solutions - Room – Starhill 4
8:00 – 9:15 (Tuesday)
Chair: Dr. Ari Maunuksela, TEAK Ltd., Teuva, Finland

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 SCOE 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.
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.

Session II: Woman in Industry and Academia - Room – Starhill 4
11:30 – 12:45 (Tuesday)
**Chair:** Dr. Adibah Shuib, Universiti Teknologi MARA (UiTM)

Dr. Adibah Shuib
**Acting President of MSORMS (Malaysian Society of Operations Research and Management Science)**  
**Head of Strategic Planning (Monitoring)**  
Centre for Strategic Planning  
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 monitoring the implementation of 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)

**Dr. Mei Fong Chong**

Professor, Faculty of Engineering  
The University of Nottingham Malaysia Campus  
Selangor Darul Ehsan, Malaysia

12:20 – 12:45 (Tuesday)

OPEN

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Session III: Industry Solutions - Room – Starhill 4  
2:30 – 3:45 pm (Tuesday)

**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

**Biography:** 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 my studies for award of Master of Engineering (M.E. in Production Engineering) in Shivaji University, Kolhapur. 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 International Conference on Multidisciplinary Research & Practice 2014.
IIM Ahmedabad. Mr. Kulkarni 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.

Abstract

Productivity and efficiency measurement and improvement go hand in hand, because one cannot improve what one cannot measure. Hence measuring productivity and efficiency is essential for all kinds of production plants to perform better. There is huge scope for research on measurement of the productivity and efficiency for pre-serial production plant, as there are no findings of literatures in this regard. This research is about the operations of pre-serial production plants and bottlenecks in adopting the standard methodologies of measurement of productivity and efficiency which are generally followed in serial production and batch production plants & developing a new measurement technique for productivity & efficiency for pre-serial & prototype production plants. As per the findings, the appropriate methodology for measurement of productivity and efficiency of Pre-serial production plants is not well set till now. Most of the companies who operates pre-serial production plants adapted the methodologies which are suitable only for serial production.

As compared to serial and batch production plants, the pre-serial production plants work totally differently. In serial production plants the product is optimized and all the relevant data which contributes in the measurement of productivity and efficiency is available. The pre-serial plants are responsible for product optimization. In these plants the product optimization is primary objective and process is secondary. Hence we cannot finalize the inputs like cycle time, machining time; labor usage till the product is finalized. The value of input measures will keep on changing during optimization of product and process. Hence using these values for measurement of productivity makes no sense. Once the product is optimized then the suitable processes will get optimized and the trails will takes place. The results from trails will be considered as the input measures for productivity measurement. As the working methodology and process of serial and pre-serial production plants differs from each other, there is a need to develop a measurement technique which can efficiently measure the productivity of pre-serial plants.

The author will work on defining a new measurement model/methodology for pre-serial plants and as per the pre-study it has been decided that the author will divide the production process into micro processes and define the standard for each process which will be considered as standard and compared with actual parameters which will leads to find out productivity and efficiency of the pre-serial production plants. This horizontal deployment of this methodology can be done to batch production and also prototype production plants with suitable modifications.

Session IV: Industry Solutions - Room – Starhill 4
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

Abstract:

Big data will play a key role in shaping the design and innovation of products, production, and services by making them smarter, better connected, more efficient and widely accessible. Data analysis has been enlarging its footprint in business and engineering applications for the last two decades. The industrial engineering profession can be at the forefront of applying big data analysis and research in product development, manufacturing, and service areas. Basic data mining algorithms applicable to analysis of big data are introduced. Applications of big data analysis in product design and innovation, manufacturing, remanufacturing, and service domains will be the focus.

Industrial engineering needs to be open to embracing applications where data offers value. Product design and development is a highly multidisciplinary process awaiting new solutions. It is widely recognized that design of an innovative product considers data streams originating at customers, experts, trails of data left by products throughout their lifetime, and cyberspace. Disruptive innovations often happen because they meet this expanded set of requirements.

Traditional manufacturing and remanufacturing as well as emerging manufacturing technologies and systems involve data. Data science offers tools for fusing diverse data steams (parameters) that would not be possible with traditional approaches such as operations research or simulation. Sustainability considerations offer another set of data analysis opportunities. Service industry is plentiful of opportunities for big data opportunities to be discussed besides the product design and innovation, manufacturing, remanufacturing, and sustainability applications.
Biography:
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 on Munich, Germany and Institut National Polytechnique de Grenoble, France.

Wednesday (March 9, 2016)

Session V: Industry Solutions - Room – Starhill 4
8:00 – 9:15 am (Wednesday)
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

Vivek Sundar Magesh
TVS Logistics Services Limited
Chennai, India

08:25 – 8:50 am

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)

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Md Kawsar Ali  
Chief Operating Officer  
Comfit Composite Knit LTD  
Gorai, Mirzapur, Tangail  
Dhaka, Bangladesh

Md. Kawsar Ali is a well-known expert and mentor in the garment industries of Bangladesh. He has twenty one 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. Kawsar 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.

Session VI: Industry Solutions  
Room – Starhill 4  
11:30 am – 12:45 pm (Wednesday)  
Chair: Farrah “Nix” A. Juban, Intel Corporation, Penang, Malaysia

Dr. Zain Tahboub  
Chief Advisor-Director of Excellence & Innovation  
Dubai Aviation Engineering Projects (DAEP)  
United Arab Emirates (UAE)

“I^3 University of the future for integrating the university with industry and innovation”

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.
**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 Azliah Abdul Hamid, Shiau Wei Chan, Production and Operation Department, Universiti Tun Hussein Onn Malaysia (UTHM)  
Josu Takala, Department of Engineering Science and Industrial Management, University of Vaasa, Wolffintie, 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.

**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)*

**Session VII: Room – Starhill 4**  
2:30 – 3:45 pm (Wednesday)

**Chair:**

**PANEL SESSION - Woman in Industry and Academia**

**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

Bio: 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 geomaterials, 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 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

Prof. Christine Ennew  
Provost, University of Nottingham Malaysia Campus  
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 Malaccan 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 4
4:00 – 5:15 pm (Wednesday)
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 Trazedy
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.

Thursday (March 10, 2016)

Session IX: Industry Solutions - Room – Starhill 4  
8:00 – 9:15 am (Thursday)

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)
Prof. Dr. Bhuvenesh Rajamony
School of Manufacturing Engineering
University Malaysia Perlis UniMAP
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 a B.Eng. in Mechanical Engineering from the University of Madurai 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 1988. 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, UIITM 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.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 EDM machine, Plasma cutting and TIG welding. He is also responsible for setting up the Advanced Flexible 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.

Abstract – One of the main issues with the different industries today is to manufacture products that help in elimination cost as well as works towards waste reduction. These and many other industries related problems had led to the formation of lean manufacturing, a method that was initially implemented by Toyota of Japan. However, there is very little, almost no research that is done on lean manufacturing in Malaysia and there is a lot of struggle that Malaysian manufacturing industry is facing in the implementation and sustenance of lean principles as well as policies. The present project research is an attempt to find the challenges or issues that Malaysian industries are facing in order to implement and successfully sustain the lean manufacturing processes. The researcher would try to investigate on the topic by taking mixed analysis method, where both primary and secondary researches would be conducted. This research would also take in the different principles and concepts in lean manufacturing and collate it with the primary findings. Overall, this study can be used as a benchmarking for successful lean manufacturing implementation in other developing countries.
Session X: Industry Solutions - Room – Starhill 4
11:30 am – 12:45 pm (Thursday)
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

Abstract: The internationalization of corporate activities and an advancing international division of labor are driven by the progress of logistics and information technology. Meanwhile, as both natural and political risks increase, an accident in one region can impact the overall supply chain. Under the circumstances, because of uncertainty on both the supply and demand sides, those involved with the supply chain should understand and estimate the fluctuation swiftly and precisely, optimizing procurement, production, and inventories. From a practical perspective, a demand–supply operation varies greatly by industry sector, business category, and regional characteristics, as does supply chain management systems.

For example, the demand for materials such as metals and chemical products is relatively stable; however, the production process involves many constraints in the form of annealing, washing, and setup. These constraints pose difficulties in supply adjustments. Therefore, the manufacturers focus on the stable control of supply. On the other hand, the demand for home appliances is turbulent. Thus, the manufacturers in this industry focus on the flexible control of supply following changes in demand. Additionally, acceptable supply lead times including transport tend to be shorter in small countries like Japan than in large countries like the U.S. This difference should produce a different level of difficulty in demand–supply coordination. The market of the supply chain planning (SCP) system as a replacement of the production planning system is rapidly growing; however, the introduction of SCP cannot achieve success unless the system is designed to fit the industry and business category.

Biography: 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, fabless 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.

12:20 – 12:45 (Thursday)

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 Certified 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.

Session XI: Industry Solutions - Room – Starhill 4
2:30 – 3:45 pm (Thursday)
Chair: Johann Ong, SilTerra Malaysia Sdn Bhd., Kulim, Kedah, Malaysia

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 Sakthi 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 Visvesvaraya 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 Department
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 also undertaken many community services in various parts of India out of
his quest to contribute more to society. He is member in SAE, MISTE, MISNT, MNIQR, SAISE, IRED, IAEngg, MMS, IWS, IIW, IIP, 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 4
4:00 – 5:15 pm (Thursday)

4:00 – 4:25 (Thursday)
OPEN

4:25 – 4:50 (Thursday)
OPEN

4:50 – 5:15 (Thursday)
OPEN
Lean Six-Sigma Green Belt Workshop  
March 7-8, 2016 (Monday and Tuesday)

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<tr>
<th>DAY I: March 7, 2016 (Monday)</th>
<th>DAY II: March 8, 2016 (Tuesday)</th>
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<tr>
<td>1. Introduction of participants</td>
<td>9. Lean Six Sigma Fundamentals</td>
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<tr>
<td>2. Pre-Test and Evaluation of Lean and Six-Sigma Concept</td>
<td>• Describe what is meant by “Process Focus”</td>
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<tr>
<td>3. Understanding Lean Manufacturing Management and Lean Business Principles</td>
<td>• Describe the importance of VOC, VOB, and VOE, and CTQ’s</td>
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<tr>
<td>• The role of corporate and organizational leadership in Lean Manufacturing Management implementation</td>
<td>• Explain COPQ</td>
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<tr>
<td>• Waste Identification and Elimination</td>
<td>• List and explain Lean Six-Sigma Tools</td>
</tr>
<tr>
<td>• Traditional 7 types of Waste proposed as part of the Toyota Production System by Taiichi Ohno, previously a Chief Engineer at Toyota Motor Company.</td>
<td>• Describe the Lean Six Sigma metrics</td>
</tr>
<tr>
<td>• Other Types of Waste</td>
<td>• Explain the difference between DPU and DPMO</td>
</tr>
<tr>
<td>4. Understanding Six Sigma</td>
<td>10. Lean Six-Sigma Implementation</td>
</tr>
<tr>
<td>• Describe the objectives of Six Sigma</td>
<td>• Explain the importance of the different stakeholders including the senior executive team and the different roles they play in Lean Six Sigma project and system implementation.</td>
</tr>
<tr>
<td>• Describe the relationship between variation and sigma</td>
<td>• Explain the roles of Master Black Belts, Black Belts Green Belts and or Department managers, supervisors, team members and their roles in Lean Six-Sigma Implementation</td>
</tr>
<tr>
<td>• Recognize some Six Sigma concepts</td>
<td>• Importance of Project Charter, GEMBA, Lean Six-Sigma</td>
</tr>
<tr>
<td>• Recognize the Six Sigma implementation model (DMAIC)</td>
<td>Training prior to Lean Six-Sigma implementation</td>
</tr>
<tr>
<td>• Describe your role and responsibilities in Lean Six Sigma (LSS)</td>
<td>• Generate a Process and Value Stream Map (From Morning Session)</td>
</tr>
<tr>
<td>5. Describe the relationship between Lean and Six-Sigma and the importance of their co-existence within operations and in other business processes.</td>
<td>• Statistical Tools required for Lean Six-Sigma</td>
</tr>
<tr>
<td>6. Define and explain Lean Six Sigma</td>
<td>• Importance of Data Collection and Analysis</td>
</tr>
<tr>
<td>7. Selecting Projects</td>
<td>• How to determine Defects per Unit (DPU)</td>
</tr>
<tr>
<td>• Utilize a structured approach to select projects</td>
<td>• How to determine Defects per Million of Opportunities (DPMO)</td>
</tr>
<tr>
<td>• Refine and Define the problem into a Project Charter</td>
<td>• Utilization of current and future states of the system to show process or system’s improvement.</td>
</tr>
<tr>
<td>• Make an initial estimate of your project’s benefits</td>
<td>• Lean Six-Sigma Project presentation and closure</td>
</tr>
<tr>
<td>8. Mini Group Exercise (Project) – Proposed by the group, completed and presented to Class</td>
<td>11. Final Group Exercise Lean Six Sigma mini Project – Proposed by each group</td>
</tr>
<tr>
<td></td>
<td>12. Final Test and presentation of Certificates</td>
</tr>
</tbody>
</table>

DR. JOSEPH M. OGDUNDU, MBB  
President and CEO – Emerald Global Consulting Inc.  
West Bloomfield, Michigan, USA

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 sustainment 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, Sunco 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.
Smart Manufacturing Workshop
March 10, 2016 (Thursday), 8:00 am – 5:00 pm

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

Rupy Sawhney is a Professor & Heath 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, IIE Lean Teaching Award, Reuben Harris Award, and Accenture Teaching Excellence Award).

Entrepreneurial Mindset: Opportunity Recognition & Value Proposition
March 10, 2016 (Thursday), 2:00 pm – 8:00 pm

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-Direct of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs’ Organization Faculty Advisory Council and is a member of the American Society of Engineering Education.

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.
Preliminary Program – IEOM 2016 KL

March 8 – 10, 2016
JW Marriot Hotel

March 7, 2016 (Monday)

08:00 am – 05:00 pm (Room Starhill 4)

Lean Six Sigma Green Belt Certification Workshop

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

08:25 – 08:50 (Tuesday)
S. Indra Devi
Senior Lecturer, Department of Languages
Centre for Languages and Human Development
Universiti Teknikal Malaysia Melaka


08:50 – 09:15 (Tuesday)
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 Massaei
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

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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

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

08:00 – 09:30, TUESDAY  Lean Six Sigma Green Belt Workshop   Starhill 6
Dr. Joseph M. Ogundu, MBB
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

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 Aziz and Summyia Qamar, University of Engineering and Technology, Taxila, Pakistan
Chanchal Saha, Binghamton University, Poughkeepsie, New York, United States
Safullah 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 Amar Rachman, Universitas Indonesia, Depok, Jawa Barat, Indonesia

08:00 – 09:15, TUESDAY  Supply Chain Management I   Starhill 8
Session Chair: Erdem Aksakal, Gazi University, Ankara, Turkey

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. Zagloel, Akhmad Hidayatno and Clara Benarto, Industrial Engineering Department, University of Indonesia, Depok, West Java, Indonesia

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

ID 325  Green Supplier Selection under Risk Assessment
Erdem Aksakal and Emre Caliskan, Gazi University, Ankara, Turkey
Material Flow Cost Accounting

Session Chair: Wichai Chattinnawat, Chiang Mai University, Thailand

ID 148 Framework of an ‘(In) Efficiency Costing’ based on the idea of Material Flow Cost Accounting
Ronny Sygulla and Uwe Götzte, Technische Universität Chemnitz, Saxony, Germany

ID 165 How will MFCA make Usefulness on Sustainable Engineering - Based on practical experiences in Japanese and Southwestern Asian Companies?
Michiyasu Nakajima and Asako Kimura, Kansai University, Suita-Shi, Osaka, Japan

ID 215 Application of Material Flow Cost Accounting (MFCA) and Quality Control Tools in Wooden Toys Product
Wasawat Nakkiew and Pattarawadee Poolperm, Department of Industrial Engineering, Chiang Mai University, Thailand

ID 601 Impact of Introducing Material Flow Cost Accounting: A Comparative Review of Supply Chains and Individual Companies
Kana Okada and Katsuhiko Kokubu, Kobe University, Hyogo, Japan

Undergraduate Student Paper Competition sponsored by Siemens

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

ID 161 An estimation of land price by kriging using geographic information system
Yoichi Shimakawa, Salesian Polytechnic, Machida-shi, Tokyo, Japan
Yutarou Kitamura, Advanced Course in Production Systems Engineering Salesian Polytechnic, Tokyo, Japan

ID 085 River’s Rubbish Catcher Machine (RRC-Machine) - The Planning of a Machine Instrument to Catch the Rubbish in the River towards Healthy Environment
Rendhie Suswanto, Mining Engineering Department, University of Sriwijaya, Inderalaya, South Sumatera, Indonesia

Fuzzy AHP based Multi-Criteria Decisions Support System for Eco-Design
Asela Kulatunga and Chanjief Chandrakumar, Faculty of Engineering, University of Peradeniya, Sri Lanka
Senthan Mathavan, School of Mechanical and Manufacturing Engineering, Loughborough University, UK

ID 176: Assessment on 5S System of Rules in a Cosmetics Manufacturing’s Central Weighing Area, Processing and Packaging Area for Creams, Liquids and Lotions (CLL)
Ma. Erika R. Laguardia and Rachel C. Villanueva Department of Industrial Engineering, Malayan Colleges Laguna, Cabuyao Laguna, Philippines

Graduate Student Paper Competition sponsored by EATON

Session Chair: Dr. Md. Mamun Habib, Asia Graduate School of Business, UNITAR International University, Selangor, Malaysia

ID 098 Superstructure Optimization of Multiple Gas-Solid Cyclone Arrangements
Ali ElKamel, University of Waterloo, Ontario, Canada
Rois Fatoni, Chemical Engineering Department, Universitas Muhammadiyah Surakarta, Surakarta, Indonesia
Muhammad Fariz Failaka, Chemical Engineering Department, University of Waterloo, Ontario, Canada

ID 391 Similarity Measures and Distance Measures Applications: An Analysis and Design of Systems prospective
Osama Rabie, King Abdulaziz University, Jeddah, Saudi Arabia

ID 408 Design and Manufacturing of Automobile Testing Track Sweeping Machine
Nazish Quadri Syed, College of Pune, Maharashtra, India

ID 433 Geometric Chip Analysis of Helical End Milling Based on a Variable Flow Stress Machining Theory
Majed Masmali and Philip Mathew, The University of New South Wales, Sydney, NSW, Australia

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<th>Time</th>
<th>Session</th>
<th>Title</th>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Mayang Sari I</td>
<td>Occupational Safety and Health (OSH)</td>
<td>Shahid Ali and Azmi Mohd Shariff, Universiti Teknologi Petronas, Tronoh, Perak, Malaysia</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Data Analytics</td>
<td>ID 137 AHP-Based Conceptual Model for Selection of Key Elements for Safety Culture Using SMART Criteria</td>
<td>Jafri Rohani, Universiti Teknologi Malaysia</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Data Analytics</td>
<td>ID 326 Knowledge Management (KM) in Human Error (HE) in Accident Prevention</td>
<td>Ahmad Soyuti Haji Sabran, Sapurakencana TI Offshore Sdn Bhd, Puchong, Selangor De Malaysia, Malaysia</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Data Analytics</td>
<td>ID 487 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, Awaluddin Mohamed Shaharoun and Habibah Haron, UTM Razak School of Engineering and Advanced Technology, Kuala Lumpur, Malaysia</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Data Analytics</td>
<td>ID 583 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, Sumayel Muhamad Mallick, Anlima Yarn Dyeing Ltd., Savar, Dhaka, Bangladesh</td>
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<td>08:00 – 09:15, TUESDAY</td>
<td>Data Analytics</td>
<td>ID 486 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, Senai, Johor, Malaysia</td>
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<td>09:15 – 10:15, TUESDAY</td>
<td>Mayang Sari II</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>
</tr>
<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Mayang Sari II</td>
<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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<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Mayang Sari II</td>
<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>
</tr>
<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Mayang Sari II</td>
<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>
</tr>
<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Mayang Sari II</td>
<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>
</tr>
<tr>
<td>09:15 – 10:15, 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>
</tr>
<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Case Studies</td>
<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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<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Case Studies</td>
<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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<tr>
<td>09:15 – 10:15, TUESDAY</td>
<td>Case Studies</td>
<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>
</tr>
</tbody>
</table>
08:00 – 09:15, TUESDAY  Reliability and Maintenance  Mayang Sari IV
Session Chair: Annamalai Pandian, Saginaw Valley State University, Michigan, United States

ID 129  An Optimal Preventive Maintenance Plan According to Power Generation for a Wind Turbine
Hajej Zied and Nidhal Rezg, LGIPM, METZ, France

ID 203  A Methodology for Simultaneously Optimizing Selective Maintenance Decision and X-Control Chart Parameters
Pravin Tambe, Industrial Engineering Department, RCOEM, Nagpur, India
Makarand Kulkarni, IIT Delhi, New Delhi, Delhi, India

ID 287  Value of Perfect Information in Condition Based Maintenance using Proportional Hazards Models; a comparison of maintenance strategies
Alireza Ghasemi and Iireza Farhang Doost, Dalhousie University, Halifax, NS, Canada

ID 237  Visual data mining of faults in machining process based on machine learning
Soumaya Yacout, École Polytechnique, Montreal, Quebec, Canada
Yasser Shaban, Faculty of Engineering, Helwan University, Cairo, Egypt
Jose Luis, Gonzalez Rubio, Madrid, Spain

ID 040  Manufacturing cell layout improvement using Simulation Modeling and Group Technology
Annamalai Pandian, Saginaw Valley State University, Michigan, United States
Ahad Ali, Lawrence Technological University, Southfield, MI, United States

09:30 – Welcome Address:
Professor Datuk Dr. Mohd. Noh bin Dalimin
Vice-Chancellor, Universiti Tun Hussein Onn Malaysia (UTHM)
Mayang Sari Grand Ballroom

10:00 – 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

11:30 – 12:45, TUESDAY  Global Engineering Education II  Starhill 4
Session Chair: Dr. Christoph Wunck, Jade University, Wilhelmshaven, Germany

11:30 – 11:55 (Tuesday)
Professor Dr. Mushtak Al-Atabi
Dean, School of Engineering
Taylor’s University
Selangor Darul Ehsan, Malaysia

11:55 – 12:20 (Tuesday)
Professor R. Natarajan
Former Chairman, AICTE
Former Director, IIT Madras, India

Emerging Engineering Education Challenges and Opportunities -- Indian Perspectives

12:20 – 12:45 (Tuesday)
Dr. Christoph Wunck
Professor, Business Computing Systems, Industrial Engineering
College of Management, Information, Technology
Jade University
Wilhelmshaven, Germany
**IEOM Kuala Lumpur Conference Preliminary Technical Program March 8-10, 2016**

### 11:30 – 12:45, TUESDAY  
**Industry Solutions II**  
*Starhill 5*

**Session Chair:** Dr. Adibah Shuib, Universiti Teknologi MARA (UiTM)

11:30 – 11:55 (Tuesday)

**Dr. Adibah Shuib**  
Head of Strategic Planning (Monitoring)  
Centre for Strategic Planning  
Universiti Teknologi MARA (UiTM)  
Acting President - MSORMS (Malaysian Society of Operations Research and Management Science)

11:55 – 12:20 (Tuesday)

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

12:20 – 12:45 (Tuesday)

OPEN

### 11:30 – 12:45, TUESDAY  
**Lean Six Sigma Green Belt Workshop**  
*Starhill 6*

**Dr. Joseph M. Ogundu, MBB**  
President and CEO – Emerald Global Consulting Inc.  
West Bloomfield, Michigan, USA

### 11:30 – 12:45, TUESDAY  
**Operations Management II**  
*Starhill 7*

**Session Chair:** Hiroyuki Goto, Hosei University, Tokyo, Japan

ID 114  
**Assessment of Automotive Industry Component Supplier’s Competitiveness in South Africa**  
Mukondeleli Grace Kanakana Katumba and Opeyeolu Timothy Laseinde, Tshwane University of Technology, Pretoria, Gauteng, South Africa

ID 633  
**Optimal Control Applied to Dynamic Model of Climate Change: A Bangladesh Scenario**  
M. H. A. Biswas and Md. Mohidul Haque, Khulna University, Bangladesh  
Muhammad Hanif, Noakhali Science and Technology University, Noakhali, Bangladesh  
M. Alhaz Uddin, Khulna University Engineering and Technology, Bangladesh

ID 492  
**Particle Swarm Optimization for Just-In-Time Trucks Scheduling in Cross Docking Terminals**  
Warisa Wisittipanich, Department of Industrial Engineering, Chiang Mai University, Muang, Chiang Mai, Thailand

ID 144  
**Performance evaluation of a heuristics for the prize collecting Steiner tree problem**  
Hiroyuki Goto, Yuki Hosokawa and Eishi Chiba, Hosei University, Koganei-shi, Tokyo, Japan

### 11:30 – 12:45, TUESDAY  
**Supply Chain Management II**  
*Starhill 8*

**Session Chair:** Sinta Sarpani, University of Indonesia, Indonesia

ID 335  
**Prepositioning of relief goods under network uncertainty for tropical cyclones with information updates: a humanitarian supply chain**  
Bryan Gobaco, Miguel Lahoz, Mykhael Ng, and Derrick Sy, Industrial Engineering Department, De La Salle University, Manila, Philippines

ID 313  
**Supply Chain Flexibility and Performance under Uncertainty in Indian Automotive Industry**  
Parveen Farooque, Aligarh Muslim University (AMU), Aligarh, Uttar Pradesh, India

ID 401  
**Supply Chain Risk Management in the Indonesian Flavor Industry: Case Study from a Multinational Flavor Company in Indonesia**  
Fransisca Dini Ariyanti and Aditya Andika, Industrial Engineering Department, Bina Nusantara University, Jakarta, Indonesia

ID 559  
**Designing Process Improvement of Order Fulfillment in an Indonesian Lubricant Company Using Business Process Reengineering Method**  
Sinta Sarpani, University of Indonesia, Jakarta, South Jakarta, Indonesia

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<th>Session Title</th>
<th>Chair</th>
<th>Presenters/Institutions</th>
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</table>
Hirotsgu Kitada, Faculty of Business Administration, Hosei University, Tokyo, Japan
Akira Higashida, Faculty of Business Management, Meijo University, Nagoya, Japan

ID 149 Material Flow Cost Accounting in Supply Chains – Challenges and Approaches
Ronny Sygulla, Uwe Götze and Fanny Dressel, Technische Universität Chemnitz, Saxony, Germany

ID 305 Ceramics Process Improvement with Material Flow Cost Accounting
Wimalin Laosiritaworn, Chaing Mai University, Muang, Chiang Mai, Thailand

ID 349 Application of Material Flow Cost Accounting Analysis to Increase Pajama Production Efficiency: A Case Study of Con
Wichai Chattinawat, Industrial Engineering Department, Chaing Mai University, Muang, Chiang Mai, Thailand

ID 469 Application of Material Flow Cost Accounting and System Dynamics Approach for Waste Reduction and Sustainable Food Manufacturing Development in Thailand
Jedsada Tipmontian and Ketinun Kittipongpittaya, King Mongkut's University of Technology, North Bangkok, Muang, Prachinburi, Thailand
Rajmohan Murugesan, Anna University, Chennai, Tamilnadu, India

ID 537 Application of MFCA and ECRS in Waste Reduction: A Case Study of Electronic Parts Factory
Chompoonoot Kasemset, Department of industrial engineering, Chaing Mai University, Chiang Mai, Thailand
Chawis Boonmee, Division of Sustainable and Environmental Engineering, Muroran Institute of Technology, Hokkaido, Japan

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| 11:30 – 12:45, TUESDAY | **Undergraduate Student Paper Competition sponsored by Siemens** | **Bintang VI**                  | 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
Charlie 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

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| 11:30 – 12:45, TUESDAY | **Graduate Student Paper Competition sponsored by EATON** | **Bintang VII**                 | ID 477 A new risk-based dynamic approach for Prioritizing Patients' access to healthcare services
Daoud Ait Kadi, Samira Abbasgholizadeh Rahimi and Angel Ruiz, Université Laval, Quebec, Canada

ID 500 Determining the Effect of Key Process Parameters on Forming Force of Single Point Incremental Sheet Metal Forming
Abdulmajeed Dabwan, Adham Ragab, Mohammed Saleh and Abdelnaser Daoud, King Saud University, Riaydh, Saudia 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

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Amin Lakzadeh, Middle East Mines & Mineral Industries Development Holding Company (MIDHCO), Kerman, Alghadir, Iran

ID 135  In-house Crowdsourcing-Based Entity Resolution Using Argumentation
Morteza Saberi, Naeem Khalid Janjua, Elizabeth Chang and Omar Khadeer Hussain, School of Business, UNSW Canberra, Australia
Peiman Pazhooheshfar, Young Researchers and Elite Club, Arak Branch, Islamic Azad University, Arak, Iran

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 Yangyai, 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 Mashhadi 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-Hoii, 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 Mashhadi Alizadeh, Department of Industrial Engineering, Sadjad University of Technology, Mashhad, Iran
Jalal Sani Bajgiran, Day Company, Tehran, Iran
Ebrahim Rezaee Nik, Department of Industrial Engineering, Sadjad University of Technology, Mashhad, Iran

11:30 – 12:45, TUESDAY  Case Studies Mayang Sari III
Session Chair: Sanda Geipele, Riga Technical University, Latvia

ID 329  Energy Efficiency Improvement Opportunities in Latvia as a Sustainable Development Indicator
Ineta Geipele, Linda Kauškale and Iveta Pukite, Riga Technical University, Latvia

ID 498  A Build-or-Lease Case Study for a Potential New Warehouse Due To Increasing Storage Capacity Requirements
Denis Daus, Chiang Mai University, Lübbecke, NRW, Germany

ID 567  The Impact of Lack in Occupational Health and Safety Implementation in Small Businesses
Charles Mbohwa and Sebonkile Thaba, University of Johannesburg, South Africa

ID 481  Financial Inclusion in Colombia: Evolution and Relative Efficiency
Gloria Rodriguez-Lozano, Universidad Nacional de Colombia, Bogota, Colombia
ID 359  Management of energy efficient processes in residential and public buildings at regional level: A Case Study of Latvia
Sanda Geipele, Institute of Civil Engineering and Real Estate Economics, Riga Technical University, Riga, Latvia
Gita Actina, Institute of Physical Energetics, Energy Efficiency Center, Riga, Latvia

11:30 – 12:45, TUESDAY  
Transportation and Traffic  
Session Chair: Yoichi Shimakawa, Salesian Polytechnic, Machida-shi, Tokyo, Japan

ID 024  A Proposed Hybrid Scheme for Eliminating Road Transportation Waste
Bernardo Villarreal, Universidad de Monterrey, San Pedro Garza Garcia Nuevo Leon, Mexico

ID 042  A Two-stage Stochastic Programming Model for Districting and Transportation Lot-size of Sugarcane
Kanchala Sudtachat, Suranaree University of Technology, Muang, Nakhon Ratchasima, Thailand

ID 113  An investigation into the urban bus route performance using a modified DEA Model: A case study of Kolkata bus transport
Arnab Adhikari and Sumanta Basu, Indian Institute of Management Calcutta, Kolkata, West Bengal, India
Indranil Biswas, Operations Management Area, Indian Institute of Management Lucknow, Prabandh Nagar, Lucknow, India

ID 130  An Analytical Framework for Local Impacts of Road Pricing Policy: A Case Study of the Tokyo Metropolitan Area
Yoichi Shimakawa, Salesian Polytechnic, Machida-shi, Tokyo, Japan
Hiroyuki Goto, Hosei University, Koganei, Tokyo, Japan
Hirotaka Takahashi and Yasushi Sumitani, Department of Information and Management Systems Engineering, Nagaoka University of Technology, Nagaoka, Niigata, Japan

1:00 pm – Industry Keynote:  
Dr. Anwar Ali Mohamed
O.R. Freelance Consultant, Penang, Malaysia and  
Former Principal Engineer at Intel Malaysia
Mayang Sari Grand Ballroom (Boxed Lunches Provided)

2:00 pm – Networking Break at Exhibition Hall

2:30 – 3:45, TUESDAY  
Global Engineering Education III  
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

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
ISTEC founder, IFEES ExCom

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

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2:30 – 3:45, TUESDAY  
**Industry Solutions III**  
Session Chair: Kishor Kulkarni, Tata Technology, Pune, India  

2:30 – 2:55  
**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  
**Hakan Butuner**  
MECO Industrial Management & Engineering Co.  
Istanbul, Turkey  
*ID 008: Systematic Competency Based Training Needs Analysis*

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

2:30 – 3:45, TUESDAY  
**Lean Six Sigma Green Belt Workshop**  

Dr. Joseph M. Ogundu, MBB  
President and CEO – Emerald Global Consulting Inc.  
West Bloomfield, Michigan, USA

2:30 – 3:45, TUESDAY  
**Operations Management III**  
Session Chair: Artie Ng, Hong Kong Polytechnic University

ID 146  Resolution of Resource Contentions in the Critical Chain Project Management based on Simulated Annealing  
Hiroyuki Goto and Hajime Yokoyama, Hosei University, Koganei, Tokyo, Japan

ID 152  Performance Measurement System and Business Performance Measurement System: A Comparative Study  
Shahryar Sorooshian, Nor Mahirah Mustapha and Azlinna Azizan, Universiti Malaysia Pahang, Kuantan, Pahang, Malaysia

ID 263  Improvement of Master Production Planning in a Semi-Conductor Manufacturer  
Waralak Maneefun and Parames Chutima, Chulalongkorn University, Bangkok, Thailand

ID 272  Use of Interdiction Models to evaluate the Robustness of two Echelon Supply Chain for Minimum Service level  
Priyank Sinha, IIT Kanpur, Kanpur, Utter Pradesh, India

ID 336  Competitive Revenue Management Model Using Dynamic Pricing for Theater Seats Management  
Lindley Bacudio, Rose Angel Lizardo and Eunice Austria, De La Salle University - Science and Technology Complex Binan, Laguna Philippines

ID 290  Second-movers' advantage under the Big Data era: sustainability performance through disruptive innovation  
Artie Ng, Adam Wong and Edmund Wut, Hong Kong Polytechnic University, Hong Kong, China

2:30 – 3:45, TUESDAY  
**Supply Chain Management III**  
Session Chair: Mohammad Rizal Firmansyah, University of South Australia

ID 419  Applying the Analytical Hierarchy Process to Determine Upstream Competitiveness for Wedding-Planning Industry  
Grisna Anggadwita, Cut Irna Setiawati, Yuhana Astuti and Bayu Rachmadi, School of Economic and Business, Telkom University, Bandung, West Java, Indonesia

ID 463  “Performance Evaluation”&“Problems Identifications in Warehouses” of Third-Party Logistics  
Ghulam Yasin Shaikh, Muhammad Aijazuddin, Abu Bakar, Shamir Ali, Muhammad Amir and Moin Khan, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan
ID 505  Addressing Supply Chain Configuration Practices: Evidence from Italian Best Performer Valve Suppliers for the Oil & Gas Industry
Guido Jacopo Luca Micheli, Enrico Cagno, Filippo S.P.M. Manzi and Yasmine Sabri, Politecnico di Milano, Italy

ID 558  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
Rene Amaya, Adriana Moros, Guisselle Garcia and Carlos Paternina, Universidad del Norte, Barranquilla, Atlántico, Colombia

ID 581  The development of a framework for Australian SMMEs collaboration in a global supply chain environment, Part 2: Genetic operators and a case study
Mohammad Rizal Firmsnayah, University of South Australia, Mawson Lakes, Adelaide, South Australia, Australia

2:30 – 3:45, TUESDAY  Manufacturing and Design  Bintang V
Session Chair: Indi Galih, Universitas Indonesia

ID 185  Improvement of Productivity Rate of JIT #262, Creams, Liquids, Lotions Department of a Cosmetics Company
Ezrha C. Godlano and Rachel C. Villanueva Department of Industrial Engineering, Malayan Colleges Laguna, Cabuyao Laguna, Philippines

ID 175  Effect of Sintering Temperature on Hydroxyapatite Compact Scaffold Characteristics
Wassanai Wattanutchariya, Jidapah Ruennareenard and Anirut Chaijaruwanich, Department of Industrial Engineering, Faculty of Engineering, Chiang Mai University, Muang, Chiang Mai, Thailand

ID 214  Social Network Analysis Based Evolutionary Algorithmic Approach to Identify the Influence of Hubs on Flexible Scheduling Problems
Vijayakumar Manupati and Ila Sharma, VIT University, Vellore, TamilNadu, India

ID 223  System of decision-making assistance for the recycling manufactured products
Mickael Gardoni, ÉTS, Montréal, Canada
Gaye Khalifa, University Assane Seck of Ziguinchor, Senegal
Amadou Coulibaly, INSA Strasbourg, France

ID 317  Designing Laptop Based On Costumer Preference Using ECQFD and TRIZ Methods
Amalia Suzianti, Irham Satria, Shabila Anjani and Indi Galih, Universitas Indonesia, Depok, Jawa Barat, Indonesia

2:30 – 3:45, TUESDAY  Undergraduate Student Paper Competition sponsored by Siemens  Bintang VI
Session Chair: Abbas Mahmoudabadi, MehrAstan University, Gilan, Iran

ID 400  Optimization of Warehouse Operations for Logistics Company in the Philippines
Stephanie B. Duque, Maricar M. Navarro, Bernaliza O. Verrey, Joyale C. Vitoa, Sherilyn M. Zantua, Rosalia F. Gabuya, Industrial Engineering Department, Technological Institute of the Philippines, Quezon City, Philippines

ID 635  Adjustable Turning Radius Steering Mechanism (Chandok's Raft Steering System)
Navpreet Singh, CGC-College of Engineering, India

ID 512  Developing a Multi-objective Model for Locating a New Warehouse for Bama's Chain Store
Maral Siahpour, Ferdowsi University, Mashhad, Khorasan Razavie, Iran

ID 421  Consideration of economics and ergonomics aspects in the design and manufacturing of Hydraulic Floor crane
Abdul Wahid, Shakil Shaikh, Muhammad Ibrahim Khan, Shahzain Akram and Syed Muhammad Hassan, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan

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 (MJITT), 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

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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, Faculty of Engineering, Kasetsart University (Bangkhen Campus), Chatuchak, 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  
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 Iftikar 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, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

ID 291  Ergonomic Risk Factors for Workers in Garments Manufacturing – A Case Study from Pakistan  
Zahid Abbass Shah, Asim Amjad, Maria Ashraf, Fareeha Mushtaq and Iram A. Sheikh, University of the Punjab, New Campus, Lahore, Punjab, Pakistan

ID 343  Human Error in Multitasking Environments  
Ali Ahmad, Northwestern State University, Natchitoches, LA, United States  
Saber Darmoul, Abdulmajeed Dabwan, and Mohammed Alkahtani, Industrial Engineering Department, King Saud University, Riyadh, Saudi Arabia  
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  
Session Chair: Ainul Akmar Mohktar, 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  
Ushio Sumita, Keio University, Yokohama, Kanagawa, Japan

ID 151  Structural Analysis of Page Access Behaviors of Sessions at Website of a Housing Equipment Company  
Ushio Sumita and Mikio Komatsu, 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 154  Analysis of VOC (Voice of Customer) Data for Assessing Corporate Image of a Housing Equipment Company  
Ushio Sumita and Hiroaki Takagi, Keio University, Yokohama, Kanagawa, Japan

ID 488  Application of Logistic Regression in Resolving Influential Risk Factors Subject to Corrosion under Insulation  
Ainul Akmar Mohktar, Masdi Muhammad and Nurul Rawaida Ain Burhani and Mokhtar Che Ismail, Universiti Teknologi Petronas, Tronoh, Perak, Malaysia
2:30 – 3:45, TUESDAY  
**Construction Management**  
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**  
Session Chair: Shao Hung Goh, SIM University, Singapore

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 Genetic algorithm and Tabu Search  
Mehdi Seifbarghy, Alzahra 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 Ashrafieh, Gilan, Iran  
Hassan Abdoos, Road Maintenance and Transport Organization, Tehran, Iran  
Roozbeh Azizmohammadi, Department of Industrial Engineering, Payame Noor University, Tehran, Iran

ID 649  
Optimization of Shifting Cycle of SKUs by Developing Suggested Opeating Procedure (SOP) in a FMCG Industry  
Ghulam Yasin Shaikh, Muhammad Zulfiqar, Jazib Zai, Zahid Ali Abbasi and Mohsin Sheikh, Mehran University of Engineering and Technology, Jamshoro, Hyderabad, Sindh, Pakistan

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

15:45 - Break

4:00 – 5:15, TUESDAY  
**Global Engineering Education IV**  
Session Chair: Dr. Ayham Jaaron, An-Najah National University, Palestine

4:00 – 4:30 (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

ID 717: Engineering Postgraduate Students’ Perspective on Their Preparedness for the Job Market: Employability Attributes

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4:30 – 5:00 (Tuesday)
Dr. Ayham Jaaron
Asst. Prof. in Industrial Engineering
Director of Quality Assurance Unit
Director of ABET Centre
An-Najah National University
Nablus, West Bank
Palestine

5:00 – 5:30 (Tuesday)
Prof. Dr. Gunduz Ulusoy
Faculty of Engineering and Natural Sciences
Sabanci University
Orhanli, Tuzla
Istanbul, Turkey

4:00 – 7:00, TUESDAY
Industry Solutions IV
Starhill 5

Big Data in Manufacturing and Service Industry
4:00 – 7:00 pm (Tuesday)

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

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

Dr. Joseph M. Ogundu, MBB
President and CEO – Emerald Global Consulting Inc.
West Bloomfield, Michigan, USA

4:00 – 5:15, TUESDAY
Operations Management IV
Starhill 7
Session Chair: Nor Aziati Abdul Hamid, Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia

ID 357 Optimization Model for Advertisement Decision a Case of Cooperative Dairy
Anubha Rautel, Nishith Mohan, S. K. Sharma and P. Bhardwaj, 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

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, East Java, Indonesia

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 enviroments with shared resources based on GTBM method
Eldon Caldwell, University of Costa Rica, San Jose, Costa Rica
4:00 – 5:15, TUESDAY  Supply Chain Management IV  Starhill 8
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
Wassanan Wattanatchariya, Department of Industrial Engineering, Faculty of Engineering Chiang Mai University, Thailand
Roengchai Tansuchat, Faculty of Economics, Chiang Mai University, Thailand
Jidapah Ruenareenard, 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

4:00 – 5:15, TUESDAY  Manufacturing and Design  Bintang V
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
Zanfah Syazana Hashim, Universiti Teknikal Malaysia Melaka (UTeM), Kulim, Kedah, Malaysia
Md Nizam Abdul Rahman, Universiti Teknikal Malaysia Melaka, Durian, Tunghal, Melaka, Malaysia

ID 480  Investigation of surface integrity in high speed machining of Ti6AI4V 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, Shubham Singhal, Rushil Batra and Ranganath M. Singari, Delhi Technological University, New Delhi, Delhi, India

4:00 – 5:15, TUESDAY  Case Studies  Bintang VI
Session Chair: Md. Mizanur 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, Johannesburg, South Africa

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

ID 288: Evaluate Performance of Earth – Air – Pipe System under Laboratory Condition
Md. Mizanur Rahman, Ling Le Sung. Fadzlita Mohd. Tamir and Mohd Suffian Bin Misaran, Mechanical Engineering Program, Faculty of Engineering, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia

4:00 – 5:15, TUESDAY  Ph.D. Dissertation Research Presentation Competition  Bintang VII
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
IEOM Kuala Lumpur Conference  Preliminary Technical Program  March 8-10, 2016

ID 509  Deployment of Virtualization Technology for Higher Engineering Education Data Communication Laboratory
Zulfiqar Ali, Royal Commission, 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 Commission, 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, Kedah, Malaysia
Abdul Talib 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

4:00 – 5:15, TUESDAY  Human Factors and Ergonomics  Mayang Sari I
Session Chair: Hakan Butuner, IMECO Industrial Management & Engineering Co., Istanbul, Turkey

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 Widaningrum, 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 Jayabal, 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

4:00 – 5:30, TUESDAY  Decision Sciences  Mayang Sari II
Session Chair: Saber Darmoul, King Saud University, Riyadh, Saudi Arabia

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
Charlie Sy, De La Salle University, Manila, Philippines

ID 269  Fuzzy Extent 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

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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

ID 141  The Impact of ICT Usage on Collaborative Product Development Performance: A Conceptual Model and Industry Perspective
Chathurani Silva and Sanjay Mathrani, 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
Zerihun Asmelash Samuel, Tilahun Seyoum Workneh and Cristina Trois, School of Engineering, University of KwaZulu-Natal, PMB, South Africa
Fekadu Fufa Feyess, 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 Vishvakarma 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 Soonthornvipat, Vorapoch Angkasith and Dhiranantha Rithmanee, King Mongkut's University of Technology Thonburi, Bangkok, Thailand

Noorliza Karia and Mohamed Soliman, Universiti Sains Malaysia, Penang, Malaysia

5:30 – Poster Session and IEOM Student and Professional Chapter Mixer
March 9, 2016 (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 (Wednesday)

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

08:25 – 08:50 (Wednesday)

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

08:50 – 09:15 (Wednesday)

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

**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

**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

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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, 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
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, Tigray, 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, Kuala Lumpur, Selangor, Darul Ehsan, Malaysia

08:00 – 09:15, WEDNESDAY
Supply Chain Management V
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

ID 321 Reverse Logistics in Indian Pharmaceutical Industry
Jamal A Farooque, Aligarh Muslim University (AMU), Aligarh, UP, India

ID 143 Disruption recovery of two-stage serial supply chain with consideration of carbon emission cost
Noraida Azura Darom and Hawa Hishamuddin, Universiti Kebangsaan Malaysia, Bandar Baru Bangi, Selangor, Malaysia

ID 246 Optimization Planning for Logistics distribution of rice commodities in South Sulawesi
Muhammad Rusman, Industrial Engineering, Hasanuddin University, Makassar, Sulawesi Selatan, Indonesia

08:00 – 09:30, WEDNESDAY
Manufacturing and Design
Session Chair: Muhammad Akmal Johar, Universiti Tun Hussein Onn Malaysia

ID 468 Applying Human Centered Design Process to Hitachi’s Integrated Plant Construction System
Eizaburo Takegami, Service Design Research Department, Htachi, Ltd., Research & Development Group, Tokyo, Japan
Ryota Niizeki, Service Design Research Department, Htachi, Ltd., Research & Development Group, Tokyo, Japan

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ID 327  An Improvement on Shear Test Equipment for HGA and GR&R Analysis in a Magnetic Head Operation
Krisada Asawarungsangkul and Santi Pumkrachang, Department of Industrial Engineering, King Mongkut's University of Technology, North Bangkok, Thailand

ID 507  Development of a Business Process Model Notations (BMPN) for a Cloud Manufacturing Architecture

ID 550  Application of Fuzzy Logic and Fuzzy Systems in Machining: A Literature Review
Sahil Nanda, Shubham Singhal, Rushil Batra and Ranganath M. Singari, Delhi Technological University, New Delhi, Delhi, India

ID 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

ID 395  Comparative Performance Study of Smart Structure for Thermal Microactuators
Muhammad Akmal Johar, Universiti Tun Hussein Onn Malaysia, Parit Raja, Johor, Malaysia

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

ID 435  Study on Performance Evaluation of Self-propelled Reaper
Jannatul Ferdows Nipa, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh

ID 087  Evaluating Maintenance Strategies Effectiveness on Overall Equipment Utilization
Charles Mbohwa and Bupe Mwanza, University of Johannesburg, Gauteng, South Africa

ID 685  Need for Deployment of RFID Technology in Indian Hospitals
Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India

ID 234  The environmental impact of inputs used in the vitivinicultural sector in Algeria
Kaddour El Heit, Université Mouloud Mammeri, Tizi Ouzou, Algeria

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

ID 084  Cost Based Failure Consequence Approach for Identifying Critical Components for Maintenance Support Decision
Pravin Tambe, Rcoem, Nagpur, Maharashtra, India
Makarand Kulkarni, IIT Delhi, New Delhi, Delhi, India

ID 283  Exergy Based Multi-State Reliability Model for a Stationary Gas Turbine
Tamiru Alemu Lemma, Fakhruldin Mohd Hashim and Mohd Amin Bin Abd Majid, Department of Mechanical Engineering, Universiti Teknologi Petronas, Bandar Sri Iskandar, Perak, Malaysia

ID 284  Gas Turbine Prognostics using Fuzzy Systems and Modified Bat Algorithm
Tamiru Alemu Lemma, Fakhruldin Mohd Hashim and Mohd Amin Bin Abd Majid, Department of Mechanical Engineering, Universiti Teknologi Petronas, Bandar Sri Iskandar, Perak, Malaysia

ID 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

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ID 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

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
Olasunkanmi Ismaila, Federal University of Agriculture, Abeokuta, Nigeria
Babatunde Adetifa, Dept. of Agricultural and Mechanical Engineering, Obafemi Awolowo University, Nigeria
Livinus Onu, S.E. Adegbite 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 Kurniawati, 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
Erry Rimawan, Graduate Program, Universitas Mercu Buana, Jakarta, Indonesia

08:00 – 09:15, WEDNESDAY Decision Analysis Mayang Sari II
Session Chair: Somayeh Khoshsoroor, Harbin Institute of Technology, Harbin, Heilongjiang, China

ID 356 Assessing Customer Requirements and Preferences for a Perishable Product: A Case of an Indian Cooperative Dairy
Anubha Rautela, Vinaytosh Mishra, S. K. Sharma, P. Bhawardj and Nishith Mohan, Indian Institute of Technology-BHU, Varanasi, Uttar Pradesh, 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, Heilongjiang, 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 Ignatius Madanhire, University of Johannesburg, Gauteng, South Africa

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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 Theko, 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 Laguana  
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 Ignatius 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

ID 271  Development of an Expert System for the Feasibility Assessment of Renewable Energy Projects  
M. Khurshid Khan, Farhan Qutab Siddiqui and Jasim Al-Dairi, University of Bradford, United Kingdom

ID 301  Renewable energy policy in Germany and Malaysia: Success factors  
Md. Mizanur Rahman, Aminuddin Saat and Mazlan Abdul Wahid, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia

ID 396  Aerodynamic Optimization of NACA64A410 Blade Aerofoil for Small Wind Turbine Application with Ansys Fluent  
Mulu Bayray Kahsay, Mekelle University, Mekelle, Tigray, Ethiopia  
Tariku Achamyeleh, Department of Mechanical Engineering, Faculty of Technology, Debre Tabor University, Debre Tabor, Ethiopia  
Mulu Bayray, School of Mechanical and Industrial Engineering, Ethiopian Institute of Technology- Mekelle, Mekelle University, Mekelle, Ethiopia

ID 399  Tidal Energy and its Prospects in Bangladesh  
Mohammad Mahfujur Rashid, Ahsanullah University of Science and Technology, Dhaka, Bangladesh

9:30 – 10:15 Tuesday Morning Keynote:  
Ir. Dr. Zuhairi Abd. Hamid  
Executive Director - Construction Research Institute of Malaysia (CREAM)  
Mayang Sari Grand Ballroom

10:15 – 11:00 Tuesday Morning Keynote:  
Speaker from PROTON Automobile – Malaysia

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

11:30 – 12:45, WEDNESDAY   Global Engineering Education VI   Starhill 4  
Session Chair: Dr. Rosemary Seva, De La Salle University (DLSU), Manila, Philippines

11:30 – 11:55 (Wednesday)  
Dr. Alfredo Soeiro  
Associate Professor  
University of Porto, Portugal  
Past Academic Director in Civil Engineering  
Past Pro-Rector of the University of Porto for Continuing Education  
Past President - European Society of Engineering Education

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11:55 – 12:20 (Wednesday)
Dr. Asela K. Kulathunga
Senior Lecturer
Department of Production Engineering
Faculty of Engineering
University of Peradeniya
Sri Lanka

Dr. Rosemary Seva
Dean of Gokongwei College of Engineering
De La Salle University (DLSU)
Manila, Philippines

11:30 – 12:45, WEDNESDAY Industry Solutions VI Starhill 5
Session 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)

"I3 University of the future for integrating the university with industry and innovation"

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 Aziati Abdul Hamid and Shiau Wei Chan, Production and Operation Department, Universiti Tun Hussein Onn Malaysia (UTHM), Batu Pahat, Johor, Malaysia
Josu Takala, Department of Engineering Science and Industrial Management, University of Vaasa, Wolffintie, Finland

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)

11:30 – 12:45, WEDNESDAY Operations Research Starhill 6
Session Chair: Nurhadi Siswanto, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 070 Disambiguation Points Sampling Heuristic for the Stochastic Obstacle Scene Problem
Vural Aksakalli, Istanbul Sehir University, Uskudar, Istanbul, Turkey
Ali Fuat Alkaya and Serkan Yildirim, Marmara University, Goztepe, Istanbul, Turkey

ID 075 Dual Based Procedure for the Single Stage General Minimum Cost Flow Problem
R.R.K. Sharma and Priyank Sinha, Indian Institute of Technology, Kanpur, UP, India

ID 375 The Impact of Structure of Interdependence on Supplier Performance in the Local Pineapple Processing Supply Chain in Thailand: a Mixed Method Research
Phatcharee Thongrattana, Sudaratana Wongweragiat and Kritsana Aimdate, Kasetart University, Chatuchak, Bangkok, Thailand

ID 427 Mathematical Model for Maritime Inventory Routing Problem with Multiple Time Windows
Nurhadi Siswanto, Industrial Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

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11:30 – 12:45, WEDNESDAY   Lean and Six Sigma II    Starhill 7

Session Chair: Muhammad Hamad Sajjad, Alfaisal University, Riyadh, Saudi Arabia

ID 001  A Sequential Truck Transportation Waste Reduction Scheme
Berndardo Villarreal and Andrea Lopez, Universidad de Monterrey, San Pedro Garza Garcia, Nuevo Leon, Mexico

ID 045  Applying the Principles of Lean Management to the Radiology Department
Demet Bayraktar, Hakan Butuner and Gözde Hatipoğlu, Business Administration Department, Faculty of Business and Management Sciences, Suleyman Sah University, Tuzla, Istanbul Turkey

ID 090  Design and assessment of lean handling buffers in forward-reserve model
Bhavin Shah and Vivek Khanzode, National Institute of Industrial Engineering, Mumbai, Maharashtra, India

11:30 – 12:45, WEDNESDAY   Supply Chain Management VI   Starhill 8

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
Syafir Daniel Budiman, Petra Christian University, Surabaya, Indonesia

ID 552  Coordinating a Multi-echelon Apparel Supply Chain in the Presence of Supply and Demand Uncertainty
Arnab Adhikari, Operations Management Area, Indian Institute of Management Calcutta, Joka, Kolkata 700104, India
Arnab 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   Bintang V

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 657  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 668  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 506  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

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11:30 – 12:45, WEDNESDAY  High School STEM Project Presentation  Bintang VI
Session Chair: Bhuvenesh Rajamony, UNIMAP, Malaysia

ID 533  Composition Methodology for Optimal Portfolio and Performance Measures Considering Indian SENSEX
Hohyun Lee, Hyuncho Han 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, Youngjoon 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  Bintang VII
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

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, Department of Mechanical Engineering, Universiti Teknologi Petronas, Iskandar, Perak Darul Ridzuan, 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

11:30 – 1:00, WEDNESDAY  Production Planning and Management  Mayang Sari I
Session Chair: Ali Vatankhah Barenji, Eastern Mediterranean University, Turkey

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

ID 132  An Analysis of competitive Advantages of South African Manufacturing industries. A case study; Automotive Industries
Mukondeleli Grace Kanakana Katumba and John Ikome, Tshwane 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 Rudee Masuchun, Faculty of Engineering, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand
ID 302  A Dynamic Multi Agent based scheduling for flexible flow line manufacturing system: UPVC door and window Company
Ali Vatankhah Barenji and Danial Roudi, Eastern Mediterranean University, Famagusta, Rize, Turkey
Majid Hashemipour, School of Engineering Mathematics and Science, Robert Morris University, Moon Morris, United States
Reza Vatankhah Barenji, Hacettepe University, Ankara, Baytape, Turkey

11:30 – 1:00, WEDNESDAY  e-Business and e-Commerce  Mayang Sari II
Session Chair: Eui H. Park, North Carolina Agricultural & Technical State University, Greensboro, USA

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 Widiastri, Universitas Katolik Parahyangan, Bandung, West Java, Indonesia

ID 344  Evaluating the Location of Effective Product Advertising on Facebook Ads
Atya Aisha, Aulia Hadining and Dimas 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, Department of Industrial & Systems Engineering, North Carolina Agricultural & Technical State University, Greensboro, USA

11:30 – 1:00, WEDNESDAY  Facility Planning and Management  Mayang Sari III
Session Chair: Suman Samanta, IIT Kanpur, Kanpur, India

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
Mustahsan Mir, Ajman University of Science & Technology, UAE
Ahmed Hassanin, 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
Salma A. Iqbal, Raihan 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 PVPIT Bavdhan 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
Justus Rabi B, Shri Andal Alagar College of Engineering, Chennai, Tamilnadu, India
Darly S.S., University College of Engineering and Technology, Thindivanam, Tamilnadu, India

ID 430  Application of Decoupled Harmonic Power Flow for Assessment of Harmonic Passive Filter Size and Location
Agus Ulinuha, Universitas Muhammadiyah Surakarta, Indonesia

1:00 pm Wednesday Lunch Keynote:
Dr. Rupy Sawhney, Heath Fellow in Business and Engineering Professor, Industrial and Systems Engineering University of Tennessee, Knoxville, USA
Mayang Sari Grand Ballroom

2:00 pm Networking Break – Exhibition Hall

2:30 – 3:45, WEDNESDAY  Global Engineering Education VII Starhill 4
Session Chair: Dr. Eldon Caldwell, University of Costa Rica

2:30 – 3:00 (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

3:00 – 3:30 (Wednesday)
Dr. Pal Pandi Ammavasi, M.E., Ph.D (Engg), MBA., Ph.D (Mgmt)
Pal PandiAssociate Professor
Bharath Niketan Engineering College
Aundipatty, Tamilnadu, India

3:30 – 4:00 (Wednesday)
Dr. Eldon Caldwell
Director, Industrial Engineering Department
Engineering School
University of Costa Rica

   Using Robotics as Educational Framework Strategy in Industrial Engineering

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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. Mei 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

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 Opeyeolu 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 Alkaya, Dindar Oz and Ramazan Algin, 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, Abdurrahim Shamayleh and Malick 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 Tourki and Said El Fezazi, Caddi Ayad University, High School of Technology Safi, Morocco

ID 139 Proposed Lean Sustained Factors
Sha’ri 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

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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 Technology, Jamshoro, Sindh, 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  
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  
Grina Anggawita, School of Economic and Business, Telkom University, Bandung, Indonesia
Cut Irna Setiawati, School of Communication and Business, Telkom 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 Bhiuyi 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 Boonsothonsatit, 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  
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 Khaliqdina and Intizar Ali, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan

ID 360  An Intelligent feature based process planning for Rotational parts  
Vijayakumar Manupati, Harshita Raj and Manidhar Darisi Venkata, VIT University, Vellore, Tamilnadu, India

ID 684  Strengthening Life Line  
Parul Maroo, Komal Koya and Hiren Patel, Department of Industrial Engineering, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India

ID 584  Design of control system for Electric Power Steering in vehicle  
Mohammad Reza Ahadiat, Department of Electrical Engineering, Mehriz Branch, Islamic Azad University, Yazd, Iran

2:30 – 3:45, WEDNESDAY  Engineering Education  
Session Chair: Karl Hain, Technische Hochschule Deggendorf, Bavaria, Germany

ID 017  Learning strategies of post-secondary students  
Peter Toth, Obuda University, Budapest, Hungary, Hungary

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ID 030 An Effective Organizational Structure to Implement Strategic Plans in Higher Education Institutions
Salih Duffuaa and Ahmed Elamin Haroun, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

ID 200 Application of Concurrent Engineering for Collaborative Learning and New Product Design
Muhammad Haris Aziz, Summyia Qamar, Aisha Tayyab and Ahmad Wasim, University of Engineering and Technology, Taxila, Pakistan
Chanchal Saha, Binghamton University, Poughkeepsie, New York, United States
Salman Hussain, University of Engineering and Technology, Taxila, Pakistan

ID 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

ID 398 Fostering creativity and innovation in engineering design education: A case study
Karl Hain and Christoph Rapp, Technische Hochschule Deggendorf, Bavaria, Germany

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

ID 328 Case Averaging as a Tool for Operational Efficiency in GI Endoscopy
Javad Taheri, North Carolina State University, Cary, NC, United States

ID 076 Capacity Planning For Diabetes Management - Indian Example
Vinaytosh Mishra, Cherian Samuel and S K Sharma, Indian Institute of Technology - BHU, Varanasi, Uttar Pradesh, India

ID 424 Hospital-Supplier Integration: an Assessment of the Driving Factors in the Context of the Saudi Arabian Healthcare System
Al Shahami, S., Rahman, S., and Chan, C., RMIT, Melbourne, Vic, Australia

ID 464 An Integrated Framework for Optimization of Resources in Emergency Departments
Julia El-Zoghby, Hala Farouk and Khaled El-Kilany, Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt

ID 172 Improving Indian Healthcare using Data Mining
Vivek Sundar Magesh, Beri Pradeep, Harinivas Bhaskaran, Sadhanand Lakshminarayanamurthy, Thomas Franco and Nishant Kumar, TVS Logistics, Chennai, Tamil Nadu, India

2:30 – 3:45, WEDNESDAY Production Planning and Management Mayang Sari I
Session Chair: Linda Kauškale, Institute of the Civil Engineering and Real Estate Economics, Riga Technical University, Latvia

ID 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

ID 466 Semiconductor Fabrication Strategy for Cycle Time and Capacity Optimization: Past and Present
Kader Ibrahim, Chik MA and U. Hashim, Institute of Nano electronic Engineering, Universiti Malaysia Perlis, Perlis, Malaysia

ID 483 Optimal Production-Inventory Control Policy for Manufacturing Systems Subject to Quality Deterioration
Karem Dhouib, Department of Mechanical and Industrial Engineering, Faculty of Engineering, Riyadh, Saudi Arabia

ID 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 Pancasila Jakarta, Jakarta Pusat, Jakarta, Indonesia
Sha’ri Mohd Yusof, UTM, Jalan Sultan Yahya Petra Kuala Lumpur, Kuala Lumpur, Malaysia
Revino Revino, Post Graduate Program, Institut Sains dan Teknologi Nasional Jakarta, Jakarta Selatan, Jakarta, Indonesia

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ID 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

ID 309 The Strategic Management Analysis of Wood Manufacturing Companies in Latvia - Interdisciplinary Approach
Linda Kauskale, Kristine Fedotova and Sanda 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 Adedotun Olanrewaju Adetunla, Eastern Mediterranean University, Famagusta, Mersin, Turkey
Reza Vatankhah Barenji, Hacettepe University, Ankara, Baytape, Turkey

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

ID 644 Efficient Authentication Method Using Score Level Fusion and Particle Swarm Optimization (PSO) Of Multimodal Biometrics
Kannan Devaraj, Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu, India

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 Almonayirie, 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 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 Peradneniya, 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

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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, Selangor, Darul Ehsan, Malaysia

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

Panelists

Dr. Abu Masud, P.E.
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 (IFEES)
Executive Secretary of the Global Engineering Deans Council (GEDC)
Resident Scholar in Global Engineering at Marquette University

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

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

4:00 – 5:15, WEDNESDAY  Industry Solutions VIII  Starhill 5
Women in Industry and Academia
Session Chair: Dr. Stefanie Pillai, University of Malaya

4:00 – 4:25 pm (Wednesday)
Ms. Priyadarshani Premarathne
Department of Sociology, Faculty of Arts,
University of Peradeniya, Sri Lanka

ID 241: Perceotion of female employees towards the Lean and work culture change in apparel industry in Sri Lanka
S. Sewwandi and H.D.P. Premarathne, 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 pm (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

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4:00 – 5:15, WEDNESDAY  
**Operations Research**  
Starhill 6

*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 Asawarungsaengkul and Naritsak Tuntitippawan, 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-Ejon, University of Johannesburg, Gauteng, South Africa

*ID 513* Model of Violator Detector Network Problem - A Case Study Sioux Falls Network  
Amber Shafiq, KAIST, Deajon, Chaladong, Korea

4:00 – 5:15, WEDNESDAY  
**Lean and Six Sigma IV**  
Starhill 7

*ID 245* The Development of 5s-Kaizen and Service Excellence Measurement Framework for Malaysia Private Hospitals  
Nor Aziati Abdul Hamid, Yunus 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-1000, Bangladesh

*ID 564* Creating shared value: How to guide for the Royal Project area  
Napassawan Tangamporn, Vorapoch Angkasith and Dhiranantha Rithmanee, 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

4:00 – 5:30, WEDNESDAY  
**Supply Chain Management VIII**  
Starhill 8

*ID 591* A Framework for evaluating the performance of Thai Tourism Industry Supply Chain Management  
Daraka Palang and Korakot YaiBuathet 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

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ID 621  Supply chain management in Service Quality
Mahadi Hasan Miraz, Ferdoush Saleheen and Mashiur 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

4:00 – 5:15, WEDNESDAY  Entrepreneurship and Innovation  Bintang V
Session Chair: Santiago-Omar Caballero-Morales, Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico

ID 233  Development of Training Model of Marketing for SMEs
Yati Rohayati, Telkom University & Telkom Foundation, Bandung, Jawa Barat, Indonesia
Sani Wulandari, Telkom University, Bandung, Jawa Barat, Indonesia

ID 258  Analyzing the Adoption of Malaysian Standards (MS) on SME Performances: The Mediating Effects of Innovation Adoption Factors
Fadhlur Rahim Azmi and Haslinda Musa, Universiti Teknikal Malaysia Melaka, Durian Tunggal, Melaka, Malaysia

ID 475  New Service Development Process in Micro, Small and Medium Enterprises (MSMEs): An Indonesian Case Study
Ima Nurul Rachmania, Merlyn Rakhmaniar and Santi Setyaningsih, School of Business and Management, Institut Teknologi Bandung, Bandung, West Java, Indonesia

ID 570  The Implementation of Team development Process in Cooperative Enterprises
Sebonkile Cynthia Thaba and Charles Mbohwa, Department of Quality and Operations Management, University of Johannesburg, Bunting Road Campus, Johannesburg, South Africa

ID 573  On the Situation of Traditional Textile Producers in Mexico: General Overview for Supply Chain Improvements
Santiago-Omar Caballero-Morales and Gladys Bonilla Enriquez, Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico

4:00 – 5:15, WEDNESDAY  Engineering Education  Bintang VI
Session Chair: Hamid Parsaei, Texas A&M University at Qatar, Doha, Qatar

ID 494  Assessing Self-Responsibility in Employability Competencies Development among Australian Engineering Students: Introductory report
Daudi Lazarus, University of South Australia, Paralowie, SA, Australia
Timothy Ferris, Cranfield University, Shrivenham, Oxfordshire, United Kingdom

ID 593  The Challenges of Computational Thinking at Higher Secondary School in Mauritius
Canayah Cuniah, University of Technology, Port Louis, Moka, Mauritius

ID 519  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

ID 694: Android Maze Game for Children as an Autism Therapy
Muhammad Israr Pathonii, Alhamidi Haidar, Muhammad Pu and Zurina Muda, Faculty Information Science and Technology Universiti Kebangsaan Malaysia

ID 458  Employing Technology to Customize the Flipped Classroom Practice
Hamid Parsaei and Mohamed Ismail, Texas A&M University at Qatar, Doha, Qatar
4:00 – 5:15, WEDNESDAY  
**Healthcare Systems**  
Bintang VII

**ID 504  Performance Management Criteria in Malaysian Healthcare**
Ihfasuziella Ibrahim, Mohd Khairelden Ghan, and Zuhairi Abd Hamid, Construction Research Institute of Malaysia (CREAM), Kuala Lumpur, Malaysia
Syahrul Nizam Kamaruzzaman and Zairul Nisham Musa, University of Malaya, Kuala Lumpur, Malaysia

**ID 553  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

**ID 565  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

**ID 689  Need for Deployment of RFID Technology in Indian Hospitals**
Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India

**ID 597  Fuzzy Multi-Criteria Simulated Evolution for Nurse Re-rostering**
Michael Mutingi, University of Botswana, Gaborone, Botswana

4:00 – 5:30, WEDNESDAY  
**Production Planning and Control**  
Mayang Sari I

**ID 618  Productivity Assessment Based on Different Perspectives in Industries: A Review**
Chan Sin Tan, Rosmaini Ahmad, Mohd Fidzwan B. Md. Amin Hamzas and M.I. Hussain, Universiti Malaysia Perlis, Arau, Perlis, Malaysia

**ID 620  A Taguchi-Continues Simulation Approach to the Injection Molding Blowing Process Quality Improvement**
Safwan A. Altarazi, Gazal Al Sudani, Zaid Rajab, Zina Q. Karadsheh and Anita Bursheh, German Jordanian University, Amman, Jordan

**ID 647  Implementation of Fuzzy Inference System with Tsukamoto for Production Planning Optimisation**
Rohaizan Ramlan, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

**ID 522  A case study of production scheduling and shop floor control for hybrid flexible flowshop**
Li-Man Liao, Ching-Jen Huang and Guan-Heng Lin, National Chin-Yi University of Technology, Taichung, Taiwan

**ID 031  Statistical Process Control (SPC) Application in a Manufacturing Firm to Improve Cost Effectiveness: Case study**
Charles Mbohwa and Ignatio Madanhire, University of Johannesburg, Gauteng, South Africa

**ID 082  Developing a Risk Based Maintenance - A Case study - Low Density Polyethylene (LDPE) production unit of Amir Kabir Petrochemical complex in Iran**
SeyedAmirhossein Alavifar, Russian State university of Tourism and Services, Moscow, Russia

4:00 – 5:15, WEDNESDAY  
**Undergraduate Research Competition**  
Mayang Sari II

**ID 088  Application of Work Study for Productivity Improvement: A Case study of a Brewing Company**
Charles Mbohwa and Bupe Mwanza, University of Johannesburg, Gauteng, South Africa

**ID 089  The Impact of Maintenance Systems on Water Supply: A case Study of a Utility Company**
Charles Mbohwa and Bupe Mwanza, University of Johannesburg, Gauteng, South Africa
ID 294  Optimizing the Final Exam Scheduling Process at King Abdulaziz University
Abrar Saeed Al Amoudi, Raneem Gashgari, Lamees Alhashimi, Lujain Aljawi and Raed Obaid, King Abdulaziz University, Jeddah, Western Provence, Saudi Arabia

4:00 – 5:15, WEDNESDAY  Project Management  Mayang Sari III
Session Chair: Mohammad Chuttur, University of Mauritius

ID 011  Expert System Model Structure for Feasibility Study Using Strategic Planning and Systems Engineering Principles
Mohammed Alzahrani, Umm Al-Qura University, Al-Leith, Makkah, Saudi Arabia

ID 018  Impact of Personality Traits of Manager on the Performance of Project
Ifra Jamil, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), Islamabad, Pakistan.

ID 059  A balanced approach to project management in partnering types of contract: a public private partnerships framework
Putu Mandiartha, University Malaysia Pahang, Kuantan, Pahang, Malaysia
Colin F. Duffield, The University of Melbourne, VIC, Australia

ID 104  A Case Study Assessment of Project Management Maturity Level in the Malaysia's IT Industry
Whee Yen Wong, Kar Peng Yeoh, and Seok Gee Yap, University Tunku Abdul Rahman, Selangor Darul Ehsan, Malaysia

4:00 – 5:30, WEDNESDAY  Sustainability and Green Systems  Mayang Sari IV
Session Chair: Liga Kamola, Riga Technical University, Latvia

ID 277  Decision support framework for the Sustainability of Traditional Brass Industry – A Sri Lankan case study
Asela Kulatunga, Mahanama Dharmawardhana and Malan Jayawickrama, Faculty of Engineering, University of Peradeniya, Peradeniya, Central, Sri Lanka
Shanaka Karunarathna, University of Peradeniya, Kandy, Central, Sri Lanka

ID 285  An AHP Based Methodology to Evaluate Social Life Cycle of an Apparel Manufacturing Plant
M. I. Rashangani, H.M.M.M. Jayawickrama, A.K. Kulatunga and C. Chandrakumar, Department of Production Engineering, University of Peradeniya, Sri Lanka
H.D.P. Premarathne, Department of Sociology, University of Peradeniya, Sri Lanka

ID 314  Introducing of smart work – opportunity to increase economical development of municipalities in Latvia
Ilze Judrupa, Riga Technical University, Riga, Latvia

ID 484  The Significance of Riga Neighbourhoods for the Sustainable Economic Development of the City
Uldis Kamols, Tatjana Survilo and Inesa Pavlova, Riga Technical University, Latvia

ID 478  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

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

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March 10, 2016 (Thursday)

08:00 – 09:15, THURSDAY  Global Engineering Education IX  Starhill 4
Session Chair: Khairiyah Mohd Yusof, Universiti Teknologi Malaysia

08:00 – 08:25 (Thursday)
Dr. Funso Falade
Department of Civil & Environmental Engineering
University of Lagos, Akoka, Lagos, Nigeria
and
President, African Engineering Education Association

08:25 – 08:50 (Thursday)
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

ID 568  Virtual Instrument for Monitoring Process Parameters: A Versatile Tool for Engineering Education
Amar Partap Singh Pharwaha, Sant Longowal Institute of Engineering and Technology (Deemed University), Punjab, India

09:00 – 09:30 (Thursday)
Khairiyah Mohd Yusof, PhD
Director, Centre for Engineering Education (CEE)
Universiti Teknologi Malaysia
Johor Bahru, Malaysia

08:00 – 09:15, THURSDAY  Industry Solutions IX  Starhill 5
Session Chair: Masaru Tezuka, Hitachi Solutions East Japan, Ltd.

08:00 – 08:40 (Thursday)
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
Masaru Tezuka and Junko Miyazaki, Hitachi Solutions East Japan, Ltd., Sendai, Miyagi, Japan
Masaki Fujiwara and Miyuki Kornki, Miyagi University, Kurokawagun, Miyagi, Japan

08:40 – 09:15 (Thursday)
Dr. Jalaluddin Harun
Director General
Malaysian Timber Industry Board (MTIB)

08:00 – 09:15, THURSDAY  Smart Manufacturing Workshop  Starhill 6

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

08:00 – 09:15, THURSDAY  Quality Control and Management  Starhill 7
Session Chair: Galia Novakova Nedeltcheva, Sofia University, Bulgaria

ID 183  A Bayesian LASSO Algorithm for Simultaneous Variation Fault Diagnosis in Ill Conditioned Multistage Manufacturing Processes
Sandipan Karmakar and Jhareswar Maiti, IIT Kharagpur, West Bengal, India

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ID 199  Review on some Multivariate Statistical Process Control Methods for Process monitoring
Arian Dhini and Istri Surjandari, Universitas Indonesia, Depok, West Java, Indonesia

ID 361  Process Variability Analysis of License Vehicle Number Plate Production in Nigeria
Stephen Nwanya Oluseyi Ajayi and Felix Ishola, Covenant University, Cannanland, Ota, Ogun State, Nigeria
Celestine Achebe, University of Nigeria, Nsukka, Enugu State, Nigeria

ID 221  Motion and Time Study: Measurement of Workstation for Piston Assembly Line Considering Anthropometric For
Indonesian People
Teuku Yuri M. Zagloel and Inaki Maulida Hakim, Department of Industrial Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 212  Rework Impact on BIW Production System Optimization Using Six Sigma Analysis
Galia Novakova Nedeltcheva, Sofia University, Faculty of Mathematics and Informatics, Sofia, Bulgaria
Hayder Zghair, Lawrence Technological University, Detroit, MI, United States

08:00 – 09:15, THURSDAY  Logistics Management I  Starhill 8
Session Chair: Sirajuddin Sirajuddin, University of Indonesia

ID 196  Assessment of Thai Check Point for Border Trade Operations
Jirapat Wanitwattanakosol, College of Arts, Media and Technology, Chiang Mai University, Thailand
Sooksiri Wichaisri, Department of Industrial Engineering, Kasetsart University, Chatuchak, Bangkok, Thailand
Tisinee Surapunt, College of Arts, Media and Technology, Chiang Mai University, Thailand
Thaneeya Chaiwongbud, Information System Management Research Unit, College of Arts, Media and Technology, Chiang Mai University, Muang, Chiang Mai, Thailand

ID 249  A Practical Case Study of a Heterogeneous Fleet Vehicle Routing Problem with Various Constraints
Kusuma Soonpracha and Anan Mungwattana, Department of Industrial Engineering, Kasetsart University, Chatuchak, Bangkok, Thailand
Tharinee Manisri, Sripatum University, Jatujak, Bangkok, Thailand

ID 490  A Novel Multi-Objective and Multi-Criteria Decision Support System for Logistic Management during Flood
Disaster
Ainul Akmar Mokhtar, Masdi Muhammad and Nurul Rawaida Ain Burhani, Universiti Teknologi Petronas, Tronoh, Perak, Malaysia

ID 354  Facility and Process Layout Analysis of an SME using Simulation: A Case Study of a Manufacturing Company
Onkar P, Vimal Kumar, Pratima Verma, Suraj Pratap Singh and Jitendra Katiyar, Indian Institute of Technology Kanpur, Uttar Pradesh, India

ID 397  Save water to save our next generation
Md. Mizanur Rahman, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia
Md. Kawsar Ali and Jahangir Alam, Comfit Composite Knit Ltd., Mirzapur, Tangail, Bangladesh

ID 508  The Influence of Industrial Engineering in Semiconductor Fabrication Factory Optimization
Mohd Razali Muhamad, Universiti Teknikal Malaysia Melaka, Malaysia
Mohd Azizi Chik, SilTerra Malaysia, Kulim, Kedah, Malaysia

ID 625  A Review on Operation Diagnosis and Identification of Operation Improvement
Edly Ferdin Ramly, follow by Mohd Shahir Yahya and Musli Mohammad, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia

ID 672  Industrial Logistic Performance Evaluation: A Case of Printing and Packaging Company in Thailand
Kanda Boonsothonsatit, Institute of Field Robotics, King Mongkut's University of Technology Thonburi, Bangkok, Thailand
Suwaphit Buabuthr, Institute of Field Robotics, King Mongkut's University of Technology Thonburi, Bangkok, Thailand

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08:00 – 09:15, THURSDAY  
**Artificial Intelligence**  
**Session Chair:** Baouche Rafik, University of Boumerdes, Algeria

ID 238  **Model development to monitor and control energy consumption in South Africa**  
Oludolapo A. Olanrewaju and Therese Van Wyk, Department of Industrial Engineering, Vaal University of Technology, Vanderbijlpark, South Africa

ID 667  **Applying Fuzzy Inference System Tsukamoto for Decision Making in Crude Palm Oil Production Planning**  
Abdul Talib Bon and Silvia Firda Utami, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Johor, Malaysia

ID 485  **Impact of Change Orders in Construction Sector in the West Bank**  
Ayham Jaaron, Mohammad Othman and Mujahed Staiti, An-Najah National University, Nablus, West Bank, Palestine

ID 213  **Using fuzzy set theory for determining toxicity thresholds of product**  
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

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)**  
Baouche Rafik, University of Boumerdes, Algeria

Baddari Kamel, University of Bouira, Algeria

08:00 – 09:15, THURSDAY  
**Healthcare Systems**  
**Session Chair:** Md. Liakot Ali, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

ID 202  **Fabrication of Fracture Aid Using Rapid Prototyping**  
Gopu Govindasamy, Nivedha Balakrishnan, Saranya Sureshkumar and Suvitha Subramaniam, Sri Ramakrishna Engineering College, Coimbatore, India

ID 554  **A Discrete-Event and Agent-Based Hybrid Simulation Approach for Healthcare Systems Modeling and Analysis**  
Ali Anjomshoae, Universiti Teknologi Malaysia, Johor, Johor Bahru, Malaysia

ID 607  **Logistic tools for increased the level of opportunity in the intervention in patients with hip fracture at “Hospital Universitario Mayor Mederi” case**  
Valeria Mendoza Cortes, Universidad Del Rosario, Bogotá, Colombia

ID 608  **Inventory - A Tool to Improve Hospital Management**  
Valeria Mendoza Cortes, Universidad Del Rosario, Bogotá, Colombia

ID 656  **A Model of a Secured Smart e-Health System**  
Md. Liakot Ali, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

Mohammad Tauhidul Alam, Bangladesh Bank, Dhaka, Bangladesh

08:00 – 09:15, THURSDAY  
**Modeling and Simulation**  
**Session Chair:** Andrew Abah, University of Nigeria

ID 499  **Tolerance Analysis using an alternative to Monte Carlo simulation**  
Mohamed Gadallah, Cairo University, Giza, Egypt

Omnia Fadel, Mohamed Zaghoul and Hanan Kouta, Port Said University, Port Said, Egypt

ID 587  **Effect of Information Sharing and Capacity Adjustment on Healthcare Service Supply Chain: The Case of Flood Disaster**  
Ali Anjomshoae, Universiti Teknologi Malaysia, Johor, Johor Bahru, Malaysia

ID 637  **Placement of Solar-Wind Hybrid Power Plant in Iran with using AHP algorithm and technical and economic evaluations by HOMER software**  
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

ID 502  **Predicting the Development Time of Platform for Multiple-Generation Product Using Artificial Neural Network**
**Development of Facility Utilization Model for Use in Ajaokuta Steel Complex**  
Stephen Nwanya, Oluseyi Ajayi and Obafemi Olatunji, Covenant University, Cannland, Ota, Ogun State, Nigeria  
Andrew Abah, University of Nigeria, Nsukka, Enugu State, Nigeria

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<td>08:00 – 09:15, THURSDAY</td>
<td><strong>Reliability and Maintenance</strong></td>
<td>Mayang Sari II</td>
<td>Maruf Hasan, University of New South Wales, Sydney, Australia</td>
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<td>ID 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>ID 514</td>
<td>Reliability and Maintainability Parameters Estimation under Imperfect Repair and Maintenance by Genetic Algorithm</td>
<td>Mootaz Ghazy, Ahmed Farouk and Amr Hassnien, Arab Academy for Science and Technology and Maritime, Alexandria, Egypt</td>
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<td>ID 617</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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<td>ID 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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<td><strong>Project Management</strong></td>
<td>Mayang Sari III</td>
<td>Agnese Travaglini, Politecnico di Milano, Milan, Italy</td>
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<td>ID 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>ID 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>ID 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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<tr>
<td>ID 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>ID 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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<td>08:00 – 09:15, THURSDAY</td>
<td><strong>Modeling and Simulation</strong></td>
<td>Mayang Sari IV</td>
<td>Alessandro Navarra, Universidad Católica del Norte, Antofagasta, Chile</td>
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<td>ID 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, Gowrynathan Jeyanthinathasarma, Faculty of Engineering, University of Peradeniya, Sri Lanka, Nadarasa Sanjeevan, University of Peradeniya, Vavuniya, Sri Lanka</td>
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<tr>
<td>ID 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, Muhammad Bujiwa, University of Waterloo, Waterloo, ON, Canada</td>
<td></td>
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<tr>
<td>ID 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>
<td></td>
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ID 367  Sensitivity Analysis in Optimization of Multiple Cyclone Arrangements
Muhammad 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

ID 133  Debottlenecking of Conventional Copper Smelters
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

9:30 - Thursday Morning Keynote:
Dr. Hans-Juergen Hoyer
Secretary General of the International Federation for Engineering Education Societies (IFEEES)
Executive Secretary of the Global Engineering Deans Council (GEDC) and
Resident Scholar in Global Engineering at Marquette University, USA
Mayang Sari Grand Ballroom

10:15 - 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

11:30 – 12:45, THURSDAY    Global Engineering Education X  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
Member of the European Engineering Deans Council

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

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

"Engineering Education and Environment"
### Industry Solutions X

**Session Chair:** Resh Plaha, Crystal Quality UK Ltd

**11:30 – 12:20**

**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*

**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*

### Smart Manufacturing Workshop

**11:30 – 12:45, THURSDAY**

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

### Quality Control and Management

**Session Chair:** Vimal Kumar, Indian Institute of Technology Kanpur, India

**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**  
P.S. 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 Business School, Bangalore, India  
Bishu 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, D. I. Yogyakarta, Indonesia  
Wilhelmus Abisatya Pararta, 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

### Logistics Management II

**Session Chair:** Mandy Taha, Alexandria University, Egypt

**ID 056 Transforming green logistics practice into benefits - A case of 3PLs**  
Noorliza Karia and Muhammad Hasmi Abu Hassan Asaari, Universiti Sains Malaysia, USM, Penang, Malaysia

**ID 092 The Analysis of Airport Operational Performance Case Study: Chiangmai International Airport, Thailand**  
Tipavinee 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
11:30 – 12:45, THURSDAY  
**Inventory Management**  
Bintang V

Session Chair: Ehsan Shekarian, University of Malaya, Kuala Lumpur, Malaysia

**ID 222 Value Chain Optimization in Overseas Procurement**  
Aman Sinha, Bher India LTD., Pune, Maharashtra, India  
Deepak Chandra, National Institute of Industrial Engineering, Mumbai, India

**ID 337 Analyzing optimization techniques in inventory models: the case of fuzzy economic order quantity problems**  
Ehsan Shekarian, Nima Kazemi, Ezutah Udoncy Olugu and Salwa Hanim Abdul-Rashid, University of Malaya, Kuala Lumpur, Malaysia

**ID 140 Improvising Operational Productivity of Inventory Management in a Retail Store**  
Akshay S. and Mridula Sahay, Amrita Business School, Amrita Vishwa Vidyapeetham, Coimbatore, Tamil Nadu, India

**ID 300 The effect of human learning with cognitive and motor capabilities on a fuzzy EOQ model**  
Ehsan Shekarian, Nima Kazemi, Ezutah Udoncy Olugu, Salwa Hanim Abdul-Rashid and Raja Ariffin Bn Raja Ghazilla, University of Malaya, Kuala Lumpur, Selangor, Malaysia

11:30 – 12:45, THURSDAY  
**Artificial Intelligence**  
Bintang VI

Session Chair: Ali Asghar Heidari University of Tehran, Iran

**ID 315 Evaluations of Crossover and Mutation Probability of Genetic Algorithm in an Optimal Facility Layout Problem**  
Maricar Navarro, Technological Institute of the Philippines, Quezon City, National Capital Region, Philippines

**ID 120 Two Calibrated Metaheuristic Algorithms for Solving a Multi-Plant Capacitated Lot-Sizing Problem in an Integrated Production-Distribution Network**  
Maryam Mohammad and S. Nurmay Musa, University of Malaya, Kuala Lumpur, Malaysia

**ID 374 Conceptual Framework for Using System Identification in Reservoir Production Forecasting**  
Berihun Mamo Negash, Universiti Teknologi Petronas, Bandar Seri Iskandar, Perak Darul Ridzuan, Malaysia

**ID 643 Let a CPSO+ algorithm explore your high-quality shortest paths: an effective chaos-enhanced PSO-based strategy**  
Ali Asghar Heidari and Rahim Abaspour, University of Tehran, Iran

11:30 – 12:45, THURSDAY  
**Lean and Six Sigma**  
Bintang VII

Session Chair: Taiwo Samuel, Olabisi Onabanjo University, Nigeria

**ID 426 Production Management Model Integrating Green and Lean Six Sigma**  
Cherrafi Anass, Khalid Benhida, Ahmed Mokhils, Fatima Zohra Elamrani and Elfezeazi Said Cadi Ayyad University, Safi, Morocco

**ID 579 Improvement of the Production Process via Kaizen: Case Study of wiring company**  
Ilham Kissani, Al Akhawayn University, Ifrane, Morocco

**ID 586 Solving Quality Issues in Automotive Component Manufacturing Environment by utilizing Six Sigma DMAIC Approach and Quality tools**  
Mohd Norzaimi Che Ani, Manufacturing Engineering Section, Universiti Kuala Lumpur – Malaysian Spanish Institute, Kulum, Kedah, Malaysia  
Ishak Abdul Azid, Mechanical Engineering Section, Universiti Kuala Lumpur – Malaysian Spanish Institute, Kulum, Kedah, Malaysia  
Shahrul Kamarudin, Mechanical and Industrial Engineering Department, Universiti Teknologi Petronas, Tronoh, Perak, Malaysia

**ID 653 Anthropometric Data Variation Within Gari-frying Population**  
Taiwo Samuel, Olabisi Onabanjo University, Ago-Iwoye, Ogun, Nigeria

Michael Mutungi, School of Engineering, Namibia University of Science & Technology, Windhoek, Namibia and Faculty of Engineering & the Built Environment, University of Johannesburg, Johannesburg, South Africa  
Charles Mbohwa, Faculty of Engineering & the Built environment, University of Johannesburg, Johannesburg, South Africa  
Herbert Mapfaira, Mechanical Engineering Department, University of Botswana, Gaborone, Botswana

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**11:30 – 12:45, THURSDAY**  
**Case Studies**  
**Mayang Sari I**  
Session Chair: Pornwasin Sirisawat, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

**ID 362**  
Energy sector process control system to ensure achievement of energy efficiency targets in Latvia: a case study  
Ineta Geipele, Institute of Civil Engineering and Real Estate Economics, Riga Technical University, Riga, Latvia  
Gita Actina, Energy Efficiency Center, Institute of Physical Energetics, Riga, Latvia  
Sanda Geipele, Institute of Civil Engineering and Real Estate Economics, Riga Technical University, Riga, Latvia  
Namejs Zeltins, Energy Efficiency Center, Institute of Physical Energetics, Riga, Latvia

**ID 668**  
Relationship between Human Errors in Maintenance and Overall Equipment Effectiveness in Food Industries  
Yunos Ngadiman, 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 459**  
Numerical Study of Non- Premixed Combustion of Pulsed Swirling Co-axial Jets  
Shiferaw Regassa Jufar and Berihun Mamo Negash, Department of Petroleum Engineering, Universiti Teknologi Petronas, Perak Darul Ridzuan, Malaysia

**ID 596**  
Towards Risk Managed Cloud Adoption - A Conceptual Framework  
Anil Kumar Saini, University School of Management Studies, New Delhi, India  
Shikha Gupta, Ansal University, Gurgaon, Haryana, India  
Kulbhushan Saxena, FIIB, Gurgaon, Haryana, India

**11:30 – 12:45, THURSDAY**  
**Sustainable Manufacturing**  
**Mayang Sari II**  
Session Chair: Ahmad Mubin, University of Muhammadiyah Malang, Jawa Timur, Indonesia

**ID 431**  
Hendrik Hopf and Egon Müller, Technische Universität Chemnitz, Germany, Chemnitz, Germany

**ID 452**  
Enabling CMOS 0.13µm technology at 0.18um equipment platform on 200mm Semiconductor Manufacturing Industry  
Thung Beng Joo and Kader Ibrahim, Silterra Malaysia Sdn Bhd,Kulim, Kedah, Malaysia  
Nurulfajar Bin Abd Manap and Fauziyah 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 (AASMT), Alexandria, Egypt

**ID 455**  
Development of Comprehensive WIP Performance Monitoring Systems for Semiconductor Fabrication Foundry  
Mohamad Zambri Mohd Darudin. Silterra Malaysia Sdn. Bhd., Kulim, Kedah, Malaysia  
Nor’ Azah binti Khusairi. Silterra Malaysia Sdn. Bhd., Kulim Hi  
Hasbullah Haji Ashaari, School of Technology Management and Logistic, Universiti Utara Malaysia, Kedah, Malaysia

**ID 311**  
Development of Sustainable Performance Measurement System for Electronic and Plastics Industrial Cluster Based Industrial Symbiosis Scenario in the Industrial Estate  
Ahmad Mubin, University of Muhammadiyah Malang, Jawa Timur, Indonesia

**11:30 – 12:45, THURSDAY**  
**Service Systems and Service Management**  
**Mayang Sari III**  
Session Chair: Aziz E. ElSayed, Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt

**ID 035**  
Activating Organizational Learning Capabilities through Service Operations Design  
Christopher Backhouse, Loughborough University, Loughborough, Leicestershire, United Kingdom  
Ayham Jaaron, An-Najah National University, Nablus, West Bank, Palestine

**ID 578**  
The Role of Service Providers on Cloud Computing Technology for a Sustainable Computer Network  
Ramesh Chandra Rath, Einstein Academy of Technology and Management, Khordha, Bhubaneswar, Odisha, India

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ID 588  Developing KPIs for organizations with similar objectives
Charles Mbohwa, Jan Harm Christiaan Pretorius and Edoghogho Ogbeifun, University of Johannesburg, Gauteng, South Africa

ID 099  D-Optimal Equivalent-Estimation Second-Order Strip-Strip-Plot Designs for Three Multi-Stage Processes
Prapassorn Tantiphanwadi and Prapaisri Sudasna na Ayudhya, Kasetsart University, Chatuchak, Bangkok, Thailand

ID 456  Network Management and Bandwidth Resource Allocation in Educational Institutions

11:30 – 12:45, THURSDAY  Modeling and Simulation  Mayang Sari IV
Session Chair: Basel Aleideh, Kuwait University

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 PUNQ-S3 reservoir model using proxy modeling and multi-objective optimizations
Berihun 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

14:00 – Networking break – Exhibition hall

2:30 – 3:45, THURSDAY  Global Engineering Education XI  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

ID 546  Trends in engineering education: Programs’ content, implementation to meet current challenges.

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

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2:30 – 3:45, THURSDAY

Industry Solutions XI

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

2:30 – 2:55 pm

Parth Rashmikant Patel
Executive Director
Apollo Techno Equipments Limited
Ahmedabad, Gujarat, India

2:55 – 3:20 pm

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 pm

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

2:30 – 3:45, THURSDAY

Smart Manufacturing Workshop

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

2:30 – 3:45, THURSDAY

Reliability and Maintenance

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 Identifying Optimal Intervene Hazard for Cutting Tools Considering Cost-availability Optimization
Soumaya Yacout, École Polytechnique, Montreal, Quebec, Canada
Yasser Shaban, Faculty of Engineering, Helwan University, Cairo, Egypt

ID 083 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

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2:00 – 8:00, THURSDAY

**Entrepreneurship Workshop**
Starhill 8

2:00 to 8:00 pm

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

2:30 – 3:45, THURSDAY

**Sustainable Manufacturing**
Bintang V

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 Vidyapeetham, 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 Fahlul 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, Joharah A.Ghani and Baba Md Deros, Universiti Kebangsaan Malaysia / National University of Malaysia, Bangi, Selangor, 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

2:30 – 3:45, THURSDAY

**Computer and Computing**
Bintang VI

Session Chair: Hanane Zermane, Batna 2 University, Algeria

ID 240 Development of a Computer Aided Learning Tool for PIC Microcontroller
Md. Liakot Ali and Mainur Rahman, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

ID 636 Prediction of Oil Well Flowing Bottom-hole Pressure in Petroleum Fields
Medhat Awadalla and Hassan Yousef, SQU, Muscat, Oman

ID 681 Decision Analysis View of Higher Education Planning Activities of Admission and Recourses Allocation in Oman
Mahmood Al Kindi, Mechanical and Industrial Engineering, Sultan Qaboos University, AlKhoud, Oman

ID 718 Organizational factors for implementing TQFD
Hari Krishnan Thampi and Pramod V. R., N.S.S College of Engineering, Palakkad, Kerala, India  
Abdul Samad K., Malabar Cements Ltd., Palakkad, Walayar, Kerala 678624, India

ID 065 Development of an internet-based fuzzy control system of manufacturing plant
Hanane Zermane and Hayet Mouss, Batna 2 University, Batna, Algeria

2:30 – 3:45, THURSDAY

**Systems Engineering**
Bintang VII

Session Chair: Nouara Ouazraoui, University of Batna-Algeria, Batna, Algeria

ID 174 Literature review of Industrial Competitiveness Index: research gap
Teuku Yuri M. Zagloel and IB Putra Jandhana, Department of Industrial Engineering, University of Indonesia, Depok, West Java, Indonesia
ID 182  PSI-Cockpit: A Supply-Demand Planning System Focusing on Achieving Goals through Resolving KPI Conflicts
Shintaro Urabe, Satoshi Munakata and Huang Shuangquan, Hitachi Solutions East Japan, Ltd., Sendai, Miyagi, Japan

ID 659  The Impact of Quality Management Tools in Municipal Water Distributors: Case of Namibia
Michael Mutungi, School of Engineering, Namibia University of Science & Technology, Windhoek, Namibia and Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa
Timothy Silombela and Damas Mashauri1, School of Engineering, Namibia University of Science & Technology, Windhoek, Namibia
Charles Mbohwa, Faculty of Engineering and the Built Environment University of Johannesburg, Johannesburg, South Africa

ID 612  Remote Global Alignment Error for Pad Inductor Layer to Improve the Cycle Time
Saandilian Devadas, Silterra Malaysia Sdn.Bhd, Kulim, Kedah, Malaysia
Shajahan Maidin, Universiti Teknikal Malaysia, Melaka, Durian Tunggal, Melaka, Malaysia
Tritham Wara, Leng Kok Hong and Nurul Ayu Hashim, Silterra Malaysia Sdn. Bhd., Kulim, Kedah, Malaysia

ID 204  Modified Barrier and Operational Risk Analysis using Bayesian approach: Towards Bayesian–BORA methodology
Nouara Ouazraoui, University of Batna-Algeria, Batna, Algeria
Mouloud Bourareche, Health and Occupational Safety Institute, University of Batna, Batna, Algeria
Rachid Nait Said, University of Batna-Algeria, Batna, Algeria

2:30 – 3:45, THURSDAY  Engineering Economy  Mayang Sari I
Session Chair: Thabit Sultan Mohammed, Dhofar University, Oman

ID 383  Analyzing the Success Rate of Strategic and Tactical Economic Sanctions; A strategy for Russian economic planning
Seyed Amirhossein Alavifar and Viktor Makarovich Zahrenyu, Russian State university of Tourism and Services, Moscow, Russia

ID 543  Using Mathematical Programming for Investment Assessment and Optimal Investment
Hohyun Lee, Jinwoo Lee and Myeonghun Ji, Data Science Lab, Paul Math School, Goesan-gun, Chungcheongbuk-do, Korea

ID 180  Cost Minimization in Data Batch Processing
Alyaa Abdulameer, Abdulrahim Shamayleh and Malick Ndiaye, Industrial Engineering Department, American University of Sharjah, Sharjah, United Arab Emirates

ID 524  Low Energy and Low Cost Freshwater Production by Membrane Distillation
Rubina Bahar, Tasnim Firdaus Ariff and Mohammad Jabez Perves Bappy, International Islamic University Malaysia, Kuala Lumpur, Malaysia

ID 264  Remote-Controlled Microcontroller-Based Temperature System: An Economical Design
Thabit Sultan Mohammed, Dhofar University, Salalah, Dhofar, Oman

2:30 – 3:45, THURSDAY  Sustainability and Green Systems  Mayang Sari II
Session Chair: Liga Kamola, Riga Technical University, Latvia

ID 454  Measuring Product Sustainability Using Fuzzy Method
Muhamad Zameri Mat Saman, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia
Abdul Rahman Hemdi, Universiti Teknologi Mara, Permatang Pauh, Pulau Pinang, Malaysia
Safian Sharif, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia
Salwa Mahmood, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

ID 670  On-Grid Solar Power Systems with Net Metering and Solar Irradiance in Pakistan
Hafsa Qamar, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, KPK, Pakistan

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

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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 Asawarungsaengkul 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 Ithnan and Ists Fakhiruzzai Nusirwan, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

ID 703 Selecting the Contractor using Multi Criteria Decision Making in National Gas Company of Lorestan province of Iran
Moslem Parsa, Industrial Engineering, Lorestan Gas Company, Khorramabad, Iran

ID 248 Yield Stability and Genotype by Environment Interaction of Fifteen Rice (Oryza Sativa L) Genotypes Evaluated under Rainfed and Irrigated Conditions in Northern Ghana
Albert Luguterah Uds, Navrongo, Upper East Region, Ghana
Desmond S. Adogoba, CSIR - SARITamale, Northern Region, Ghana

2:30 – 3:45, THURSDAY Modeling and Simulation Mayang Sari IV
Session Chair: Rene Estember, Mapua Institute of Technology, Manila, Philippines

ID 155 Thermochemical Processing of Biomass: Graphic User Interface Models for Costing and Material Balances
Ali Elkamal, University of Waterloo, Waterloo, Ontario, Canada
Rois Fatoni, Chemical Engineering Department, Universitas Muhammadiyah Surakarta, Surakarta Jawa Tengah, Indonesia
Abdulhalim Abdulrazik, University of Waterloo, Waterloo, Ontario, Canada

ID 189 Empirical Analysis and Modeling of Learning Curves in the Apparel Manufacturing Industry
Thilini Ranasinghe, University of Peradeniya, Sri Lanka
Chanaka Senanayake, University of Peradeniya, Sri Lanka
Kanthi Perera, University of Peradeniya, Sri Lanka

ID 669 Assembly Line Optimization using Arena Simulation
Abdul Talib Bon and Nur Nasiah Shahrin, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Johor, Malaysia

ID 298 On the Energy detection of unknown signals over fading channel for different diversity combining techniques
Rupali Agarwal, Neelam Srivastava and Himanshu Katiyar, Babu Banarasi Das National Institute of Technology and Management, Lucknow, Uttar Pradesh, India

ID 192 Forecasting of Stock Prices Using Brownian Motion – Monte Carlo Simulation
Rene Estember, Mapua Institute of Technology, Manila, Philippines
Michael John Maraña, Mapua Institute of Technology, Manila, Philippines

15:45 - Break

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 (Thursday)
Nidhi M B
HoD Mechanical Engineering Department
MarBaselios College of Engineering & Technology (MBCET)

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Enhancing outcome Based Education through Self awareness

4:30 – 5:00 (Thursday)
**Dr. P. Muredzi**
Dean – School of Engineering & Technology
Harare Institute of Technology
Zimbabwe

5:00 – 5:30 (Thursday)
OPEN

4:00 – 5:15, THURSDAY
**Industry Solutions XII**

4:00 – 4:30 (Thursday)
OPEN

4:30 – 5:00 (Thursday)
OPEN

5:00 – 5:30 (Thursday)
OPEN

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

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

4:00 – 8:00, THURSDAY
**Entreprenuership Workshop**

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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
Upender 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 Emahlahleni regions
Charles Mbohwa 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, Kampus Tetap Pauh Putra, Malaysia

4:00 – 5:15, THURSDAY  OPEN  Bintang VI

4:00 – 5:15, THURSDAY  OPEN  Bintang V

4:00 – 5:15, THURSDAY  IFEES Meeting – Board of Directors  Mayang Sari I
International Federation of Engineering Education Societies (IFEES) Meeting
Board of Directors

4:00 – 5:15, THURSDAY  IEOM Student Chapter Development Meeting  Mayang Sari II

4:00 – 5:15, THURSDAY  IEOM Chapter Meeting  Mayang Sari III

4:00 – 5:15, THURSDAY  IEOM Chapter Meeting  Mayang Sari IV

5:30 pm, Thursday: Closing Mixer
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 Hadj, 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, Dpt of Chemistry, Faculty of Hydrocarbons & Chemistry, University Mhamed Bouguerra of Boumerdes, Algeria
Belloum Mohamed, Laboratory of Materials Science (LCMVAR), Dept. of Chemistry, Faculty of Science, University Hadj Lakhdar of Batna, Algeria

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

ID 048 Debugging Operation of Automated Assembly Line using Signal Noise Ratio
Masatoshi Kitaoka, Kanagawa University, Yokohama city, Japan
Hitosh Takeda, Bunkyo University, Chigasaki, Kanagawa, Japan

ID 049 Model for Estimation of Interurban Passenger Transportation Scheme
Santiago-Omar Caballero-Morales, Universidad Popular Autónoma del Estado de Puebla, Puebla, Mexico
Gladys Bonilla Enriquez, Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico

ID 067 Your Opinion Matters: A Cross-Sectional Study on Happiness among Older Adults in Siberia
Ekaterina Taran, Galina Barysheva and Elena Frolova, Tomsk Polytechnic University, Tomsk, Russian Federation
Fabio Casati and Giacomo Arrighini, The University of Trento, Italy

ID 108 Integration of economic and environmental aspects in sustainable supply chain management: a review
Noraida Azura Darom and Hawa Hishamuddin, Universiti Kebangsaan Malaysia, Bandar Baru Bangi, Selangor, Malaysia

ID 116 Characterization and Modeling of Rheological Behavior of a System of Mud a Reverse Emulsion
Mellak Abderrahmane, Boumerdes University – Algeria, Boumerdes, Algeria
Kaddour El Heit, Université Mouloud Mammeri, Tizi Ouzou, Algeria

ID 159 Optimization of a Battery Pack in Plug-In Hybrid Electric Vehicles
Ali El Kample, University of Waterloo, Waterloo, Ontario, Canada
Rois Fatoni, Chemical Engineering Department, Universitas Muhammadiyah Surakarta, Jawa Tengah, Indonesia
Manoj Mathew, Chemical Engineering Department, University of Waterloo, Waterloo, ON, Canada

ID 166 Implementation of Knowledge Management at Woven Handycraft Industry (Case Study: DI Yogyakarta – Indonesia)
Nofi Erni, Esa Unggul University, Kebon Jeruk, West Jakarta, Indonesia

ID 169 The Design of QTrac: An Automated Quality and Cost Management System for Projects
Hananeli Nel, Post-Graduate School of Engineering, University of Johannesburg, Johannesburg, Gauteng, South Africa

ID 181 Investigation of structural and physical properties of Al1-xMnx thin films grown by magnetron sputtering:
influence of thermal annealing
Majda Mokhtari, Badji Mokhtar-Annaba University, Sidi Amar, Annaba, Algeria

ID 187 Study of surface quality - Effect of fractal dimension and texture parameters
Mounira Bouridia, Research center in Technologies Industrielles.CRTI.ex-CSC, Chéraga, Algérie, Annaba, Algeria
Lakhdar Laouar, Badji Mokhtar University BP12 -2300, Industrial Mechanics Laboratory Annaba, Algeria
Hamid Hamadache, Annaba University, Algeria

ID 188 Effect of inclination of the walls mold on the primary cooling during the continuous casting
Mounira Bouridia, Research center in Technologies Industrielles.CRTI.ex-CSC, Chéraga, Algérie, Annaba, Algeria
Lakhdar Laouar, Badji Mokhtar University BP12 -2300, Industrial Mechanics Laboratory Annaba, Algeria
ID 206 Selection of Green suppliers based on GSCM practices: Using fuzzy MCDM approach in an Indian Electronics Company
Vijayakumar Manupati, Akshay Uppala, Rohit Sharma and Harshita Raj, VIT University, Vellore, Tamilnadu, India

ID 207 A Social Network Based Optimisation Approach on Patient Admission Scheduling Problem
Vijayakumar Manupati, Venkat Anirudh Kodali, Shaik Shama Zabeen and Lakkimsetti Sai Prudhvi Siddhartha, VIT University, Vellore, Tamil Nadu, India
Manoj Kakarla, Vit University, Chittoor, Andhra Pradesh, India

ID 208 Analyzing the Effect of Line-Cell Conversion on Manufacturing Systems
Vijayakumar Manupati and Chaitanya Gangal, Vit University, Vellore, Tamilnadu, India

ID 209 An Integrated Multi-Echelon Stochastic Supply Chain Production-Distribution Model with Carbon Emissions
Rishabh Ranka, Biswajita Mohanty, Manidhar Darisi Venkata, Raj Kumar Singh, Pavan Kumar Kulkarni and Vijayakumar Manupati, School of Mechanical and Building Sciences, Vellore Institute of Technology, Vellore, Tamil Nadu, India

ID 219 Effect of Wire Cutting Process on the Variables of Surface Roughness
Mustafa A. Rijab, Technical Institute of Baquba, Mechanical Department, Iraq
Ali I. Al-Mosawi, Free Consultation, Babylon, Hilla, Iraq
Muhammad A. Al-Najar, Asia Cell Company, Iraq
Shaymaa Abbas Abdulsada, University of Kufa, Collage of Engineering, Iraq

ID 226 Search an electric prevention by controlling the resistive component of the isolation of an ungrounded low voltage electrical network
Abderrezak Hocine, University Badji Mokhtar, Sidi Amar, Annaba, Algeria

ID 253 Project Management for New Sputtering System Development
Yao-Chin, Wang Blue Bee System Integration Ltd., Tainan, Taiwan

ID 255 A Hybrid Genetic Algorithm for Solving Facility Location-Allocation Problem
Farzad Firouzi Jahantigh, Department of Industrial Engineering, University of Sistan and Baluchestan, Zahedan, Iran
Behnam Malmir, Department of Industrial and Manufacturing Systems Engineering, Kansas State University, Manhattan, USA

ID 260 Lean Supplier Selection: A Data Envelopment Analysis (DEA) Approach
Masoud Rahiminezhad Galankashi, Department of Material, Manufacturing and Industrial Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia
Muhammad Hisjam, Department of Industrial Engineering, Faculty of Engineering, Sebelas Maret University, Surakarta, Indonesia
Syed Ahmad Helmi, Department of Material, Manufacturing and Industrial Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia

ID 261 Applying 5S Method on Trims Store’s Documentation System in an Apparel Industry
Ishat Islam, SQBL, Rangpur, Rangpur, Bangladesh

ID 274 Agile Supplier Selection: A Fuzzy Analytic Hierarchy Process (FAHP) Approach
Masoud Rahiminezhad Galankashi, Mohammad Hisjam and Syed Ahmad Helmi, UTM, Skudai, Johor, Malaysia

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 Norhallis 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
Innah 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

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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 University of Medical Sciences, Kerman, Iran
Mohammad Hosein Mehrholhasani, 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 University of Medical Sciences, Bandar-Abbas, Iran
Leila Vail, 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 Ariff Shri Abdul Aziz and Mohamad Zambri Mohd Darudin, Silterra Malaysia Sdn Bhd, Kulim, Kedah, Malaysia
Samad Ramlan, Mohamed Ariff 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 Stucture; Evidence from Malaysia
Hamed Emami, Project Management Office, ZKJ 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
Surbhi 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 Autónoma 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
Abdulhalim Abdulrazik and Mahyar Abolhailaj, 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

ID 575  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
Gladys Bonilla Enriquez, Universidad Popular Autonoma del Estado de Puebla, Puebla, Mexico

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ID 641  Alternative solution for the pipeline transport of viscous oil using the heaters in pumping stations.
Amar Benmounah and Ammar Chebouba, Department of Transport and Equipment of Hydrocarbons, Faculty of Hydrocarbons and Chemistry. UMBB, Boumerdes, Algeria

ID 666:  Desalination of Seawater Research Project on the Basis of the Positive Results of Water Treatment by Magnetic Field
Abderrahmane Bellaouar, Department of Process Engineering, Amar TelidjiUniversity of Laghouat, Laghouat, Algeria
Farid Touiti, Research and Development Technologies Laboratory, Afro-Energy Corporation Ltd., Metill, Algeria

ID 674  Rework Reduction in KHS Machinery Pvt. Ltd.
Dharmil Bavishi, Juhi Gupta, Gaurav Banthia, Parul Maroo, and Richa Grover, Industrial Engineering, Pandit Deendayal Petroleum University

ID 685  Need for Deployment of RFID Technology in Indian Hospitals
Parul Maroo, Industrial Engineering, Pandit Deendayal Petroleum University, Raisan, Gandhinagar, Gujarat, India

ID 698  Predicting Seasonal Demand with Bayesian Generalized Linear Model
Mohammad Anwar Rahman, Manufacturing & Construction Management, Central Connecticut State University, New Britain, Connecticut, USA
Ahad Ali and Gomant Duvvuru, Lawrence Technological University, Southfield, Michigan, USA

ID 699  Impacts of 5S Implementation
Richa Grover, Shailee Dalal and Aditya Singh, Industrial Engineering Department, Pandit Deendayal Petroleum University, India

ID 701  Resource Management for Workflows in Cloud Computing Environment Based On Group Technology Approach
Saleh Shahdi-Pashaki, Department of Industrial Engineering, Shomal University, Amol, Iran
Ehsan Teymournia, School of Mechanical, Industrial, and Manufacturing Engineering, Oregon State University, Corvallis, USA
Vahid Kayvanfar, Department of Industrial Engineering, Amirkabir University of Technology, Tehran, Iran
Koorosh Mashhadi Alizadeh, Department of Industrial Engineering, Sadjad University of Technology, Mashhad, Iran

ID 719  Mean-Variance Portfolio Optimization on Some Stocks by Using Non Constant Mean and Volatility Models Approaches
Endang Soeryana Hasbullah, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran Bandung - Indonesia
Nur Fadhilina bt Abdul Halim, School of Informatics and Applied Mathematics, Universiti Malaysia Terengganu, Malaysia
F. Sukono, Endang Rusyaman and Sudradjat Supian, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Bandung – Indonesia

ID 720  Applications De Bruijn Graphs of Hamiltonian and Eulerian Cycles to Fault Tolerant Networks
Mochammad Suyudi, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Bandung, Indonesia
Roslan Bin Hasni Abdullah, School of Informatics and Applied Mathematics, Universiti Malaysia Terengganu, Malaysia
Sudrajat Supian and Asep Kuswandi Supriatna, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Bandung – Indonesia

ID 721  Model Predictive Control for Automobiles
Yash Deepak Gandhi and Maheep Singh Rathore, Pandit Dendayal Petroleum University, Ahmedabad, Gujrat, India

ID 722  Quater Car Analysis Using Simulink
Yash Deepak Gandhi, Shailee Dalal and Anurag Nehra, Pandit Dendayal Petroleum University, Ahmedabad, Gujrat, India

**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, Jovale C. Vitao, Sherlyn 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 604  Prioritization of patients with Communication Disorders
Daoud Ait Kadi, Samira Abbasgholizadeh Rahimi and Angel Ruiz, Université Laval, Quebec, QC, Canada
### Exhibitors

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If any company, university or institute likes to give a booth, please contact us: See details in the conference exhibition page: [http://ieomsociety.org/ieom2016/?page_id=46](http://ieomsociety.org/ieom2016/?page_id=46)

Dr. Ahad Ali and Dr. Abdul Talib Bon  
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